

**ANEXO III**

**LEVANTAMIENTO TOPOGRÁFICO**



**LEVANTAMIENTO TOPOGRAFICO  
PARCELAS B -2 Y B – 3 DE APR . 04 . 08  
(MADRID)**

**MAYO - 2008**



## MEMORIA



## MEMORIA DESCRIPTIVA

El objetivo del trabajo es realizar un levantamiento topográfico de las parcelas B-2 y B-3 del APR. 04.08 situadas entre las calles O'donnell y Doctor Casteló de Madrid.

Realizado un análisis previo de la documentación facilitada por el cliente se procedió a realizar el levantamiento incluyendo todos los elementos planimétricos y altimétricos existentes en el terreno, también se tomo la altura de los edificios perimetrales.

El sistema de coordenadas utilizado ha sido, PLANO

Se colocaron en el terreno cinco bases de replanteo numeradas de 1001 a 1007 y de 1012 a 1015 materializadas en el terreno con clavos de acero rodeados de pintura azul y estacas de madera con clavo de acero en el centro. El enlace con la red topográfica Nacional se realizo por técnicas GPS, la red de bases de replanteo y los puntos que componen el levantamiento se observaron por métodos de topografía clásica.



Con los datos de campo y los cálculos efectuados con los mismos, se desarrolló el plano en formato digital, entregándose en ficheros DWG, DXF.

Los trabajos de campo se realizaron con receptores GPS LEICA System 1200 modelo 1230 y estación total marca TRIMBLE, modelo DDR – 5601.

El software empleado fue el programa LEICA GEO OFFICE para los cálculos GPS y TOPCAL para los cálculos de topografía clásica. El programa para la digitalización del plano fue AUTOCAD.

Documentación que se entrega por cada una de las zonas:

Libreta de Campo.

Listado de Coordenadas.

Cálculos.

Fotos.

Plano.

Madrid, Mayo de 2008





## OBSERVACIONES TOPOGRAFÍA CLÁSICA



Est.	P.V.	H.	V.	D.g.	M.	I.
1001	1002	386.7321	98.7564	49.276	1.400	1.516
1001	1003	346.6520	101.7763	38.951	1.400	1.516
1001	1	286.7538	100.9774	80.532	1.800	1.516
1001	2	286.5036	100.9529	77.114	1.800	1.516
1001	3	287.8677	100.8820	75.820	1.800	1.516
1001	4	286.6975	100.8344	60.835	1.800	1.516
1001	5	285.0938	100.7432	47.810	1.800	1.516
1001	6	283.0558	100.6209	37.708	1.800	1.516
1001	7	280.0522	100.6149	38.043	1.800	1.516
1001	8	279.6285	100.5951	36.888	1.800	1.516
1001	9	282.7360	100.6009	36.524	1.800	1.516
1001	10	281.6702	100.5469	32.930	1.800	1.516
1001	11	278.2376	100.5483	33.254	1.800	1.516
1001	12	281.2440	100.5081	31.767	1.800	1.516
1001	13	278.6423	100.3199	25.874	1.800	1.516
1001	14	259.5834	99.2003	11.374	1.800	1.516
1001	15	245.9297	98.9839	11.329	1.800	1.516
1001	16	237.3972	98.6473	9.853	1.800	1.516
1001	17	232.7858	98.3975	8.644	1.800	1.516
1001	18	234.2992	98.1143	7.405	1.800	1.516
1001	19	319.0492	96.2725	4.877	1.800	1.516
1001	20	374.2455	97.4355	15.488	1.800	1.516
1001	21	381.9271	97.7536	25.988	1.800	1.516
1001	22	376.1671	97.7114	26.493	1.800	1.516
1001	23	381.0064	97.9516	37.296	1.800	1.516
1001	24	382.7610	98.2587	43.940	1.800	1.516
1001	25	386.2555	98.2151	43.646	1.800	1.516
1001	26	387.9147	98.6258	59.493	1.800	1.516
1001	27	388.7744	98.8772	73.206	1.800	1.516
1001	28	389.1265	98.9974	80.877	1.800	1.516
1001	29	387.2370	98.9749	81.014	1.800	1.516
1001	30	388.0124	99.1563	95.140	1.800	1.516
1001	31	388.4920	99.2782	106.353	1.800	1.516
1001	32	389.9382	99.2444	106.209	1.800	1.516
1001	33	390.0375	99.2705	109.869	1.800	1.516
1001	34	386.4812	99.3071	110.693	1.800	1.516
1001	35	385.5089	99.1289	95.580	1.800	1.516
1001	36	382.8616	98.7534	69.458	1.800	1.516
1001	37	379.1380	98.3574	50.337	1.800	1.516
1001	38	372.5146	97.8476	33.916	1.800	1.516
1001	39	358.1723	97.6148	20.458	1.800	1.516
1001	40	304.3695	95.9683	10.711	2.200	1.516
1001	41	296.6950	99.3175	29.972	2.200	1.516
1001	42	295.3628	99.8761	43.468	2.200	1.516
1001	43	294.5180	100.2413	60.974	2.200	1.516
1001	44	294.2454	100.3631	69.396	2.200	1.516
1001	45	294.3075	100.4346	74.781	2.200	1.516
1001	46	294.0979	100.5083	83.521	2.200	1.516
1001	47	293.8527	100.5582	87.613	2.200	1.516
1001	48	293.6660	100.4693	99.092	2.200	1.516
1001	49	290.3539	100.5562	80.655	2.200	1.516
1001	50	288.7846	100.5375	80.688	2.200	1.516
1001	51	288.0060	100.3385	67.261	2.200	1.516



Est.	P.V.	H.	V.	D.g.	M.	I.
1001	52	289.8951	100.3836	66.989	2.200	1.516
1001	53	288.7585	100.0736	46.994	2.200	1.516
1001	54	286.0931	100.0177	47.319	2.200	1.516
1001	55	282.5083	99.3693	30.577	2.200	1.516
1001	56	286.6224	99.4511	30.154	2.200	1.516
1001	57	279.2414	97.5640	13.683	2.200	1.516
1001	58	270.4877	97.4120	14.257	2.200	1.516
1001	59	241.4002	93.8473	6.763	2.200	1.516
1001	60	257.4445	92.6204	5.532	2.200	1.516
1001	61	118.3963	92.7132	7.403	2.200	1.516
1001	62	132.8663	93.4045	8.365	2.200	1.516
1001	63	109.8583	96.1371	18.317	2.200	1.516
1001	64	103.6301	96.1723	17.929	2.200	1.516
1001	65	101.5685	96.0961	17.372	2.200	1.516
1001	66	98.7380	96.1251	17.279	2.200	1.516
1001	67	102.7185	95.7184	15.358	2.200	1.516
1001	68	101.8784	94.8543	12.062	2.200	1.516
1001	69	95.9523	94.3291	11.118	2.200	1.516
1001	70	106.5180	93.1666	8.752	2.200	1.516
1001	71	105.4840	94.5596	11.271	2.200	1.516
1001	72	107.6199	93.9903	10.108	2.200	1.516
1001	73	111.9842	77.9541	2.071	2.200	1.516
1001	74	136.9688	93.6852	8.179	2.200	1.516
1001	75	75.3026	92.3828	6.723	2.200	1.516
1001	76	320.3347	90.4496	4.556	2.200	1.516
1001	77	236.6803	93.9922	6.593	2.200	1.516
1001	78	274.9421	94.7233	7.510	2.200	1.516
1001	79	276.2115	96.0139	9.510	2.200	1.516
1001	80	278.3142	96.6136	10.845	2.200	1.516
1001	81	280.4524	97.3245	12.842	2.200	1.516
1001	82	284.3237	97.2575	12.764	2.200	1.516
1001	83	287.1073	98.3582	13.450	2.000	1.516
1001	84	284.2431	99.0215	17.584	2.000	1.516
1001	85	290.2493	99.0065	17.973	2.000	1.516
1001	86	293.9736	100.0194	36.371	2.000	1.516
1001	87	285.6154	100.0714	36.880	2.000	1.516
1001	88	281.4437	100.2747	36.450	2.000	1.516
1001	89	280.1898	100.1801	33.135	2.000	1.516
1001	90	281.8394	100.2992	38.005	2.000	1.516
1001	91	289.1966	100.2465	42.609	2.000	1.516
1001	92	291.6465	100.2460	43.191	2.000	1.516
1001	93	293.3054	100.2375	44.001	2.000	1.516
1001	94	293.2711	100.2381	44.448	2.000	1.516
1001	95	294.7627	100.3294	52.394	2.000	1.516
1001	96	293.6554	100.3681	52.393	2.000	1.516
1001	97	293.6298	100.3858	54.221	2.000	1.516
1001	98	290.6490	100.4410	55.200	2.000	1.516
1001	99	291.7086	100.4384	68.188	2.000	1.516
1001	100	290.4364	100.5868	68.217	2.000	1.516
1001	101	292.8715	100.5873	70.095	2.000	1.516
1001	102	293.7820	100.5742	70.799	2.000	1.516
1001	103	291.2243	100.6629	77.554	2.000	1.516
1001	104	291.2546	100.6804	79.624	2.000	1.516





Est.	P.V.	H.	V.	D.g.	M.	I.
1001	105	291.8391	100.6806	80.775	2.000	1.516
1001	106	291.8228	100.6520	75.434	2.000	1.516
1001	107	291.7444	100.6127	69.402	2.000	1.516
1001	108	291.6648	100.5167	62.366	2.000	1.516
1001	109	291.5700	100.4614	56.639	2.000	1.516
1001	110	291.4309	100.3996	50.526	2.000	1.516
1001	111	291.2671	100.2980	44.581	2.000	1.516
1001	112	289.9516	100.2886	44.167	2.000	1.516
1001	113	291.0863	100.1454	38.682	2.000	1.516
1001	114	290.8256	99.9649	32.655	2.000	1.516
1001	115	290.3405	99.7140	26.574	2.000	1.516
1001	116	289.6486	99.3191	20.447	2.000	1.516
1001	117	288.5554	98.5498	14.625	2.000	1.516
1001	118	97.1141	96.2787	13.552	2.000	1.516
1001	119	168.2979	97.0369	14.226	2.000	1.516
1001	120	244.2386	98.9789	19.173	2.000	1.516
1001	121	279.0308	100.6157	62.790	2.000	1.516
1001	122	327.6220	94.1284	6.381	2.000	1.516
1001	123	325.1027	94.1399	6.405	2.000	1.516
1001	124	348.2500	95.3166	8.444	2.000	1.516
1001	125	371.5883	96.5731	16.615	2.000	1.516
1001	126	379.4723	97.0678	25.248	2.000	1.516
1001	127	378.5324	97.4725	34.680	2.000	1.516
1001	128	381.4129	97.8555	43.344	2.000	1.516
1001	129	383.1523	98.0568	51.189	2.000	1.516
1001	130	384.4052	98.3184	59.097	2.000	1.516
1001	131	385.3824	98.5043	67.085	2.000	1.516
1001	132	386.1451	98.6885	74.989	2.000	1.516
1001	133	386.6798	98.8100	82.541	2.000	1.516
1001	134	387.2691	98.9091	90.966	2.000	1.516
1001	135	387.7048	99.0600	98.887	2.000	1.516
1001	136	388.0389	99.1277	106.054	2.000	1.516
1001	137	388.1663	99.0814	105.185	2.000	1.516
1001	138	388.2088	99.0813	104.766	2.000	1.516
1001	139	390.0940	99.1205	102.296	2.000	1.516
1001	140	391.8126	99.0745	102.363	2.000	1.516
1001	141	389.8417	99.0316	92.517	2.000	1.516
1001	142	389.7415	98.9521	87.479	2.000	1.516
1001	143	387.0424	98.7980	84.013	2.000	1.516
1001	144	387.0473	98.7859	83.355	2.000	1.516
1001	145	389.6320	98.8448	80.652	2.000	1.516
1001	146	391.5925	98.7780	80.612	2.000	1.516
1001	147	391.5399	98.6857	75.631	2.000	1.516
1001	148	391.8112	98.8282	82.652	2.000	1.516
1001	149	389.5428	98.8858	82.628	2.000	1.516
1001	150	388.9154	98.6336	68.450	2.000	1.516
1001	151	391.6909	98.5618	68.315	2.000	1.516
1001	152	391.5664	98.2780	56.443	2.000	1.516
1001	153	388.1474	98.3597	56.568	2.000	1.516
1001	154	385.2936	98.3675	62.532	2.000	1.516
1001	155	387.5678	98.3541	61.570	2.000	1.516
1001	156	380.8277	97.6321	40.897	2.000	1.516
1001	157	381.6640	97.6916	41.588	2.000	1.516



Est.	P.V.	H.	V.	D.g.	M.	I.
1001	158	387.8446	98.1178	49.221	2.000	1.516
1001	159	391.0921	97.9989	49.131	2.000	1.516
1001	160	390.9520	97.7497	43.807	2.000	1.516
1001	161	387.3654	97.9218	43.931	2.000	1.516
1001	162	385.1742	97.4833	33.610	2.000	1.516
1001	163	391.0106	97.2488	33.472	2.000	1.516
1001	164	390.1675	96.8825	22.147	2.000	1.516
1001	165	381.3882	97.1508	22.559	2.000	1.516
1001	166	378.0322	96.7409	21.210	2.000	1.516
1001	167	371.3827	96.8407	21.918	2.000	1.516
1001	168	79.2882	94.6666	9.773	2.000	1.516
1001	169	84.2020	96.2493	15.384	2.000	1.516
1001	170	348.7623	94.4963	6.361	2.000	1.516
1001	171	380.4476	96.9951	20.858	2.000	1.516
1001	172	385.7610	97.5183	36.748	2.000	1.516
1001	173	388.0126	98.2926	55.245	2.000	1.516
1001	174	389.0819	98.6977	72.643	2.000	1.516
1001	175	389.7553	98.9568	89.953	2.000	1.516
1001	176	390.1196	99.0989	103.491	2.000	1.516
1001	177	390.2545	99.1502	109.174	2.000	1.516
1001	178	391.9385	99.4782	109.127	1.400	1.516
1001	179	391.9053	99.4060	95.198	1.400	1.516
1001	180	391.8037	99.2247	79.698	1.400	1.516
1001	181	391.6385	99.0176	61.071	1.400	1.516
1001	182	391.3072	98.5091	41.721	1.400	1.516
1001	183	390.3398	98.4538	23.345	1.400	1.516
1001	184	381.1233	100.1106	4.925	1.400	1.516
1001	185	395.3890	106.9002	29.383	1.400	1.516
1001	186	396.8731	101.3391	4.454	1.400	1.516
1001	187	394.0228	101.3937	4.225	1.400	1.516
1001	188	387.3110	101.1551	4.250	1.400	1.516
1001	189	385.5329	100.2154	4.453	1.400	1.516
1001	190	391.1393	98.5487	19.901	1.400	1.516
1001	191	391.8530	98.3290	38.100	1.400	1.516
1001	192	391.9938	98.8719	52.997	1.400	1.516
1001	193	392.0643	98.8838	65.950	1.600	1.516
1001	194	392.1299	99.1341	84.450	1.600	1.516
1001	195	392.1631	99.2940	98.720	1.600	1.516
1001	196	392.1717	99.3613	109.518	1.600	1.516
1001	197	111.5466	98.6473	19.317	1.600	1.516
1001	198	125.3115	98.0746	11.460	1.600	1.516
1001	199	138.9190	98.5340	11.398	1.600	1.516
1001	200	140.4436	98.5411	9.511	1.600	1.516
1001	201	133.5036	98.3177	8.156	1.600	1.516
1001	202	83.2339	98.0905	6.716	1.600	1.516
1001	203	73.6710	98.0164	6.704	1.600	1.516
1001	1004	292.4443	101.1346	103.057	1.400	1.516
1002	9002	0.0000	1.6000	1.512	1.600	1.516
1002	1005	297.7966	100.3090	61.957	1.400	1.512
1002	1001	97.2867	101.5477	49.289	1.400	1.512
1002	197	97.4698	101.5681	48.376	1.400	1.512
1002	204	98.0950	101.5842	48.347	1.400	1.512
1002	205	96.5751	101.4174	44.887	1.400	1.512



Est.	P.V.	H.	V.	D.g.	M.	I.
1002	206	97.1459	101.4175	44.825	1.400	1.512
1002	207	94.9722	101.2445	33.174	1.400	1.512
1002	208	90.5329	100.7936	21.709	1.400	1.512
1002	209	79.3945	99.9004	11.766	1.400	1.512
1002	210	51.5121	99.2689	15.873	1.400	1.512
1002	211	69.4374	99.3581	22.846	1.400	1.512
1002	212	78.3374	101.2322	30.369	1.400	1.512
1002	213	87.0073	101.1979	46.054	1.400	1.512
1002	214	87.6146	101.2095	45.949	1.400	1.512
1002	215	87.7637	101.5025	45.663	1.400	1.512
1002	216	78.5949	100.5809	37.568	1.800	1.512
1002	217	78.1772	100.5809	37.611	1.800	1.512
1002	218	64.5892	98.6439	25.287	1.800	1.512
1002	219	50.2319	100.7396	30.916	1.800	1.512
1002	220	56.8367	100.0421	26.746	1.800	1.512
1002	221	40.6679	98.3939	20.196	1.800	1.512
1002	222	54.3820	98.6330	24.286	1.800	1.512
1002	223	45.9724	99.1132	28.028	1.800	1.512
1002	224	40.5590	98.3775	19.701	1.800	1.512
1002	225	24.0512	99.0137	17.210	1.800	1.512
1002	226	16.4036	99.3714	26.473	1.800	1.512
1002	227	15.6541	99.3722	26.693	1.800	1.512
1002	228	23.3042	98.9940	16.842	1.800	1.512
1002	229	41.1970	98.3223	19.458	1.800	1.512
1002	230	40.6698	98.3787	19.704	1.800	1.512
1002	231	60.0220	96.2636	6.815	1.800	1.512
1002	232	61.7581	96.3828	7.062	1.800	1.512
1002	233	31.9195	98.4615	12.787	1.800	1.512
1002	234	1.2508	98.1504	11.149	1.800	1.512
1002	235	398.5396	94.6614	4.288	1.800	1.512
1002	236	2.8584	94.5399	4.264	1.800	1.512
1002	237	62.7018	98.4653	24.995	1.800	1.512
1002	238	60.5108	98.4662	26.143	1.800	1.512
1002	239	389.7363	98.0753	11.124	1.800	1.512
1002	240	386.8982	98.1303	11.348	1.800	1.512
1002	241	368.9781	96.3192	6.299	1.800	1.512
1002	242	364.8330	95.9500	5.728	1.800	1.512
1002	243	348.5293	97.1799	8.263	1.800	1.512
1002	244	327.1978	98.1332	12.697	1.800	1.512
1002	245	330.3959	98.1845	12.950	1.800	1.512
1002	246	325.2014	98.4817	15.730	1.800	1.512
1002	247	317.3966	98.8185	20.874	1.800	1.512
1002	248	319.4516	98.8349	21.023	1.800	1.512
1002	249	317.4045	98.9467	23.941	1.800	1.512
1002	250	330.1067	99.1450	26.479	1.800	1.512
1002	251	330.3913	99.1340	26.028	1.800	1.512
1002	252	322.4430	98.5433	16.548	1.800	1.512
1002	253	396.8113	102.9489	16.282	1.800	1.512
1002	254	2.1831	99.1001	26.765	1.800	1.512
1002	255	364.4573	98.8885	19.731	1.800	1.512
1002	256	338.1707	99.2640	30.864	1.800	1.512
1002	257	359.0713	99.2691	41.228	1.800	1.512
1002	258	329.0072	99.2261	28.948	1.800	1.512



Est.	P.V.	H.	V.	D.g.	M.	I.
1002	259	329.2681	99.2206	28.667	1.800	1.512
1002	260	313.1426	99.0260	26.571	1.800	1.512
1002	261	326.0344	99.2552	33.410	1.800	1.512
1002	262	323.9201	99.3703	40.151	1.800	1.512
1002	263	323.6943	99.4221	41.634	1.800	1.512
1002	264	328.5027	99.4759	44.324	1.800	1.512
1002	265	328.9107	99.4300	40.909	1.800	1.512
1002	266	332.6329	99.3845	36.005	1.800	1.512
1002	267	346.0216	99.4818	41.200	1.800	1.512
1002	268	346.6389	99.4617	41.146	1.800	1.512
1002	269	332.4490	99.3920	35.647	1.800	1.512
1002	270	328.5583	99.4418	40.748	1.800	1.512
1002	271	328.9400	99.4417	40.843	1.800	1.512
1002	272	320.6833	99.4811	46.394	1.800	1.512
1002	273	322.0523	99.5729	58.131	1.800	1.512
1002	274	320.0508	99.3915	62.735	1.800	1.512
1002	275	323.2968	99.5543	52.949	1.800	1.512
1002	276	328.9350	99.5784	41.932	1.800	1.512
1002	277	315.1798	99.5463	61.543	1.800	1.512
1002	278	319.2136	99.4740	46.532	1.800	1.512
1002	279	325.7510	99.2448	33.611	1.800	1.512
1002	280	311.4465	99.1729	31.773	1.800	1.512
1002	281	308.5135	99.5995	48.010	1.800	1.512
1002	282	307.3677	99.6697	60.587	1.800	1.512
1002	283	311.4421	99.0881	60.842	2.450	1.512
1002	284	312.5581	99.6546	53.189	2.450	1.512
1002	285	314.7795	102.0206	43.356	2.450	1.512
1002	286	84.3524	79.1029	49.098	0.000	1.512
1002	287	82.4402	72.3949	49.098	0.000	1.512
1002	288	4.2364	99.0472	123.804	1.400	1.512
1002	289	4.2391	87.8938	123.790	0.000	1.512
1002	290	9.8403	86.8847	123.790	0.000	1.512
1002	291	0.7297	86.3887	123.790	0.000	1.512
1002	292	54.7918	98.0440	0.000	1.512	1.512
1002	293	340.4715	86.2900	0.000	1.512	1.512
1002	294	6.2986	87.9511	0.000	1.512	1.512
1002	295	180.1324	86.3676	0.000	1.512	1.512
1002	296	210.1753	86.7783	0.000	1.512	1.512
1002	297	237.4295	87.4367	0.000	1.512	1.512
1002	298	230.7053	90.2067	0.000	1.512	1.512
1002	299	208.1684	88.1388	0.000	1.512	1.512
1002	300	182.0491	89.8099	0.000	1.512	1.512
1002	301	54.9702	98.9438	28.738	0.000	1.512
1005	9005	0.0000	1.4000	1.482	0.000	1.512
1005	1002	298.8367	99.8985	61.949	1.400	1.482
1005	302	200.1395	99.1836	35.471	1.400	1.482
1005	303	197.1928	99.5398	20.758	1.400	1.482
1005	304	196.5837	99.7436	17.728	1.400	1.482
1005	305	199.0497	99.7786	16.526	1.400	1.482
1005	306	207.8841	99.6865	16.190	1.400	1.482
1005	307	211.4187	100.2853	5.371	1.400	1.482
1005	308	186.4821	101.1796	5.569	1.400	1.482
1005	309	179.8413	101.6279	5.520	1.400	1.482



Est.	P.V.	H.	V.	D.g.	M.	I.
1005	310	174.6346	101.9861	5.180	1.400	1.482
1005	311	17.2977	102.2356	11.382	1.400	1.482
1005	312	9.0826	101.4915	30.673	1.400	1.482
1005	313	7.1311	101.2222	50.748	1.400	1.482
1005	314	6.2399	101.0570	73.694	1.400	1.482
1005	315	5.8983	100.6629	89.386	2.000	1.482
1005	316	5.3268	100.6770	93.250	2.000	1.482
1005	317	4.0804	100.6701	95.562	2.000	1.482
1005	1006	4.6182	101.0477	94.585	1.400	1.482
1005	318	12.3510	100.6410	89.661	2.000	1.482
1005	319	13.8576	100.5281	75.788	2.000	1.482
1005	320	16.8078	100.5156	58.112	2.000	1.482
1005	321	23.3129	100.3387	38.612	2.000	1.482
1005	322	44.9399	99.4963	19.140	2.000	1.482
1005	323	118.3402	97.3243	11.697	2.000	1.482
1005	324	179.4392	98.1852	30.003	2.000	1.482
1005	325	160.4364	97.7194	22.628	2.000	1.482
1005	326	55.1563	98.9810	19.998	2.000	1.482
1005	327	30.7760	99.9963	35.414	2.000	1.482
1005	328	151.1440	58.4263	24.127	0.000	1.482
1005	329	151.1437	58.0861	24.231	0.000	1.482
1005	330	217.4959	79.5339	35.517	0.000	1.482
1005	331	238.7245	81.9649	40.107	0.000	1.482
1005	332	205.8778	97.5194	30.517	2.000	1.482
1005	333	206.6662	96.9794	21.680	2.000	1.482
1005	334	207.5642	97.0048	21.696	2.000	1.482
1005	335	394.6556	94.4060	4.232	2.000	1.482
1005	336	1.8669	98.9304	16.805	2.000	1.482
1005	337	2.9435	99.7799	30.390	2.000	1.482
1005	338	3.4619	100.1508	45.732	2.000	1.482
1005	339	3.6353	100.2636	58.814	2.000	1.482
1005	340	3.6355	89.9324	58.810	0.000	1.482
1005	341	3.6802	100.3446	71.906	2.000	1.482
1005	342	3.8131	100.5408	89.768	2.000	1.482
1005	343	4.8561	100.5663	87.445	2.000	1.482
1005	344	4.9666	100.4991	80.834	2.000	1.482
1005	345	5.0261	100.4193	75.097	2.000	1.482
1005	346	5.0746	100.5845	69.135	1.800	1.482
1005	347	5.1980	100.5539	62.345	1.800	1.482
1005	348	5.2966	100.5697	55.574	1.800	1.482
1005	349	5.4549	100.5397	48.619	1.800	1.482
1005	350	5.5885	100.4781	41.402	1.800	1.482
1005	351	5.9196	100.4430	34.819	1.800	1.482
1005	352	6.4814	100.2514	26.228	1.800	1.482
1005	353	7.2504	100.0027	19.010	1.800	1.482
1005	354	9.7008	99.1719	10.650	1.800	1.482
1005	355	23.2333	97.0229	3.009	1.800	1.482
1005	356	192.9776	95.5159	4.976	1.800	1.482
1005	357	201.7740	97.9048	23.679	1.800	1.482
1005	358	202.5586	98.1521	33.239	1.800	1.482
1005	359	200.6766	98.2749	31.329	1.800	1.482
1005	360	199.6812	98.0265	24.632	1.800	1.482
1005	361	199.4228	97.9810	19.511	1.800	1.482



Est.	P.V.	H.	V.	D.g.	M.	I.
1005	362	201.5355	97.9437	19.582	1.800	1.482
1005	363	10.8156	99.7098	14.733	1.800	1.482
1005	364	11.1501	99.6363	14.074	1.800	1.482
1005	365	11.6597	99.9023	16.538	1.800	1.482
1005	366	6.3571	100.5136	45.690	1.800	1.482
1005	367	6.2693	100.5193	46.370	1.800	1.482
1005	368	4.8680	100.5411	53.497	1.800	1.482
1005	369	4.8681	100.5413	54.266	1.800	1.482
1005	370	5.9994	100.6223	68.282	1.800	1.482
1005	371	6.2349	100.7822	71.815	1.800	1.482
1005	372	4.9376	100.5635	73.247	1.800	1.482
1005	373	5.5575	100.5787	73.317	1.800	1.482
1005	374	257.0347	98.9114	32.215	1.800	1.482
1005	375	244.0455	98.9531	40.720	1.800	1.482
1005	376	238.9894	98.9968	38.484	1.800	1.482
1005	377	217.1707	99.0825	33.488	1.800	1.482
1005	378	227.6523	98.5801	29.120	1.800	1.482
1006	9006	0.0000	1.8000	1.466	1.800	1.482
1006	1005	279.6602	99.2239	94.582	1.800	1.466
1006	1007	373.5150	99.8778	18.862	1.400	1.466
1006	1008	349.3557	97.7873	4.570	1.400	1.466
1006	1009	363.4367	98.9757	8.430	1.400	1.466
1006	1010	373.0041	99.9909	21.987	1.400	1.466
1006	379	371.9045	99.8484	18.518	1.400	1.466
1006	380	373.3471	100.0042	23.226	1.400	1.466
1006	381	373.7156	100.0427	25.019	1.400	1.466
1006	382	376.2524	100.4206	46.341	1.400	1.466
1006	383	376.6597	100.5236	54.244	1.400	1.466
1006	384	376.7274	100.5010	56.476	1.400	1.466
1006	385	377.0578	100.6030	64.377	1.400	1.466
1006	386	377.4584	100.7140	79.107	1.400	1.466
1006	387	377.7083	100.3327	92.242	2.000	1.466
1006	388	377.6936	100.3348	93.352	2.000	1.466
1006	389	377.7561	100.2019	99.281	2.000	1.466
1006	390	377.7899	100.2015	101.694	2.000	1.466
1006	391	377.6639	100.3257	93.946	2.000	1.466
1006	392	377.8196	100.1779	107.018	2.000	1.466
1006	1004	378.5130	100.6905	111.655	1.400	1.466
1006	393	381.3562	100.4262	76.159	2.000	1.466
1006	394	382.0540	100.2109	57.743	2.000	1.466
1006	395	383.3670	99.7437	40.286	2.000	1.466
1006	396	385.8050	99.0795	25.420	2.000	1.466
1006	397	8.9337	94.6289	5.886	2.000	1.466
1004	9004	0.0000	1.4000	1.482	2.000	1.466
1004	1006	136.4285	99.3984	111.667	1.400	1.482
1004	1007	137.4480	99.2048	92.883	1.400	1.482
1004	398	129.8190	100.0582	33.158	1.400	1.482
1004	399	120.7022	100.7668	14.837	1.400	1.482
1004	400	80.5086	103.2974	4.846	1.400	1.482
1004	401	4.9138	105.5150	3.055	1.400	1.482
1004	402	353.3106	104.1939	4.262	1.400	1.482
1004	403	320.6736	102.6881	6.596	1.400	1.482
1004	404	296.7060	101.7455	8.909	1.400	1.482



Est.	P.V.	H.	V.	D.g.	M.	I.
1004	405	265.3445	100.1523	16.696	1.400	1.482
1004	406	299.1239	101.4033	5.564	1.400	1.482
1004	407	280.5304	102.0375	4.160	1.400	1.482
1004	408	293.0836	100.7185	17.002	1.400	1.482
1004	409	294.6546	100.7378	16.848	1.400	1.482
1004	410	296.1816	100.7732	17.009	1.400	1.482
1004	411	296.5633	100.8124	17.462	1.400	1.482
1004	412	295.7645	100.8188	17.806	1.400	1.482
1004	1001	237.0071	98.9939	103.063	1.400	1.482
1003	9003	0.0000	1.4000	1.493	1.400	1.482
1003	413	256.7290	96.5852	47.328	0.000	1.493
1003	1001	135.2947	98.5714	38.944	1.400	1.493
1003	1011	190.9580	98.5296	26.891	1.400	1.493
1003	414	191.4560	98.1696	21.806	1.400	1.493
1003	415	192.6797	99.4526	19.267	1.400	1.493
1003	416	212.0673	94.6189	8.788	2.000	1.493
1003	417	269.1966	91.4666	15.590	0.000	1.493
1003	418	130.2024	95.9413	19.340	1.400	1.493
1003	419	105.8243	92.8987	11.826	1.400	1.493
1003	420	50.1045	93.0363	10.992	1.400	1.493
1003	421	17.1224	94.4942	19.737	1.400	1.493
1003	422	2.0948	96.5390	32.764	1.400	1.493
1003	423	395.8865	97.4973	44.031	1.400	1.493
1003	424	395.7726	100.4127	32.350	1.400	1.493
1003	425	3.0125	100.4325	20.579	1.400	1.493
1003	426	33.4929	100.4876	10.601	1.400	1.493
1003	427	108.5976	97.1067	10.177	1.400	1.493
1003	428	131.1267	96.3439	19.237	1.400	1.493
1003	429	152.3596	97.2566	24.907	1.400	1.493
1003	430	175.1694	97.8331	23.102	1.400	1.493
1003	431	170.7622	98.2540	12.298	1.400	1.493
1003	432	139.8516	96.4290	18.615	1.400	1.493
1003	433	113.7142	98.5226	4.290	1.400	1.493
1003	434	260.5734	101.4007	15.019	1.400	1.493
1003	435	307.8629	101.9870	10.723	1.400	1.493
1003	436	395.1736	100.4314	8.055	1.400	1.493
1003	437	390.6715	100.3443	21.503	1.400	1.493
1003	438	357.5846	100.6567	21.860	1.400	1.493
1003	439	349.7730	100.5728	31.421	1.400	1.493
1003	440	379.9182	100.2727	29.778	1.400	1.493
1003	441	381.0970	100.1628	43.617	1.400	1.493
1003	442	362.7313	100.3413	45.488	1.400	1.493
1003	443	366.9186	100.3073	57.366	1.400	1.493
1003	444	380.8675	100.3269	55.946	1.400	1.493
1003	445	381.4651	100.2777	66.341	1.400	1.493
1003	446	372.3269	100.2213	67.058	1.400	1.493
1003	447	364.8255	100.2082	67.881	1.400	1.493
1003	1012	349.5317	100.2343	81.201	1.400	1.493
1003	1013	349.5330	100.2370	81.205	1.400	1.493
1003	1014	396.4863	98.0368	59.540	1.400	1.493
1014	9014	0.0000	1.4000	1.425	1.400	1.493
1014	448	171.0230	77.8396	42.931	0.000	1.425
1014	449	171.0235	77.3551	40.360	0.000	1.425



Est.	P.V.	H.	V.	D.g.	M.	I.
1014	1015	48.4297	102.1659	60.582	1.400	1.425
1014	500	135.5509	92.8080	62.072	0.000	1.425
1014	501	135.5515	91.0103	61.690	0.000	1.425
1014	1003	8.3687	102.0945	59.544	1.400	1.425
1014	502	30.9945	101.7410	8.236	1.400	1.425
1014	503	147.5423	103.5413	6.846	1.400	1.425
1014	504	165.2507	102.5499	16.487	1.400	1.425
1014	505	172.3898	100.7832	23.699	1.400	1.425
1014	506	168.4786	104.9492	24.087	1.400	1.425
1014	507	158.0777	107.3235	17.156	1.400	1.425
1014	508	143.7860	112.7024	10.667	1.400	1.425
1014	509	44.3740	111.5961	10.511	1.400	1.425
1014	510	18.0520	106.4032	19.345	1.400	1.425
1014	511	193.0616	101.7453	14.492	1.400	1.425
1014	512	169.6999	104.3675	23.996	1.400	1.425
1014	513	155.7511	104.5723	26.894	1.400	1.425
1014	514	87.3402	102.0976	63.679	1.400	1.425
1014	515	76.6962	102.0132	65.650	1.400	1.425
1014	516	71.9586	101.9442	67.192	1.400	1.425
1014	517	71.0777	102.0622	64.656	1.400	1.425
1014	518	55.9726	101.4051	72.881	1.400	1.425
1014	519	43.6788	101.2850	88.792	1.400	1.425
1014	520	52.2571	101.4344	79.142	1.400	1.425
1014	521	39.9821	101.3562	83.969	1.400	1.425
1014	522	36.8720	101.3237	84.263	1.400	1.425
1014	523	36.4377	101.3904	83.003	1.400	1.425
1014	524	36.2645	101.0476	82.608	2.000	1.425
1014	525	40.4684	101.5242	82.189	1.400	1.425
1014	526	40.3637	101.3891	82.591	1.400	1.425
1014	527	43.2383	101.4674	85.684	1.400	1.425
1014	528	43.2325	101.3445	86.275	1.400	1.425
1014	529	49.6606	101.5905	78.321	1.400	1.425
1014	530	49.8316	101.5905	78.330	1.400	1.425
1014	531	49.9906	101.4764	78.531	1.400	1.425
1014	532	53.0478	101.5230	75.717	1.400	1.425
1014	533	53.4472	101.4761	76.950	1.400	1.425
1014	534	52.0621	101.4551	78.190	1.400	1.425
1014	535	51.1737	101.4364	79.003	1.400	1.425
1014	536	49.8514	101.4125	80.300	1.400	1.425
1014	537	49.0170	101.4029	81.170	1.400	1.425
1014	538	47.7669	101.3790	82.524	1.400	1.425
1014	539	46.9675	101.3636	83.433	1.400	1.425
1014	540	45.7723	101.3504	84.829	1.400	1.425
1014	541	45.0170	101.3333	85.784	1.400	1.425
1014	542	43.9262	101.3207	87.190	1.400	1.425
1014	543	43.8954	101.3099	87.649	1.400	1.425
1014	544	42.8527	101.3320	86.170	1.400	1.425
1014	545	42.8184	101.5938	84.506	1.400	1.425
1014	546	41.5693	101.6152	82.882	1.400	1.425
1014	547	49.7296	101.7266	77.218	1.400	1.425
1014	548	55.6055	101.4144	72.258	1.400	1.425
1014	549	54.7974	101.4166	74.218	1.400	1.425
1014	550	55.6984	101.3293	74.509	1.400	1.425





Est.	P.V.	H.	V.	D.g.	M.	I.
1014	551	57.4090	101.8608	71.739	1.400	1.425
1014	552	59.3173	101.8903	70.471	1.400	1.425
1014	553	59.3104	101.7127	70.795	1.400	1.425
1014	554	57.6587	101.6828	71.875	1.400	1.425
1014	555	57.7883	101.5237	72.116	1.400	1.425
1014	556	59.4622	101.5396	71.051	1.400	1.425
1014	557	58.5876	101.3865	71.630	1.400	1.425
1014	558	67.0997	102.0116	66.237	1.400	1.425
1014	559	67.3419	101.8579	66.416	1.400	1.425
1014	560	67.4711	101.5361	66.693	1.400	1.425
1014	561	68.3993	101.5480	66.288	1.400	1.425
1014	562	69.4292	101.5585	65.864	1.400	1.425
1014	563	69.3012	101.8863	65.581	1.400	1.425
1014	564	69.3267	102.0294	65.275	1.400	1.425
1014	565	71.5734	102.0154	65.735	1.400	1.425
1014	566	71.9283	101.9608	66.799	1.400	1.425
1014	567	71.6960	101.8421	66.861	1.400	1.425
1014	568	71.4251	101.6854	66.947	1.400	1.425
1014	569	65.9073	101.9966	66.571	1.400	1.425
1014	570	60.3748	101.9216	69.602	1.400	1.425
1014	571	40.7446	101.9401	65.720	1.400	1.425
1014	572	45.2231	101.8443	70.695	1.400	1.425
1014	573	47.3621	101.9332	73.474	1.400	1.425
1014	574	47.2955	101.9200	73.575	1.400	1.425
1014	575	49.1897	101.8227	76.262	1.400	1.425
1014	576	48.3050	101.8756	74.938	1.400	1.425
1014	577	41.2862	101.7258	80.460	1.400	1.425
1014	578	43.2695	101.3687	82.944	1.800	1.425
1014	579	58.6396	101.6384	68.748	1.800	1.425
1014	580	72.2855	101.8344	62.286	1.800	1.425
1014	581	73.1164	101.7540	64.745	1.800	1.425
1014	582	87.6256	101.9063	61.759	1.800	1.425
1014	583	85.4495	102.3376	61.406	1.400	1.425
1014	584	75.3079	102.2488	63.535	1.400	1.425
1014	585	75.9969	102.0275	65.475	1.400	1.425
1014	586	72.4331	101.9765	66.655	1.400	1.425
1014	587	70.0929	101.8625	62.564	1.800	1.425
1014	588	66.4307	101.8844	58.956	1.800	1.425
1014	589	49.7880	101.6659	65.159	1.800	1.425
1014	590	40.7458	101.5101	76.192	1.800	1.425
1014	591	39.5633	101.5465	75.513	1.800	1.425
1014	592	62.7642	102.1985	48.994	1.800	1.425
1014	593	61.9870	102.0481	51.871	1.800	1.425
1014	594	59.0340	102.1089	50.062	1.800	1.425
1014	595	87.0706	102.0837	52.538	1.800	1.425
1014	596	74.4366	102.0543	53.050	1.800	1.425
1014	597	54.6902	101.7808	60.575	1.800	1.425
1014	598	45.8046	102.1025	51.681	1.800	1.425
1014	599	63.8480	102.5700	42.211	1.800	1.425
1013	9013	0.0000	1.4000	1.421	1.800	1.425
1013	1003	3.6432	99.8567	81.204	1.400	1.421
1013	1015	27.3230	99.9008	53.051	1.400	1.421
1013	1007	122.3130	98.8776	38.933	1.400	1.421



Est.	P.V.	H.	V.	D.g.	M.	I.
1013	600	309.1228	99.3742	22.371	1.400	1.421
1013	601	273.8007	99.7980	10.802	1.400	1.421
1013	602	274.8026	99.5925	7.860	1.400	1.421
1013	603	289.0732	99.3244	6.115	1.400	1.421
1013	604	214.0249	98.8334	4.301	1.400	1.421
1013	605	183.7873	98.0793	2.003	1.400	1.421
1013	606	156.4898	99.4545	4.309	1.400	1.421
1013	607	156.1993	101.4055	4.300	1.400	1.421
1013	608	145.9909	100.7822	8.581	1.400	1.421
1013	609	78.8763	100.4308	13.494	1.400	1.421
1013	610	96.2385	99.6815	12.787	1.400	1.421
1013	611	97.5897	99.6187	13.160	1.400	1.421
1013	612	118.3935	99.5505	11.266	1.400	1.421
1013	613	119.6033	99.3345	12.042	1.400	1.421
1013	614	146.4360	98.7173	11.839	1.400	1.421
1013	615	147.2237	99.5712	11.033	1.400	1.421
1013	616	150.1343	99.5494	11.148	1.400	1.421
1013	617	171.8477	99.2695	4.820	1.400	1.421
1013	618	205.9429	99.0558	5.669	1.400	1.421
1013	619	274.3764	99.2901	6.182	1.400	1.421
1013	620	61.3539	100.8366	4.384	1.400	1.421
1013	621	14.4196	99.7893	13.198	1.400	1.421
1013	622	48.3597	100.1040	10.690	1.400	1.421
1013	623	77.6038	100.6324	12.868	1.400	1.421
1013	624	142.4749	100.9915	8.062	1.400	1.421
1013	625	184.5199	98.8361	3.055	1.400	1.421
1013	626	360.3834	100.6332	3.982	1.400	1.421
1013	627	369.1972	99.8405	24.700	1.400	1.421
1013	628	2.0716	99.9604	43.260	1.400	1.421
1013	629	6.2013	99.9752	41.874	1.400	1.421
1013	630	13.9925	99.5743	37.558	1.400	1.421
1013	631	369.1761	99.2563	21.415	1.600	1.421
1013	632	382.2470	98.3164	16.032	1.600	1.421
1013	633	394.0138	98.5125	19.444	1.600	1.421
1013	634	12.1596	99.1294	16.397	1.400	1.421
1013	635	2.2109	98.9451	12.174	1.400	1.421
1013	636	399.5866	99.2061	15.854	1.400	1.421
1013	637	397.7783	99.1878	15.159	1.400	1.421
1013	638	395.0670	99.2262	15.650	1.400	1.421
1013	639	24.5091	99.8539	13.683	1.400	1.421
1013	640	26.9650	100.0125	13.580	1.400	1.421
1013	641	2.3790	99.9866	9.261	1.400	1.421
1013	642	3.1145	99.8622	8.562	1.400	1.421
1013	643	374.7575	99.2034	11.074	1.400	1.421
1013	644	370.6670	99.1630	10.852	1.400	1.421
1015	9015	0.0000	1.4000	1.530	1.400	1.421
1015	1014	74.6310	98.0054	60.580	1.400	1.530
1015	1013	11.2932	100.2908	53.060	1.400	1.530
1015	645	8.8056	100.1214	62.415	1.400	1.530
1015	646	153.1325	100.7859	17.299	1.400	1.530
1015	647	120.5177	100.5960	15.075	1.400	1.530
1015	648	170.2337	100.7604	21.761	1.400	1.530
1015	649	185.7491	100.4258	30.200	1.400	1.530



<b>Est.</b>	<b>P.V.</b>	<b>H.</b>	<b>V.</b>	<b>D.g.</b>	<b>M.</b>	<b>I.</b>
1015	650	220.0708	100.5643	26.216	1.400	1.530
1015	651	235.3495	98.2789	27.111	2.000	1.530
1015	652	206.3280	100.9126	22.686	1.400	1.530
1015	653	217.3473	100.8275	23.494	1.400	1.530
1015	654	205.2017	100.8789	23.480	1.400	1.530
1015	655	201.0455	100.8787	21.837	1.400	1.530
1015	656	199.3444	100.8225	24.058	1.400	1.530
1007	9007	0.0000	1.4000	1.444	1.400	1.530
1007	1006	4.9103	100.5215	18.861	1.400	1.444
1007	1004	210.9300	100.8885	92.887	1.400	1.444
1007	1013	97.5961	101.2401	38.932	1.400	1.444
1007	657	106.3480	101.2534	8.414	1.400	1.444
1007	658	190.6847	100.4546	27.169	1.400	1.444



## LISTADO DE COORDENADAS



Pto.	X	Y	Z
1	443314.421	4474926.492	672.317
2	443310.999	4474926.731	672.399
3	443309.726	4474925.077	672.503
4	443294.731	4474926.178	672.756
5	443281.672	4474927.126	672.995
6	443271.508	4474927.879	673.185
7	443271.662	4474929.690	673.186
8	443270.485	4474929.791	673.208
9	443270.313	4474927.971	673.208
10	443266.682	4474928.227	673.270
11	443266.780	4474930.037	673.267
12	443265.503	4474928.324	673.300
14	443244.176	4474929.888	673.696
15	443242.862	4474931.932	673.734
16	443240.819	4474932.012	673.762
17	443239.509	4474931.572	673.771
18	443238.839	4474930.512	673.772
19	443238.212	4474922.702	673.838
20	443237.217	4474909.868	674.177
21	443236.364	4474899.131	674.470
22	443238.783	4474898.963	674.505
23	443237.967	4474887.931	674.753
24	443237.485	4474881.209	674.755
25	443235.070	4474881.373	674.777
26	443233.940	4474865.508	674.837
27	443232.958	4474851.799	674.844
28	443232.411	4474844.134	674.827
29	443234.812	4474843.988	674.858
30	443233.810	4474829.855	674.814
31	443232.997	4474818.645	674.760
32	443230.586	4474818.838	674.814
33	443230.300	4474815.185	674.813
34	443236.455	4474814.330	674.759
35	443237.567	4474829.486	674.861
36	443239.451	4474855.763	674.913
37	443240.851	4474875.147	674.852
38	443242.048	4474892.081	674.700
39	443243.129	4474906.738	674.319
40	443244.249	4474922.259	673.831
41	443263.601	4474920.880	673.474
42	443277.086	4474919.933	673.238
43	443294.562	4474918.701	672.922
44	443302.968	4474918.129	672.758
45	443308.319	4474917.524	672.643
46	443317.041	4474916.926	672.487
47	443321.146	4474916.867	672.385
48	443332.602	4474916.092	672.423
49	443314.507	4474921.934	672.449
50	443314.591	4474923.921	672.472
51	443301.173	4474924.921	672.796
52	443300.869	4474922.934	672.750
53	443280.903	4474924.385	673.099
54	443281.212	4474926.362	673.140
55	443264.377	4474927.594	673.456
56	443264.059	4474925.613	673.413



Pto.	X	Y	Z
57	443247.458	4474926.850	673.676
58	443247.626	4474928.844	673.732
59	443238.924	4474929.482	673.806
60	443238.789	4474927.520	673.793
61	443227.384	4474928.372	673.999
62	443227.580	4474930.383	674.018
63	443216.702	4474931.157	674.264
64	443216.557	4474929.352	674.230
65	443216.969	4474928.670	674.218
66	443216.913	4474927.897	674.204
67	443219.001	4474928.511	674.185
68	443222.177	4474927.598	674.127
69	443222.927	4474926.376	674.142
70	443225.579	4474927.490	674.091
71	443223.107	4474928.042	674.115
72	443224.327	4474928.048	674.106
73	443232.102	4474925.705	673.856
74	443228.071	4474930.653	673.963
75	443227.369	4474923.670	673.955
76	443237.847	4474922.793	673.834
77	443238.461	4474929.719	673.774
78	443241.242	4474926.505	673.775
79	443243.244	4474926.726	673.748
80	443244.619	4474926.619	673.730
81	443246.655	4474926.493	673.693
82	443246.645	4474925.712	673.703
83	443247.357	4474925.164	673.700
84	443251.465	4474926.008	673.623
85	443251.872	4474924.336	673.633
86	443270.121	4474921.547	673.342
87	443270.768	4474926.335	673.312
88	443270.173	4474928.702	673.196
89	443266.802	4474929.013	673.259
90	443271.743	4474928.625	673.174
91	443276.513	4474924.148	673.188
92	443277.031	4474922.476	673.186
93	443277.758	4474921.286	673.189
94	443278.205	4474921.272	673.187
95	443286.006	4474919.386	673.082
96	443286.094	4474920.293	673.050
97	443287.917	4474920.151	673.025
98	443289.062	4474922.642	672.971
99	443301.980	4474920.957	672.884
100	443302.075	4474922.317	672.725
101	443303.795	4474919.567	672.707
102	443304.412	4474918.503	672.715
103	443311.360	4474920.992	672.546
104	443313.425	4474920.848	672.502
105	443314.532	4474920.048	672.490
106	443309.203	4474920.394	672.581
107	443303.188	4474920.846	672.685
108	443296.170	4474921.344	672.847



Pto.	X	Y	Z
109	443290.459	4474921.762	672.943
110	443284.362	4474922.221	673.036
111	443278.433	4474922.661	673.144
112	443278.058	4474923.594	673.153
113	443272.548	4474923.078	673.265
114	443266.535	4474923.509	673.371
115	443260.468	4474923.987	673.472
116	443254.351	4474924.439	673.572
117	443248.534	4474924.846	673.686
118	443220.524	4474926.929	674.145
119	443229.597	4474938.526	674.015
120	443248.741	4474937.138	673.661
121	443296.086	4474933.749	672.746
122	443239.072	4474921.278	673.941
123	443239.235	4474921.472	673.942
124	443238.830	4474918.150	673.974
125	443238.129	4474908.941	674.247
126	443237.259	4474899.989	674.516
127	443239.017	4474890.712	674.730
128	443238.349	4474881.895	674.813
129	443237.760	4474873.967	674.915
130	443237.195	4474866.002	674.914
131	443236.610	4474857.975	674.929
132	443236.031	4474850.044	674.898
133	443235.551	4474842.477	674.896
134	443234.877	4474834.039	674.912
135	443234.284	4474826.111	674.814
136	443233.754	4474818.943	674.807
137	443233.545	4474819.814	674.871
138	443233.477	4474820.233	674.866
139	443230.459	4474822.759	674.767
140	443227.696	4474822.824	674.842
141	443231.155	4474832.522	674.761
142	443231.443	4474837.555	674.793
143	443235.102	4474840.997	674.940
144	443235.086	4474841.655	674.943
145	443231.775	4474844.377	674.817
146	443229.296	4474844.522	674.901
147	443229.644	4474849.493	674.915
148	443228.896	4474842.501	674.875
149	443231.838	4474842.398	674.800
150	443232.868	4474856.561	674.822
151	443229.895	4474856.808	674.896
152	443230.704	4474868.656	674.880
153	443233.732	4474868.438	674.811
154	443236.514	4474862.530	674.957
155	443234.276	4474863.439	674.945
156	443238.472	4474884.373	674.874
157	443238.006	4474883.628	674.861
158	443233.990	4474875.788	674.808
159	443231.485	4474875.940	674.897
160	443231.845	4474881.256	674.901



Pto.	X	Y	Z
161	443234.312	4474881.081	674.787
162	443235.373	4474891.435	674.681
163	443232.303	4474891.585	674.799
164	443233.140	4474902.880	674.437
165	443236.230	4474902.570	674.362
166	443237.198	4474904.061	674.438
167	443239.544	4474903.833	674.440
168	443224.264	4474923.667	674.171
169	443218.582	4474924.085	674.259
170	443237.572	4474919.813	673.902
171	443236.361	4474904.296	674.337
172	443235.172	4474888.288	674.785
173	443233.853	4474869.762	674.835
174	443232.614	4474852.371	674.839
175	443231.354	4474835.082	674.827
176	443230.377	4474821.567	674.819
177	443229.951	4474815.895	674.811
178	443227.070	4474816.078	674.848
179	443227.993	4474829.977	674.842
180	443229.084	4474845.441	674.924
181	443230.371	4474864.026	674.896
182	443231.710	4474883.336	674.930
183	443233.035	4474901.665	674.520
184	443234.440	4474920.090	673.944
185	443230.505	4474895.976	670.775
186	443233.290	4474920.578	673.859
187	443233.510	4474920.782	673.861
188	443233.955	4474920.738	673.876
189	443234.082	4474920.537	673.938
190	443232.915	4474905.116	674.407
191	443231.576	4474886.972	674.953
192	443230.544	4474872.106	674.892
193	443229.648	4474859.185	674.910
194	443228.364	4474840.727	674.902
195	443227.375	4474826.490	674.848
196	443226.645	4474815.716	674.853
197	443215.913	4474931.984	674.163
198	443224.376	4474931.331	674.100
199	443225.980	4474933.167	674.015
200	443227.459	4474931.969	673.971
201	443227.760	4474930.336	673.969
202	443227.218	4474924.491	673.954
203	443227.380	4474923.497	673.962
204	443234.546	4474924.055	673.829
205	443233.497	4474920.580	674.032
206	443233.900	4474920.528	674.033
207	443233.016	4474908.841	674.383
208	443232.144	4474897.262	674.761
209	443231.375	4474886.964	675.050
210	443224.174	4474887.466	675.214
211	443224.783	4474896.230	675.262
212	443225.397	4474904.577	674.444





Pto.	X	Y	Z
213	443226.586	4474921.022	674.165
214	443227.036	4474920.995	674.159
215	443227.191	4474920.727	673.954
216	443223.298	4474911.469	674.289
217	443223.050	4474911.433	674.288
218	443222.015	4474897.503	675.170
219	443213.597	4474898.170	674.272
220	443218.573	4474896.944	674.614
221	443218.933	4474888.140	675.141
222	443219.342	4474894.404	675.153
223	443214.266	4474894.739	675.022
224	443219.303	4474887.810	675.133
225	443219.013	4474882.447	674.898
226	443209.422	4474883.071	674.893
227	443209.125	4474882.830	674.895
228	443219.276	4474882.121	674.898
229	443219.616	4474887.813	675.144
230	443219.322	4474887.838	675.133
231	443230.988	4474881.322	675.031
232	443231.007	4474881.633	675.032
233	443223.792	4474882.131	674.940
234	443223.720	4474876.206	674.955
235	443230.581	4474875.727	674.991
236	443230.615	4474876.015	674.997
237	443221.531	4474896.864	675.234
238	443220.167	4474897.343	675.261
239	443223.840	4474874.198	674.968
240	443223.698	4474873.668	674.965
241	443229.229	4474872.911	674.995
242	443229.918	4474872.840	674.996
243	443229.014	4474869.890	674.997
244	443229.324	4474864.300	675.004
245	443228.636	4474864.370	675.001
246	443228.450	4474861.362	675.006
247	443228.750	4474855.766	675.019
248	443228.060	4474855.833	675.016
249	443227.850	4474852.834	675.027
250	443222.242	4474852.444	674.987
251	443222.355	4474852.896	674.985
252	443228.777	4474860.337	675.010
253	443218.595	4474875.293	673.877
254	443208.136	4474877.271	675.010
255	443217.880	4474865.670	674.976
256	443216.843	4474850.663	674.988
257	443201.286	4474851.793	675.105
258	443221.508	4474850.039	674.983
259	443221.533	4474850.342	674.982
260	443228.797	4474849.856	675.038
261	443220.851	4474845.393	675.022
262	443219.245	4474838.733	675.029
263	443218.805	4474837.310	675.009
264	443214.730	4474836.233	674.996



Pto.	X	Y	Z
265	443216.048	4474839.396	674.998
266	443216.462	4474844.773	674.980
267	443206.878	4474845.480	674.967
268	443206.623	4474845.792	674.979
269	443216.734	4474845.028	674.972
270	443216.322	4474839.436	674.989
271	443216.061	4474839.463	674.990
272	443219.014	4474832.120	675.010
273	443213.836	4474821.527	675.022
274	443214.021	4474816.552	675.231
275	443214.748	4474826.742	675.002
276	443215.563	4474838.494	674.909
277	443218.914	4474816.283	675.070
278	443219.980	4474831.635	675.016
279	443220.903	4474845.148	675.030
280	443228.438	4474844.609	675.044
281	443227.334	4474828.308	674.934
282	443226.442	4474815.725	674.946
283	443222.572	4474816.141	674.853
284	443223.204	4474823.828	674.270
285	443223.893	4474833.799	672.606
286	443224.032	4474923.615	693.153
287	443222.598	4474923.268	699.164
288	443111.566	4474886.863	676.885
289	443111.566	4474886.868	700.260
290	443113.022	4474897.658	702.301
291	443111.140	4474880.058	703.309
301	443216.702	4474897.999	676.908
302	443200.076	4474814.106	675.272
303	443214.799	4474813.008	674.967
304	443217.834	4474812.950	674.888
305	443219.017	4474813.646	674.874
306	443219.492	4474815.889	674.896
307	443230.265	4474814.770	674.793
308	443230.091	4474812.640	674.713
309	443230.287	4474812.093	674.675
310	443230.756	4474811.800	674.655
311	443246.478	4474810.643	674.417
312	443265.864	4474809.196	674.098
313	443285.921	4474807.741	673.843
314	443308.819	4474806.037	673.593
315	443324.479	4474804.866	673.286
316	443328.403	4474805.314	673.226
317	443330.857	4474806.969	673.211
318	443323.391	4474795.858	673.314
319	443309.420	4474796.877	673.588
320	443291.529	4474798.207	673.746
321	443271.494	4474799.690	674.011
322	443250.019	4474801.253	674.368
323	443232.142	4474802.593	674.708
324	443207.035	4474804.460	675.072
325	443217.063	4474800.740	675.027



Pto.	X	Y	Z
326	443248.382	4474798.445	674.537
327	443266.780	4474797.088	674.219
328	443221.656	4474800.569	690.876
329	443221.654	4474800.566	691.042
330	443203.176	4474823.151	687.439
331	443204.100	4474836.006	687.427
332	443205.200	4474816.803	675.405
333	443214.023	4474816.192	675.245
334	443214.043	4474816.497	675.237
335	443239.746	4474814.097	674.588
336	443252.334	4474813.161	674.499
337	443265.889	4474812.151	674.322
338	443281.188	4474810.961	674.108
339	443294.235	4474809.996	673.973
340	443294.231	4474809.996	685.595
341	443307.296	4474809.104	673.828
342	443325.106	4474807.758	673.455
343	443322.680	4474806.485	673.439
344	443316.081	4474806.896	673.583
345	443310.360	4474807.314	673.722
346	443304.414	4474807.775	673.782
347	443297.640	4474808.243	673.874
348	443290.888	4474808.758	673.919
349	443283.950	4474809.266	674.005
350	443276.757	4474809.848	674.106
351	443270.186	4474810.292	674.174
352	443261.615	4474810.921	674.313
353	443254.414	4474811.478	674.416
354	443246.057	4474812.082	674.555
355	443238.343	4474812.681	674.557
356	443230.605	4474813.263	674.767
357	443211.891	4474814.603	675.196
358	443202.355	4474815.347	675.381
359	443204.230	4474814.332	675.266
360	443210.923	4474813.827	675.180
361	443216.042	4474813.737	675.035
362	443215.980	4474814.386	675.049
363	443250.045	4474811.179	674.484
364	443249.383	4474811.222	674.497
365	443251.782	4474810.645	674.442
366	443280.970	4474808.893	674.048
367	443281.653	4474808.884	674.039
368	443288.851	4474809.305	673.962
369	443289.617	4474809.240	673.955
370	443303.471	4474806.861	673.749
371	443306.956	4474806.240	673.535
372	443308.524	4474807.575	673.769
373	443308.530	4474806.858	673.751
374	443215.598	4474839.067	674.968
375	443204.377	4474839.973	675.086
376	443204.217	4474836.120	675.023
377	443203.334	4474822.928	674.899



Pto.	X	Y	Z
378	443209.222	4474826.215	675.066
379	443329.039	4474824.745	673.375
380	443329.366	4474829.465	673.329
381	443329.476	4474831.260	673.314
382	443331.031	4474852.568	673.025
383	443331.584	4474860.457	672.885
384	443331.717	4474862.686	672.887
385	443332.316	4474870.569	672.721
386	443333.385	4474885.265	672.444
387	443334.339	4474898.374	672.249
388	443334.372	4474899.483	672.240
389	443334.758	4474905.401	672.417
390	443334.932	4474907.808	672.410
391	443334.357	4474900.079	672.251
392	443335.250	4474913.123	672.432
393	443337.901	4474881.971	672.221
394	443336.576	4474863.590	672.540
395	443335.357	4474846.147	672.893
396	443334.274	4474831.267	673.098
397	443332.832	4474811.276	673.227
398	443338.102	4474884.575	672.173
399	443339.438	4474903.121	672.025
400	443340.231	4474914.390	671.952
401	443339.466	4474918.981	671.939
402	443338.069	4474921.731	671.923
403	443335.486	4474924.180	671.925
404	443331.955	4474925.237	671.959
405	443322.180	4474925.939	672.163
406	443333.918	4474922.518	672.081
407	443333.674	4474920.551	672.070
408	443326.836	4474931.547	672.011
409	443327.267	4474931.659	672.008
410	443327.517	4474932.017	671.997
411	443327.361	4474932.454	671.980
412	443326.989	4474932.624	671.974
413	443302.412	4474908.466	676.899
414	443262.477	4474915.166	673.588
415	443262.251	4474912.615	673.127
416	443262.064	4474901.393	673.103
417	443272.779	4474895.751	676.445
418	443244.581	4474908.361	674.193
419	443246.898	4474899.171	674.278
420	443247.438	4474889.546	674.161
421	443245.742	4474878.151	674.666
422	443244.673	4474863.837	674.742
423	443244.299	4474851.970	674.692
424	443247.831	4474863.070	672.752
425	443249.134	4474875.130	672.822
426	443249.170	4474887.321	672.880
427	443248.524	4474898.860	673.424
428	443244.854	4474908.474	674.065
429	443248.189	4474917.065	674.034



Pto.	X	Y	Z
430	443256.918	4474917.044	673.748
431	443256.309	4474906.203	673.299
432	443247.293	4474909.537	674.005
433	443253.853	4474896.323	673.061
434	443271.975	4474897.699	672.631
435	443266.883	4474888.905	672.627
436	443255.114	4474886.247	672.907
437	443252.715	4474872.983	672.845
438	443263.861	4474873.069	672.736
439	443270.279	4474865.288	672.679
440	443255.876	4474864.224	672.834
441	443254.346	4474850.454	672.850
442	443267.256	4474849.547	672.718
443	443266.112	4474837.256	672.685
444	443253.675	4474838.142	672.674
445	443252.355	4474827.815	672.672
446	443261.918	4474827.054	672.728
447	443269.903	4474827.236	672.740
448	443250.056	4474798.487	690.869
449	443250.057	4474798.483	691.219
500	443284.699	4474795.770	683.222
501	443284.709	4474795.761	684.994
502	443244.234	4474843.801	674.599
503	443243.232	4474831.867	674.444
504	443245.011	4474821.947	674.164
505	443245.057	4474814.392	674.533
506	443246.552	4474814.497	672.954
507	443246.965	4474822.200	672.855
508	443245.885	4474829.353	672.710
509	443247.089	4474843.938	672.921
510	443247.760	4474854.544	672.882
511	443238.090	4474822.888	674.427
512	443246.091	4474814.431	673.180
513	443252.322	4474813.978	672.895
514	443302.769	4474838.467	672.727
515	443303.633	4474849.404	672.749
516	443304.049	4474854.562	672.773
517	443301.360	4474854.773	672.731
518	443302.709	4474872.937	673.217
519	443306.827	4474894.770	673.033
520	443305.797	4474879.956	673.042
521	443299.889	4474895.272	673.036
522	443297.191	4474898.384	673.073
523	443295.910	4474897.858	673.012
524	443295.481	4474897.730	672.866
525	443299.029	4474893.585	672.857
526	443299.232	4474893.962	673.023
527	443304.069	4474893.207	672.850
528	443304.514	4474893.600	673.003
529	443303.327	4474882.166	672.869
530	443303.455	4474881.999	672.868
531	443303.734	4474881.954	673.004



Pto.	X	Y	Z
532	443303.412	4474877.315	673.014
533	443304.713	4474877.556	673.041
534	443304.865	4474879.645	673.038
535	443304.946	4474881.008	673.043
536	443305.091	4474883.105	673.044
537	443305.194	4474884.470	673.036
538	443305.342	4474886.567	673.038
539	443305.442	4474887.946	673.038
540	443305.574	4474890.049	673.026
541	443305.685	4474891.436	673.029
542	443305.824	4474893.474	673.016
543	443306.148	4474893.802	673.022
544	443304.099	4474893.921	673.022
545	443302.808	4474892.857	672.710
546	443300.504	4474893.004	672.722
547	443302.468	4474881.464	672.731
548	443301.961	4474872.996	673.220
549	443303.195	4474874.779	673.174
550	443303.973	4474874.013	673.269
551	443302.476	4474870.953	672.728
552	443302.317	4474868.478	672.733
553	443302.609	4474868.631	672.921
554	443302.732	4474870.770	672.925
555	443303.018	4474870.754	673.099
556	443302.918	4474868.594	673.107
557	443303.002	4474869.731	673.265
558	443301.643	4474859.146	672.732
559	443301.899	4474858.968	672.887
560	443302.214	4474858.933	673.216
561	443302.137	4474857.885	673.213
562	443302.055	4474856.739	673.213
563	443301.737	4474856.778	672.882
564	443301.449	4474856.661	672.744
565	443302.536	4474854.571	672.744
566	443303.660	4474854.491	672.768
567	443303.661	4474854.744	672.891
568	443303.674	4474855.042	673.053
569	443301.537	4474860.429	672.737
570	443302.039	4474867.053	672.724
571	443287.214	4474882.098	672.822
572	443294.112	4474881.734	672.777
573	443297.789	4474881.532	672.594
574	443297.823	4474881.654	672.606
575	443301.309	4474881.445	672.642
576	443299.620	4474881.523	672.618
577	443298.467	4474891.640	672.644
578	443302.021	4474891.391	672.642
579	443300.452	4474868.375	672.656
580	443299.393	4474852.996	672.630
581	443301.982	4474852.795	672.641
582	443300.860	4474838.156	672.576
583	443300.430	4474840.248	672.571



Pto.	X	Y	Z
584	443301.278	4474850.372	672.581
585	443303.324	4474850.077	672.740
586	443303.655	4474853.943	672.756
587	443299.084	4474855.140	672.595
588	443294.568	4474857.333	672.680
589	443292.612	4474874.525	672.720
590	443294.886	4474889.239	672.618
591	443293.423	4474889.793	672.591
592	443284.161	4474856.576	672.733
593	443286.557	4474858.288	672.756
594	443283.915	4474859.657	672.767
595	443291.632	4474838.492	672.706
596	443290.874	4474848.931	672.713
597	443291.360	4474867.980	672.731
598	443279.615	4474869.421	672.718
599	443278.196	4474853.246	672.721
600	443269.816	4474812.548	672.902
601	443284.146	4474811.566	672.716
602	443285.894	4474813.937	672.732
603	443286.060	4474816.266	672.746
604	443292.027	4474815.832	672.760
605	443292.259	4474818.503	672.742
606	443294.874	4474818.287	672.719
607	443294.872	4474818.309	672.587
608	443299.248	4474817.944	672.576
609	443300.178	4474829.796	672.590
610	443301.872	4474826.574	672.746
611	443302.333	4474826.525	672.760
612	443301.969	4474822.150	672.761
613	443302.772	4474822.074	672.807
614	443302.390	4474817.089	672.920
615	443301.577	4474817.154	672.756
616	443301.546	4474816.635	672.760
617	443294.761	4474817.083	672.737
618	443293.063	4474814.740	672.766
619	443286.997	4474815.202	672.751
620	443292.944	4474823.870	672.624
621	443287.575	4474832.754	672.725
622	443293.841	4474830.267	672.664
623	443299.559	4474829.515	672.554
624	443298.837	4474818.503	672.556
625	443292.940	4474817.700	672.737
626	443287.357	4474821.775	672.642
627	443270.594	4474834.028	672.744
628	443272.109	4474858.944	672.709
629	443275.194	4474858.797	672.698
630	443281.170	4474856.256	672.933
631	443273.293	4474832.154	672.732
632	443279.860	4474831.590	672.906
633	443280.321	4474836.285	672.936
634	443286.206	4474835.690	672.906
635	443285.646	4474830.959	672.883



Pto.	X	Y	Z
636	443283.471	4474833.982	672.879
637	443283.420	4474833.161	672.875
638	443282.605	4474833.246	672.872
639	443289.585	4474833.604	672.713
640	443290.117	4474833.542	672.679
641	443286.928	4474828.345	672.684
642	443287.319	4474827.756	672.700
643	443282.388	4474827.051	672.820
644	443282.132	4474826.359	672.824
645	443293.841	4474810.812	672.780
646	443273.863	4474882.788	672.685
647	443273.088	4474874.345	672.757
648	443274.114	4474889.632	672.638
649	443274.846	4474900.098	672.696
650	443290.320	4474899.083	672.666
651	443296.748	4474898.646	673.031
652	443285.135	4474895.451	672.573
653	443289.086	4474896.433	672.593
654	443284.620	4474896.181	672.574
655	443283.461	4474894.299	672.597
656	443282.363	4474896.324	672.588
657	443321.089	4474825.150	673.250
658	443323.034	4474851.489	673.221
<b>1001</b>	<b>443233.913</b>	<b>4474924.987</b>	<b>673.837</b>
<b>1002</b>	<b>443234.854</b>	<b>4474875.724</b>	<b>674.919</b>
<b>1003</b>	<b>443257.433</b>	<b>4474893.961</b>	<b>672.868</b>
<b>1004</b>	<b>443336.703</b>	<b>4474917.703</b>	<b>672.121</b>
<b>1005</b>	<b>443235.543</b>	<b>4474813.774</b>	<b>674.735</b>
<b>1006</b>	<b>443329.819</b>	<b>4474806.244</b>	<b>673.265</b>
<b>1007</b>	<b>443329.501</b>	<b>4474825.102</b>	<b>673.371</b>
1008	443328.056	4474810.457	673.490
1009	443328.350	4474814.544	673.466
1010	443329.272	4474828.224	673.334
1011	443263.450	4474920.163	673.582
1012	443290.913	4474819.984	672.663
<b>1013</b>	<b>443290.914</b>	<b>4474819.985</b>	<b>672.661</b>
<b>1014</b>	<b>443239.134</b>	<b>4474837.337</b>	<b>674.800</b>
<b>1015</b>	<b>443288.099</b>	<b>4474872.962</b>	<b>672.768</b>





## CALCULOS



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P O L I G O N A L  
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-NE-	-NV-	--H--	--V--	--DG--	-M-	-I-	-AZ-	--DR--	-DES-
1001	1003	346.6520	101.7763	38.951	1.40	1.52	158.7066	38.936	-0.971
1003	1001	135.2947	98.5714	38.944	1.40	1.49	358.7066	38.934	0.967
1003	1013	349.5330	100.2370	81.205	1.40	1.49	172.9432	81.204	-0.209
1013	1003	3.6432	99.8567	81.204	1.40	1.42	372.9432	81.204	0.204
1013	1007	122.3130	98.8776	38.933	1.40	1.42	91.6112	38.927	0.707
1007	1013	97.5961	101.2401	38.932	1.40	1.44	291.6112	38.925	-0.714
1007	1004	210.9300	100.8885	92.887	1.40	1.44	4.9433	92.878	-1.252
1004	1007	137.4480	99.2048	92.883	1.40	1.48	204.9433	92.876	1.243
1004	1001	237.0071	98.9939	103.063	1.40	1.48	304.5007	103.050	1.711
1001	1004	292.4443	101.1346	103.057	1.40	1.52	104.5007	103.041	-1.720

Longitud de la poligonal 355.0  
 Error de cierre angular = -0.0088  
 Error de cierre en --X-- -0.008  
 Error de cierre en --Y-- 0.017  
 Error de cierre en --Z-- -0.004

-NE-	--X--	--Y--	--Z--	--ä--	-NOMBRE-
1001	443233.913	4474924.987	673.837	212.0564	
1003	443257.433	4474893.961	672.868	223.4119	
1013	443290.914	4474819.985	672.661	369.3000	
1007	443329.501	4474825.102	673.371	194.0151	
1004	443336.703	4474917.703	672.123	67.4953	
1001	443233.913	4474924.987	673.837	212.0564	

CALCULO EN COORDENADAS PLANAS ESCALA 1.000000



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P O L I G O N A L  
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-NE-	-NV-	--H--	--V--	--DG--	-M-	-I-	-AZ-	--DR--	-DES-
1003	1014	396.4863	98.0368	59.540	1.40	1.49	219.8987	59.512	1.929
1014	1003	8.3687	102.0945	59.544	1.40	1.42	19.8987	59.512	-1.933
1014	1015	48.4297	102.1659	60.582	1.40	1.42	59.9603	60.547	-2.035
1015	1014	74.6310	98.0054	60.580	1.40	1.53	259.9603	60.550	2.028
1015	1013	11.2932	100.2908	53.060	1.40	1.53	196.6230	53.059	-0.112
1013	1015	27.3230	99.9008	53.051	1.40	1.42	396.6230	53.051	0.104

Longitud de la poligonal 173.1  
Error de cierre angular = 0.0015  
Error de cierre en --X-- 0.005  
Error de cierre en --Y-- 0.013  
Error de cierre en --Z-- 0.001

-NE-	--X--	--Y--	--Z--	--ä--	-NOMBRE-
1003	443257.433	4474893.961	672.868	223.4119	
1014	443239.134	4474837.337	674.800	11.5300	
1015	443288.099	4474872.962	672.768	185.3293	
1013	443290.914	4474819.985	672.661	369.3000	

CALCULO EN COORDENADAS PLANAS ESCALA 1.000000



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P O L I G O N A L  
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-NE-	-NV-	--H--	--V--	--DG--	-M-	-I-	-AZ-	--DR--	-DES-
1001	1002	386.7321	98.7564	49.276	1.40	1.52	198.7862	49.267	1.079
1002	1001	97.2867	101.5477	49.289	1.40	1.51	398.7862	49.274	-1.086
1002	1005	297.7966	100.3090	61.957	1.40	1.51	199.2937	61.956	-0.188
1005	1002	298.8367	99.8985	61.949	1.40	1.48	399.2937	61.949	0.181
1005	1006	4.6182	101.0477	94.585	1.40	1.48	105.0729	94.572	-1.474
1006	1005	279.6602	99.2239	94.582	1.40	1.47	305.0729	94.575	1.469
1006	1007	373.5150	99.8778	18.862	1.40	1.47	398.9254	18.862	0.102
1007	1006	4.9103	100.5215	18.861	1.40	1.44	198.9254	18.860	-0.110

Longitud de la poligonal 224.7  
 Error de cierre angular = -0.0093  
 Error de cierre en --X-- 0.006  
 Error de cierre en --Y-- -0.005  
 Error de cierre en --Z-- -0.003

-NE-	--X--	--Y--	--Z--	--ä--	-NOMBRE-
1001	443233.913	4474924.987	673.837	212.0564	
1002	443234.854	4474875.724	674.869	301.4995	
1005	443235.543	4474813.774	674.605	100.4570	
1006	443329.819	4474806.244	673.265	25.4127	
1007	443329.501	4474825.102	673.371	194.0151	

CALCULO EN COORDENADAS PLANAS ESCALA 1.000000



## FOTOS











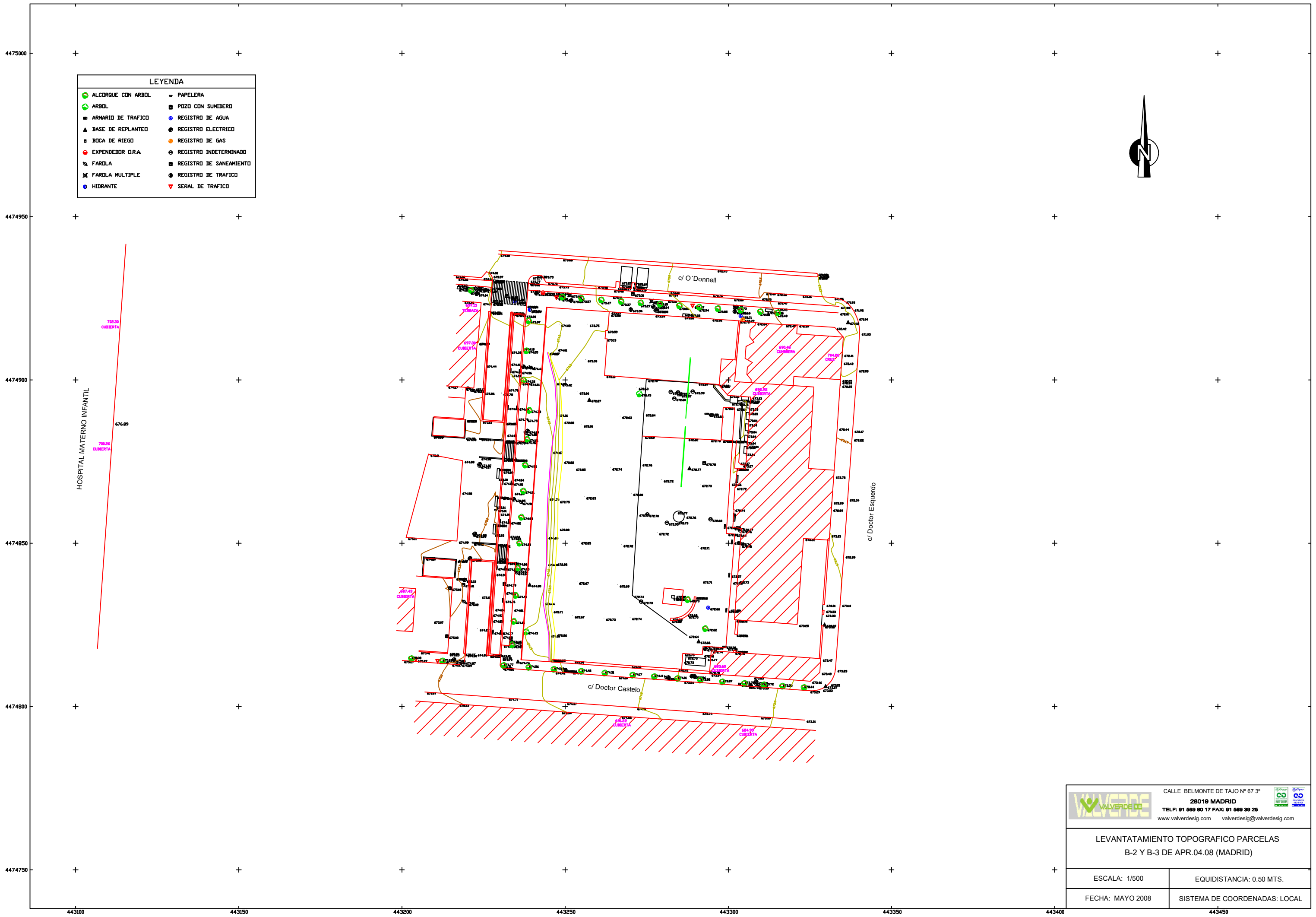






## PLANO





LEYENDA	
	ALCORQUE CON ARBOL
	ARBOL
	ARMARIO DE TRAFICO
	BASE DE REPLANTEO
	BOCA DE RIEGO
	EXPENDEDOR D.R.A.
	FARDOLA
	FARDOLA MULTIPLE
	HIDRANTE
	PAPELERA
	POZO CON SUMIDERO
	REGISTRO DE AGUA
	REGISTRO ELECTRICO
	REGISTRO DE GAS
	REGISTRO INDETERMINADO
	REGISTRO DE SANEAMIENTO
	REGISTRO DE TRAFICO
	SEÑAL DE TRAFICO





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LEVANTAMIENTO TOPOGRAFICO PARCELAS

B-2 Y B-3 DE APR.04.08 (MADRID)

ESCALA: 1/500	EQUIDISTANCIA: 0.50 MTS.
FECHA: MAYO 2008	SISTEMA DE COORDENADAS: LOCAL