

**MODIFICACION PUNTUAL DEL PLAN GENERAL
DE ORDENACIÓN URBANA U.E. SECTOR 55
ALCALA DE HENARES
MADRID**



ANEJO A : CARTOGRAFIA Y TOPOGRAFÍA

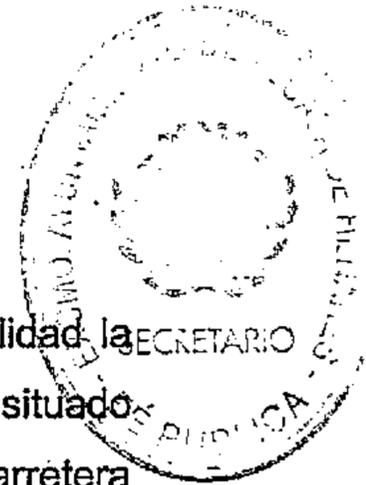


**Ayuntamiento de
Alcalá de Henares**

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1. MEMORIA

Los trabajos recogidos en la presente documentación han tenido como finalidad la obtención de cartografía a escala 1/500 del denominado Polígono Espartales, situado en el Término Municipal de Alcalá de Henares, ubicado al Norte y junto a la carretera nacional A-2 y al Este del denominado Camino de Los Espartales.

Dicho polígono se encuentra delimitado por un cerramiento y en su interior existen diversas edificaciones y naves.

El método seguido para la obtención de la cartografía ha consistido en efectuar un levantamiento mediante topografía clásica, es decir tomando sobre el terreno los datos necesarios que han permitido el posterior dibujo de la misma.

Para ello se han implantado y observado en el terreno 16 vértices cubriendo la zona. Dichos vértices se han enlazado mediante las poligonales que se adjuntan en su apartado correspondiente.

En la observación de dichas poligonales se ha utilizado una estación total de la marca Geodimeter modelo 442 de 5^{cc} de apreciación angular provista de colector automático de datos.

Se ha empleado la regla de Bessel en las observaciones angulares y se han reiterado las medidas de los ejes en ambos sentidos.

Finalizada la observación de las poligonales, el posterior paso consistió en la toma mediante radiación de los puntos necesarios para la definición del terreno.

Con estos puntos se tomaron todos los detalles planimétricos y altimétricos como han sido edificaciones, bordillos, registros, árboles, vallas etc. completando la información suministrada por los puntos con croquis acotados y un reportaje fotográfico.

Por si son de utilidad para ulteriores trabajos, se han dejado materializados de forma permanente dos de los vértices (B-5001 y B-5002) que ofrecen garantía de durabilidad. El resto de los vértices han sido considerado como provisionales si bien se han señalado con pintura, pero por su ubicación su empleo ha sido temporal.

CARTOGESA

Se ha establecido un sistema local de coordenadas, aunque enlazado a la cartografía 1:5.000 de la C.A.M. (Comunidad Autónoma de Madrid) para poder georeferenciar el presente levantamiento.

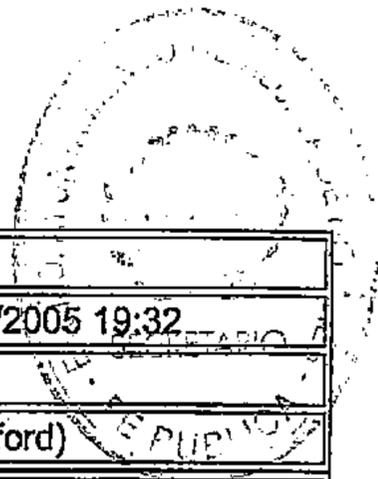
Finalizadas las observaciones y calculadas las coordenadas de todos los puntos, se ha procedido al dibujo de las correspondientes minutas a la escala citada de 1/500.

Dado el escaso relieve de la zona la representación altimétrica mediante curvas de nivel es insuficiente habiéndose por ello incorporado al dibujo un gran número de cotas provenientes de los puntos tomados en campo.

Los trabajos descritos se han desarrollado durante el mes de Marzo de 2005.



2. CÁLCULO DE POLIGONALES



Poligonal						
Proyecto : PARCELA ALCALA				Calculado en la fecha : 05/04/2005 19:32		
Sistema de referencia : Sistema Nuevo						
Proyección : Ninguna				Elipsoide : Internacional (Hayford)		
Datos originales						
Estación	Visado	Horizontal	Vertical	Dist.Geom.	Mira	Inst.
5001	5002	200.1085	100.4680	68.530	1.320	1.570
5002	5001	385.3730	100.0255	68.530	1.320	1.600
5002	5103	83.3120	100.3250	52.360	1.320	1.600
5103	5002	393.7855	100.3195	52.370	1.320	1.575
5103	5100	78.7775	99.9805	34.590	1.320	1.575
5100	5103	383.6650	100.9910	34.600	1.320	1.600
5100	5001	142.6860	100.3405	54.630	1.320	1.600
5001	5100	142.0905	100.2775	54.630	1.320	1.570
Datos calculados						
Estación	Visado	Acimut	Dist.Red.	Desnivel		
5001	5002	231.5076	68.5281	-0.253		
5002	5001	31.5076	68.5300	0.253		
5002	5103	129.4541	52.3593	0.013		
5103	5002	329.4541	52.3693	-0.008		
5103	5100	14.4536	34.5900	0.266		
5100	5103	214.4536	34.5958	-0.259		
5100	5001	373.4821	54.6292	-0.012		
5001	5100	173.4821	54.6295	0.012		
Resumen						
		Longitud de la poligonal	210.116 m			
		Número de ejes	4			
		Error de cierre angular	0.0300 gon			
		Error de cierre en X	0.006 m			
		Error de cierre en Y	0.015 m			
		Error de cierre en Z	-0.007 m			
		Error relativo en planimetría	1 / 13250			
Coordenadas finales						
Número	X	Y	Z	Desor	Nombre	
5001	468348.770	4483790.870	604.550	31.3916		
5002	468316.223	4483730.569	604.294	46.1346		
5103	468363.084	4483707.200	604.303	335.6686		
5100	468370.871	4483740.908	604.564	230.7886		



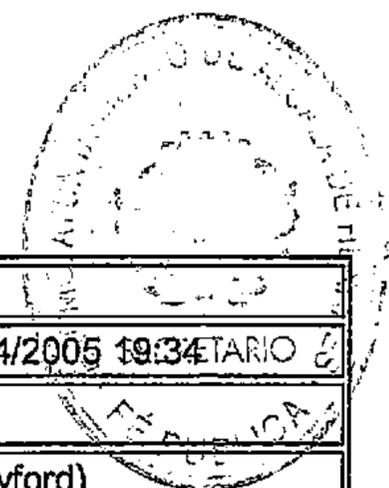
Poligonal	
Proyecto : PARCELA ALCALA	Calculado en la fecha : 05/04/2005 19:33
Sistema de referencia : Sistema Nuevo	
Proyección : Ninguna	Elipsoide : Internacional (Hayford)

Datos originales						
Estación	Visado	Horizontal	Vertical	Dist.Geom.	Mira	Inst.
5101	5001	60.1855	100.1643	36.087	1.320	1.615
5001	5101	99.7035	100.8045	36.060	1.320	1.570
5001	5002	200.1085	100.4680	68.530	1.320	1.570
5002	5001	385.3730	100.0255	68.530	1.320	1.600

Datos calculados				
Estación	Visado	Acimut	Dist.Red.	Desnivel
5101	5001	331.0989	36.0869	0.202
5001	5101	131.0989	36.0571	-0.206
5001	5002	231.5076	68.5281	-0.253
5002	5001	31.5076	68.5300	0.253

Resumen			
	Longitud de la poligonal	104.601 m	
	Número de ejes	2	
	Error de cierre angular	0.0075 gon	
	Error de cierre en X	-0.005 m	
	Error de cierre en Y	0.006 m	
	Error de cierre en Z	0.003 m	
	Error relativo en planimetría	1 / 13159	

Coordenadas finales					
Número	X	Y	Z	Desor	Nombre
5101	468380.630	4483773.940	604.340	270.9096	
5001	468348.775	4483790.871	604.544	31.3954	
5002	468316.223	4483730.569	604.294	46.1346	



Poligonal						
Proyecto : PARCELA ALCALA				Calculado en la fecha : 05/04/2005 19:34 ETARIO		
Sistema de referencia : Sistema Nuevo						
Proyección : Ninguna				Elipsoide : Internacional (Hayford)		
Datos originales						
Estación	Visado	Horizontal	Vertical	Dist.Geom.	Mira	Inst.
5101	5001	60.1855	100.1643	36.087	1.320	1.615
5001	5101	99.7035	100.8045	36.060	1.320	1.570
5001	5102	4.9340	100.5290	42.960	1.320	1.570
5102	5001	7.1138	100.2381	42.972	1.320	1.585
Datos calculados						
Estación	Visado	Acimut	Dist.Red.	Desnivel		
5101	5001	331.0951	36.0869	0.202		
5001	5101	131.0951	36.0571	-0.206		
5001	5102	36.3256	42.9585	-0.107		
5102	5001	236.3256	42.9717	0.104		
Resumen						
Longitud de la poligonal			79.037 m			
Número de ejes			2			
Error de cierre angular			0.0000 gon			
Error de cierre en X			0.000 m			
Error de cierre en Y			0.000 m			
Error de cierre en Z			0.000 m			
Error relativo en planimetría			1 / 0			
Coordenadas finales						
Número	X	Y	Z	Desor	Nombre	
5101	468380.630	4483773.940	604.340	270.9096		
5001	468348.776	4483790.867	604.544	31.3916		
5102	468371.983	4483827.025	604.438	229.2118		

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Poligonal	
Proyecto : PARCELA ALCALA	Calculado en la fecha : 05/04/2005 19:35
Sistema de referencia : Sistema Nuevo	
Proyección : Ninguna	Elipsoide : Internacional (Hayford)

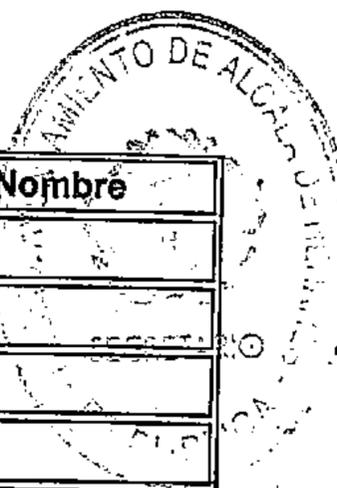
Datos originales						
Estación	Visado	Horizontal	Vertical	Dist.Geom.	Mira	Inst.
5102	5105	245.6230	100.7945	35.850	1.320	1.585
5105	5102	251.4065	100.1426	35.858	1.320	1.585
5105	5113	399.7481	99.7994	46.647	1.800	1.585
5113	5105	72.5090	99.6590	46.630	1.800	1.570
5113	5112	14.7584	99.9039	63.581	1.800	1.570
5112	5113	323.0470	99.6425	63.570	1.800	1.525
5112	5109	226.9705	99.5775	21.740	1.320	1.525
5109	5112	346.4215	101.5485	21.740	1.320	1.475
5109	5107	82.9327	101.1878	8.687	1.320	1.475
5107	5109	94.4455	102.3620	8.690	1.320	1.580
5107	5102	4.3073	100.3331	64.441	1.320	1.580
5102	5107	286.5420	100.2340	64.440	1.320	1.585

Datos calculados				
Estación	Visado	Acimut	Dist.Red.	Desnivel
5102	5105	74.8401	35.8472	-0.182
5105	5102	274.8401	35.8579	0.185
5105	5113	23.1869	46.6468	-0.068
5113	5105	223.1869	46.6293	0.020
5113	5112	165.4416	63.5809	-0.134
5112	5113	365.4416	63.5690	0.082
5112	5109	269.3703	21.7395	0.349
5109	5112	69.3703	21.7336	-0.374
5109	5107	205.8868	8.6855	-0.007
5107	5109	5.8868	8.6840	-0.062
5107	5102	315.7538	64.4401	-0.077
5102	5107	115.7538	64.4396	0.028

Resumen			
	Longitud de la poligonal	240.927 m	
	Número de ejes	6	
	Error de cierre angular	0.0315 gon	
	Error de cierre en X	0.004 m	
	Error de cierre en Y	-0.024 m	
	Error de cierre en Z	-0.001 m	
	Error relativo en planimetría	1 / 10074	

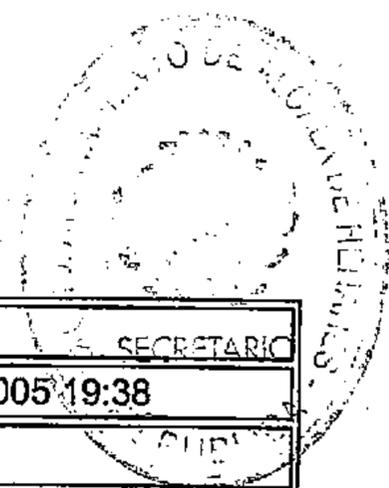
Coordenadas finales			
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CARTOGESA



Número	X	Y	Z	Desor	Nombre
5102	468371.983	4483827.025	604.438	229.2118	
5105	468405.073	4483840.825	604.254	23.4336	
5113	468421.687	4483884.399	604.210	150.6779	
5112	468454.529	4483829.957	604.102	42.3946	
5109	468435.261	4483819.896	604.464	122.9488	
5107	468434.459	4483811.247	604.491	311.4413	

Poligonal						
Proyecto : PARCELA ALCALA				Calculado en la fecha : 05/04/2005 19:37		
Sistema de referencia : Sistema Nuevo						
Proyección : Ninguna				Elipsoide : Internacional (Hayford)		
Datos originales						
Estación	Visado	Horizontal	Vertical	Dist.Geom.	Mira	Inst.
5107	5108	268.7770	99.7270	35.180	1.320	1.580
5108	5107	144.2435	101.1990	35.180	1.320	1.515
5108	5110	398.5220	100.5770	144.380	1.600	1.515
5110	5108	397.3880	99.3700	144.380	1.600	1.540
5110	5111	220.0540	99.9845	56.510	1.600	1.540
5111	5110	8.1160	99.9639	56.523	1.600	1.600
Datos calculados						
Estación	Visado	Acimut	Dist.Red.	Desnivel		
5107	5108	180.2183	35.1797	0.411		
5108	5107	380.2183	35.1738	-0.467		
5108	5110	234.4968	144.3741	-1.392		
5110	5108	34.4968	144.3729	1.370		
5110	5111	257.1628	56.5100	-0.046		
5111	5110	57.1628	56.5230	0.032		
Resumen						
Longitud de la poligonal		236.067 m				
Número de ejes		3				
Error de cierre angular		0.0000 gon				
Error de cierre en X		0.000 m				
Error de cierre en Y		0.000 m				
Error de cierre en Z		0.000 m				
Error relativo en planimetría		1 / 0				
Coordenadas finales						
Número	X	Y	Z	Desor	Nombre	
5107	468434.459	4483811.247	604.491	311.4413		
5108	468445.214	4483777.755	604.930	235.9748		
5110	468370.755	4483654.064	603.549	37.1088		
5111	468326.557	4483618.841	603.510	49.0468		



Poligonal						
Proyecto : PARCELA ALCALA				Calculado en la fecha : 05/04/2005 19:38		
Sistema de referencia : Sistema Nuevo						
Proyección : Ninguna				Elipsoide : Internacional (Hayford)		
Datos originales						
Estación	Visado	Horizontal	Vertical	Dist.Geom.	Mira	Inst.
5105	5114	339.5610	101.0185	25.690	1.320	1.585
5114	5105	263.9745	100.2674	25.710	1.320	1.575
Datos calculados						
Estación	Visado	Acimut	Dist.Red.	Desnivel		
5105	5114	362.9946	25.6867	-0.146		
5114	5105	162.9946	25.7098	0.147		
Resumen						
	Longitud de la poligonal			25.698 m		
	Número de ejes			1		
	Error de cierre angular			0.0000 gon		
	Error de cierre en X			0.000 m		
	Error de cierre en Y			0.000 m		
	Error de cierre en Z			0.000 m		
	Error relativo en planimetría			1 / 0		
Coordenadas finales						
Número	X	Y	Z	Desor	Nombre	
5105	-468405.073	4483840.825	604.254	23.4336		
5114	468390.962	4483862.303	604.108	299.0201		

3. DATOS DE RADIACIONES

Radiación desde la estación 5100

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CARTOGESA



X 468370.871 Desorientación
 Y 4483740.908 Nombre
 Z 604.564

Observaciones utilizadas

Visado	Horizontal	Vertical	Dist.Geom.	Mira	Inst.	Acimut	Dist.Red.
101	128.4345	104.3050	3.760	1.320	1.600	359.2231	8.751
102	31.2815	102.1695	6.140	1.320	1.600	262.0701	6.136
103	25.1615	101.6175	5.880	1.320	1.600	255.9501	5.878
104	6.0660	100.6375	16.750	1.320	1.600	236.8546	16.749

Radiación desde la estación 5101

X 468380.630 Desorientación 270.9096
 Y 4483773.940 Nombre
 Z 604.340

105	2.0690	100.3710	27.860	1.320	1.600	232.8576	27.860
106	375.5965	101.0595	11.350	1.320	1.600	206.3851	11.348
107	378.7715	100.9670	26.330	1.320	1.600	209.5601	26.327

Observaciones utilizadas

Visado	Horizontal	Vertical	Dist.Geom.	Mira	Inst.	Acimut	Dist.Red.
9	94.0950	99.1765	12.050	1.600	1.615	365.0046	12.049
10	117.0575	98.8060	9.550	1.600	1.615	387.9671	9.548
11	119.8695	99.2880	10.450	1.600	1.615	390.7791	10.449
12	167.4700	99.9885	10.700	1.600	1.615	38.3796	10.700
90	122.4490	103.0545	9.320	1.600	1.615	393.3586	9.309
91	130.0880	103.0095	9.610	1.600	1.615	0.9976	9.599
92	153.2255	103.0140	9.640	1.600	1.615	24.1351	9.629
93	158.1965	103.1405	9.460	1.600	1.615	29.1061	9.448
94	163.0010	103.2115	8.140	1.600	1.615	33.9106	8.130
95	170.0065	100.0745	8.580	1.600	1.615	40.9161	8.580
96	171.2530	98.8220	9.580	1.600	1.615	42.1626	9.578
97	242.9510	98.2640	4.330	1.600	1.615	113.8606	4.328
98	242.3230	99.1950	2.770	1.600	1.615	113.2326	2.770
99	309.2420	98.9420	5.940	1.600	1.615	180.1516	5.939
100	298.7620	98.8120	6.890	1.600	1.615	169.6716	6.889

Radiación desde la estación 5102

X 468371.983 Desorientación 229.2118
 Y 4483827.025 Nombre
 Z 604.438

Observaciones utilizadas

Visado	Horizontal	Vertical	Dist.Geom.	Mira	Inst.	Acimut	Dist.Red.
206	349.3015	91.8340	5.060	2.200	1.585	178.5133	5.018
207	278.9450	96.7610	12.340	2.200	1.585	108.1568	12.324
208	294.2165	100.4780	25.400	1.320	1.585	123.4283	25.399
209	282.5305	100.4565	34.790	1.320	1.585	111.7423	34.789
210	289.1495	100.2945	47.540	1.320	1.585	118.3613	47.539
211	287.7270	100.2180	62.700	1.320	1.585	116.9388	62.700
212	282.7825	100.3035	54.870	1.320	1.585	111.9943	54.869
213	284.3065	100.2535	65.090	1.320	1.585	113.5183	65.089
5106	236.5740	102.1110	14.310	1.320	1.585	65.7858	14.302

Radiación desde la estación 5103

CARTOGESA

X 468363.084 Desorientación
 Y 4483707.200 Nombre
 Z 604.303

335.6686



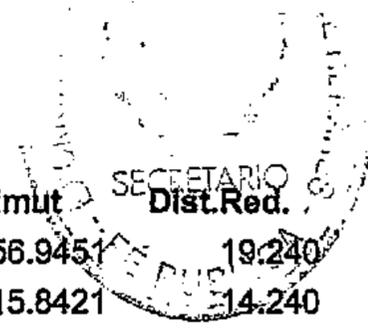
Observaciones utilizadas

Visado	Horizontal	Vertical	Dist.Geom.	Mira	Inst.	Acimut	Dist.Red.
108	76.2560	100.0050	30.070	1.320	1.575	11.9246	30.070
109	56.8060	100.4855	10.810	1.320	1.575	392.4746	10.810
110	114.7025	100.6360	9.990	1.320	1.575	50.3711	9.990
111	258.8505	106.7210	2.190	1.320	1.575	194.5191	2.178
112	301.2160	100.7320	20.450	1.320	1.575	236.8846	20.449
113	303.4170	100.5145	40.920	1.320	1.575	239.0856	40.919
114	304.4400	100.6245	72.500	1.320	1.575	240.1086	72.497
115	304.7015	100.5475	90.910	1.320	1.575	240.3701	90.907
117	308.7775	100.6300	72.260	1.320	1.575	244.4461	72.256
118	306.5795	100.6010	76.790	1.320	1.575	242.2481	76.787
119	306.2730	100.6005	57.380	1.320	1.575	241.9416	57.377
120	309.0925	100.5870	48.080	1.320	1.575	244.7611	48.078
121	305.8510	100.6080	34.680	1.320	1.575	241.5196	34.678
122	310.9585	100.8235	26.780	1.320	1.575	246.6271	26.778
123	312.5590	100.8515	25.950	1.320	1.575	248.2276	25.948
124	335.0705	100.9370	13.770	1.320	1.575	270.7391	13.769
125	347.4880	100.6130	16.820	1.320	1.575	283.1566	16.819
126	359.4350	100.3260	14.810	1.320	1.575	295.1036	14.810
127	367.5905	100.0175	19.520	1.320	1.575	303.2591	19.520
128	364.3445	100.6685	12.090	1.320	1.575	300.0131	12.089
129	373.6595	99.5555	12.490	1.320	1.575	309.3281	12.490
130	313.1870	100.9185	13.190	1.320	1.575	248.8556	13.189
132	11.7430	100.0005	19.530	1.320	1.575	347.4116	19.530
133	6.2570	99.9665	26.320	1.320	1.575	341.9256	26.320
135	5.5990	99.9160	38.600	1.320	1.575	341.2676	38.600
136	1.4170	100.0510	38.140	1.320	1.575	337.0856	38.140
137	0.2440	100.0475	43.260	1.320	1.575	335.9126	43.260
138	11.6125	101.2465	6.240	1.320	1.575	347.2811	6.239
139	393.7550	100.2965	16.840	1.320	1.575	329.4236	16.840
140	394.9900	100.1725	28.660	1.320	1.575	330.6586	28.660
141	394.1715	100.2330	41.510	1.320	1.575	329.8401	41.510
142	388.8765	99.9790	35.980	1.320	1.575	324.5451	35.980
143	388.4770	100.0310	36.900	1.320	1.575	324.1456	36.900
144	382.1000	100.1155	37.190	1.320	1.575	317.7686	37.190
145	382.5555	97.3675	39.600	3.200	1.575	318.2241	39.566
146	388.5035	98.6035	39.250	2.200	1.575	324.1721	39.241
147	24.2250	100.0940	12.230	1.320	1.575	359.8936	12.230
148	19.7420	100.1855	11.990	1.320	1.575	355.4106	11.990
149	8.0825	100.6800	19.220	1.320	1.575	343.7511	19.219
150	3.4740	100.3290	27.130	1.320	1.575	339.1426	27.130
152	4.1630	100.3065	37.250	1.320	1.575	339.8316	37.250
153	399.9495	100.3025	36.950	1.320	1.575	335.6181	36.950
154	398.2125	100.3755	46.580	1.320	1.575	333.8811	46.579
155	399.5885	100.3915	46.780	1.320	1.575	335.2571	46.779
5104	368.6010	99.9260	32.620	1.320	1.575	304.2696	32.620

Radiación desde la estación 5105

CARTOGESA

X 468405.073 Desorientación 23.4336
 Y 4483840.825 Nombre
 Z 604.254



Visado	Observaciones utilizadas						
	Horizontal	Vertical	Dist.Geom.	Mira	Inst.	Acimut	Dist.Red.
367	233.5115	100.1195	19.240	1.320	1.585	256.9451	19.240
368	192.4085	99.9240	14.240	1.320	1.585	215.8421	14.240
369	71.2125	100.9425	21.810	1.320	1.585	94.6461	21.808
370	71.1725	101.1065	22.720	1.320	1.585	94.6061	22.717
371	81.7105	101.0030	23.730	1.320	1.585	105.1441	23.727
372	91.6685	98.0635	16.500	2.000	1.585	115.1021	16.492
373	381.8795	101.8105	9.090	1.320	1.585	5.3131	9.086
374	382.3060	102.3015	7.480	1.320	1.585	5.7396	7.475
375	44.8380	99.5905	19.590	1.700	1.585	68.2716	19.590
376	73.4985	99.6935	19.560	1.800	1.585	96.9321	19.560
377	77.2540	101.9520	8.360	1.320	1.585	100.6876	8.356
378	96.3790	104.0960	5.000	1.320	1.585	119.8126	4.990
379	395.3690	101.6590	6.640	1.320	1.585	18.8026	6.638
380	29.1185	100.5090	11.070	1.320	1.585	52.5521	11.070
381	42.3720	100.5680	16.340	1.320	1.585	65.8056	16.339
382	64.2205	100.9560	15.940	1.320	1.585	87.6541	15.938
383	41.3130	102.8970	5.230	1.320	1.585	64.7466	5.225
384	209.1345	102.7350	6.280	1.320	1.585	232.5681	6.274
385	361.9855	101.7450	10.790	1.320	1.585	385.4191	10.786
386	365.1435	100.5365	27.770	1.320	1.585	388.5771	27.769

Radiación desde la estación 5107

X 468434.459 Desorientación 311.4413
 Y 4483811.247 Nombre
 Z 604.491

Visado	Observaciones utilizadas						
	Horizontal	Vertical	Dist.Geom.	Mira	Inst.	Acimut	Dist.Red.
214	314.7595	102.5370	8.180	1.320	1.580	226.2008	8.174
215	276.2220	102.6195	8.650	1.320	1.580	187.6633	8.643
216	242.0635	103.0900	7.990	1.320	1.580	153.5048	7.981

Radiación desde la estación 5108

X 468445.214 Desorientación 235.9748
 Y 4483777.755 Nombre
 Z 604.930

Visado	Observaciones utilizadas						
	Horizontal	Vertical	Dist.Geom.	Mira	Inst.	Acimut	Dist.Red.
217	148.3270	101.5665	30.600	1.320	1.515	384.3018	30.591
218	153.4365	100.1765	29.180	2.000	1.515	389.4113	29.180
219	153.8015	100.2100	29.960	2.000	1.515	389.7763	29.960
220	93.5880	102.2330	14.430	1.320	1.515	329.5628	14.421
221	42.0560	102.2990	16.230	1.320	1.515	278.0308	16.219
222	21.3780	103.1930	10.960	1.320	1.515	257.3528	10.946
223	16.1940	102.1675	10.920	1.320	1.515	252.1688	10.914
224	2.4140	101.7160	17.670	1.320	1.515	238.3888	17.664
225	383.3355	100.3165	14.700	1.600	1.515	219.3103	14.700

Radiación desde la estación 5109

CARTOGESA

X 468435.261 Desorientación
 Y 4483819.896 Nombre
 Z 604.464



Visado	Observaciones utilizadas							
	Horizontal	Vertical	Dist.Geom.	Mira	Inst.	Acimut	Dist.Red.	
258	324.8790	102.4855	10.960	1.320	1.475	47.8278	10.952	
259	316.5265	102.8040	9.240	1.320	1.475	39.4753	9.231	
260	304.2420	100.9795	11.280	1.320	1.475	27.1908	11.279	
261	208.8060	100.6595	12.660	1.320	1.475	331.7548	12.659	
262	188.1885	101.6940	10.230	1.320	1.475	311.1373	10.226	
263	204.4570	102.6465	5.620	1.320	1.475	327.4058	5.615	
264	231.1240	107.9175	1.690	1.320	1.475	354.0728	1.677	
265	364.8080	101.3970	7.840	1.320	1.475	87.7568	7.838	
266	14.0350	101.3905	7.240	1.320	1.475	136.9838	7.238	
267	36.9060	100.8740	11.440	1.320	1.475	159.8548	11.439	
268	21.7880	99.4095	15.010	1.320	1.475	144.7368	15.009	
269	393.3825	99.7845	15.540	1.320	1.475	116.3313	15.540	
270	377.9420	99.5980	16.690	1.320	1.475	100.8908	16.690	
271	366.8180	99.4110	11.850	1.320	1.475	89.7668	11.849	
272	368.6995	99.4550	24.940	1.320	1.475	91.6483	24.939	
273	28.4370	99.6135	18.500	1.320	1.475	151.3858	18.500	
274	35.9230	99.4545	15.390	1.320	1.475	158.8718	15.389	
275	31.7005	99.4930	18.750	1.320	1.475	154.6493	18.749	
276	42.3900	98.3970	25.610	1.800	1.475	165.3388	25.602	
277	9.5805	98.2130	21.140	1.800	1.475	132.5293	21.132	
278	370.2150	98.5050	27.430	1.800	1.475	93.1638	27.422	
279	356.1935	98.6755	35.930	1.800	1.475	79.1423	35.922	
280	341.2545	99.7610	40.120	1.320	1.475	64.2033	40.120	
281	345.9270	101.1140	24.850	1.320	1.475	68.8758	24.846	
282	344.6675	99.6340	30.600	1.320	1.475	67.6163	30.599	
283	333.9115	101.7090	26.020	1.320	1.475	56.8603	26.011	
284	326.0365	101.4330	28.820	1.320	1.475	48.9853	28.813	
285	328.9950	102.3500	21.810	1.320	1.475	51.9438	21.795	
286	348.6955	102.2415	16.890	1.320	1.475	71.6443	16.880	
287	324.2620	103.4620	10.770	1.320	1.475	47.2108	10.754	
288	328.9690	103.4800	10.630	1.320	1.475	51.9178	10.614	
289	331.5400	103.4800	11.080	1.320	1.475	54.4888	11.063	
290	341.3905	102.4005	16.200	1.320	1.475	64.3393	16.188	
291	340.5930	102.4010	16.690	1.320	1.475	63.5418	16.678	
292	338.8210	102.4005	17.020	1.320	1.475	61.7698	17.008	
293	280.1440	102.9545	6.340	1.320	1.475	3.0928	6.333	
294	193.0625	100.9295	15.490	1.320	1.475	316.0113	15.488	
295	216.0255	101.0340	19.880	1.320	1.475	338.9743	19.877	
296	217.4770	100.8865	22.560	1.320	1.475	340.4258	22.558	
297	206.7400	100.9270	21.330	1.320	1.475	329.6888	21.328	
298	197.1410	100.7725	18.670	1.320	1.475	320.0898	18.669	
299	198.1080	100.4620	23.510	1.320	1.475	321.0568	23.509	
300	198.6955	99.4870	21.180	1.320	1.475	321.6443	21.179	
301	213.5585	101.1095	22.430	1.320	1.475	336.5073	22.427	

Radiación desde la estación 5110

X 468370.755 Desorientación 37.1088

CARTOGESA

Y 4483654.064 Nombre
 Z 603.549



Visado	Observaciones utilizadas							Dist.Red.
	Horizontal	Vertical	Dist.Geom.	Mira	Inst.	Acimut		
226	397.2520	99.4160	140.450	1.600	1.540	34.3608	140.444	
227	398.7680	99.3865	126.960	1.600	1.540	35.8768	126.954	
228	398.0785	99.4595	115.710	1.600	1.540	35.1873	115.706	
229	395.3180	99.5825	110.900	1.600	1.540	32.4268	110.898	
230	393.5475	99.5545	97.560	1.600	1.540	30.6563	97.558	
231	396.9900	99.5360	103.370	1.600	1.540	34.0988	103.367	
232	394.9920	99.5685	85.830	1.600	1.540	32.1008	85.828	
233	390.6820	99.6185	77.040	1.600	1.540	27.7908	77.039	
234	391.3135	99.4120	62.690	1.600	1.540	28.4223	62.687	
235	386.7580	99.5310	59.930	1.600	1.540	23.8668	59.928	
236	389.1600	99.3430	46.530	1.600	1.540	26.2688	46.528	
237	373.5370	99.4505	34.970	1.600	1.540	10.6458	34.969	
238	361.9345	99.0260	15.820	1.600	1.540	399.0433	15.818	
239	320.6755	99.4760	16.820	1.600	1.540	357.7843	16.819	
240	261.5795	99.8410	20.760	1.600	1.540	298.6883	20.760	
241	288.2785	98.7665	8.660	1.600	1.540	325.3873	8.658	
242	229.2420	99.7770	22.820	1.600	1.540	266.3508	22.820	
243	238.7805	99.8515	31.500	1.600	1.540	275.8893	31.500	
244	223.0790	99.9000	56.120	1.600	1.540	260.1878	56.120	
245	219.4620	100.0105	39.360	1.600	1.540	256.5708	39.360	
246	217.8140	100.0000	57.230	1.600	1.540	254.9228	57.230	
247	214.2020	100.1015	64.200	1.600	1.540	251.3108	64.200	
248	210.3795	100.0550	79.650	1.600	1.540	247.4883	79.650	
249	210.4870	100.1015	90.850	1.600	1.540	247.5958	90.850	
250	213.5390	100.0495	78.420	1.600	1.540	250.6478	78.420	

Radiación desde la estación 5111

X 468326.557 Desorientación 49.0468
 Y 4483618.841 Nombre
 Z 603.510

Visado	Observaciones utilizadas						
	Horizontal	Vertical	Dist.Geom.	Mira	Inst.	Acimut	Dist.Red.
251	297.8915	98.8125	13.100	1.600	1.600	346.9383	13.098
252	295.5940	99.5130	24.580	1.600	1.600	344.6408	24.579
253	237.3480	99.5790	25.140	1.600	1.600	286.3948	25.139
254	230.8595	99.8345	37.320	1.600	1.600	279.9063	37.320
255	230.6235	99.9700	49.070	1.600	1.600	279.6703	49.070

Coordenadas calculadas

Número	X	Y	Z
251	468316.861	4483627.646	603.754
252	468307.777	4483634.698	603.698
253	468301.990	4483613.509	603.676
254	468291.081	4483607.256	603.607
255	468279.968	4483603.436	603.533
256	468288.224	4483612.777	603.675
257	468292.801	4483618.445	603.803

Radiación desde la estación 5112

CARTOGESA

X 468454.529 Desorientación
 Y 4483829.957 Nombre
 Z 604.102

42.3946

Observaciones utilizadas

Visado	Horizontal	Vertical	Dist.Geom.	Mira	Inst.	Acimut	Dist.Red.
302	260.6440	99.5765	12.450	1.320	1.525	303.0386	12.450
303	264.4190	99.3320	10.540	1.320	1.525	306.8136	10.539
304	312.3285	101.8085	11.880	1.320	1.525	354.7231	11.875
305	310.5300	100.9310	12.040	1.320	1.525	352.9246	12.039
306	307.6545	99.8025	19.610	1.320	1.525	350.0491	19.610
307	320.6355	98.1660	31.430	2.200	1.525	363.0301	31.417
308	330.5805	100.4955	32.180	1.320	1.525	372.9751	32.179
309	330.2115	100.4940	32.920	1.320	1.525	372.6061	32.919
310	329.4770	98.8130	33.130	2.200	1.525	371.8716	33.124
311	324.4440	98.9475	33.760	2.200	1.525	366.8386	33.755
312	322.9755	98.9480	33.680	2.200	1.525	365.3701	33.675
313	322.3660	98.9235	33.210	2.200	1.525	364.7606	33.205
314	334.1320	100.1060	35.260	1.320	1.525	376.5266	35.260
315	344.3510	99.6440	33.530	1.320	1.525	386.7456	33.529
316	346.9600	99.8175	27.860	1.320	1.525	389.3546	27.860
317	353.4865	101.6375	31.180	0.200	1.525	395.8811	31.170
318	360.3720	101.6925	27.440	0.200	1.525	2.7666	27.430
319	341.8330	100.8045	23.190	1.320	1.525	384.2276	23.188
320	350.9825	102.9520	22.080	0.200	1.525	393.3771	22.056
321	339.4970	101.0875	17.160	1.320	1.525	381.8916	17.157
322	359.7615	101.8760	11.940	1.320	1.525	2.1561	11.935
323	383.3190	98.4135	17.350	1.320	1.525	25.7136	17.345
324	375.4040	99.5860	25.020	1.320	1.525	17.7986	25.019
325	1.1900	98.8955	22.430	1.320	1.525	43.5846	22.427
326	375.0565	99.4205	29.830	1.320	1.525	17.4511	29.829
327	345.8555	99.6245	40.920	1.320	1.525	388.2501	40.919
328	335.7740	99.6185	47.710	1.320	1.525	378.1686	47.709
329	330.6315	99.8755	42.880	1.320	1.525	373.0261	42.880

Radiación desde la estación 5113

X 468421.687 Desorientación 150.6779
 Y 4483884.399 Nombre
 Z 604.210

Observaciones utilizadas

Visado	Horizontal	Vertical	Dist.Geom.	Mira	Inst.	Acimut	Dist.Red.
330	41.2050	99.5250	31.570	1.800	1.570	191.8829	31.569
331	43.8670	99.5380	33.290	1.800	1.570	194.5449	33.289
332	14.8520	100.3335	30.520	1.320	1.570	165.5299	30.520
333	34.2350	100.5065	29.390	1.320	1.570	184.9129	29.389
334	51.3890	100.4725	29.370	1.320	1.570	202.0669	29.369
335	49.3285	100.4720	32.910	1.320	1.570	200.0064	32.909
336	399.8410	102.3475	6.410	1.320	1.570	150.5189	6.406
337	12.6235	101.1590	12.800	1.320	1.570	163.3014	12.798
338	19.9690	100.6525	18.250	1.320	1.570	170.6469	18.249
339	32.5140	100.5465	27.300	1.320	1.570	183.1919	27.299
340	19.1880	100.4435	23.950	1.320	1.570	169.8659	23.949
341	4.8865	99.9420	17.970	1.320	1.570	155.5644	17.970

CARTOGESA

342	380.6350	99.4840	15.940	1.320	1.570	131.3129	15.939
343	293.5330	99.5180	5.990	1.320	1.570	44.2109	5.990
344	228.3345	100.4055	22.440	1.320	1.570	379.0124	22.440
345	222.1890	100.5405	35.020	1.320	1.570	372.8669	35.019
346	219.2170	100.9360	43.720	1.320	1.570	369.8949	43.715
347	200.2355	100.6460	27.520	1.320	1.570	350.9134	27.519
348	203.6650	100.5585	38.190	1.320	1.570	354.3429	38.189
349	180.8595	100.7675	39.070	1.320	1.570	331.5374	39.067
350	179.8395	100.7250	28.160	1.320	1.570	330.5174	28.158
351	152.1040	100.8090	25.590	1.320	1.570	302.7819	25.588
352	150.6775	100.8410	25.450	1.320	1.570	301.3554	25.448
353	140.2100	100.9495	16.560	1.320	1.570	290.8879	16.558
354	141.9590	101.2825	11.360	1.320	1.570	292.6369	11.358
355	160.6180	93.9450	7.190	2.200	1.570	311.2959	7.158
356	136.6340	93.1145	5.660	2.200	1.570	287.3119	5.627
357	192.4035	101.3010	17.320	1.320	1.570	343.0814	17.316
358	18.7725	101.9755	7.110	1.320	1.570	169.4504	7.107
359	374.3655	99.8450	15.820	1.320	1.570	125.0434	15.820
360	94.4745	100.9070	17.580	1.320	1.570	245.1524	17.578
361	127.9985	101.2530	16.290	1.320	1.570	278.6764	16.287
362	113.5825	102.2040	9.240	1.320	1.570	264.2604	9.234
363	392.1685	102.7025	5.320	1.320	1.570	142.8464	5.315
364	398.5545	101.6150	6.450	1.320	1.570	149.2324	6.448
365	88.6465	100.7605	20.030	1.320	1.570	239.3244	20.029
366	55.2345	100.2830	31.670	1.320	1.570	205.9124	31.670

Radiación desde la estación 5114

X	468390.962	Desorientación	299.0201
Y	4483862.303	Nombre	
Z	604.108		

Observaciones utilizadas

Visado	Horizontal	Vertical	Dist.Geom.	Mira	Inst.	Acimut	Dist.Red.
387	75.4860	100.9035	17.820	1.320	1.575	374.5061	17.818
388	49.2255	101.1170	14.100	1.320	1.575	348.2456	14.098
389	348.0640	102.5750	6.700	1.320	1.575	247.0841	6.695
390	364.9310	101.8280	15.430	1.320	1.575	263.9511	15.424
391	26.8580	101.1495	21.170	1.320	1.575	325.8781	21.167
392	393.9135	101.1535	22.500	1.320	1.575	292.9336	22.496
393	361.0990	100.8130	25.810	1.320	1.575	260.1191	25.808
394	349.2180	100.6530	29.760	1.320	1.575	248.2381	29.758
395	357.4430	100.2485	37.330	1.320	1.575	256.4631	37.330
396	360.4385	100.0010	37.180	1.320	1.575	259.4586	37.180
397	313.3920	101.1350	20.440	1.320	1.575	212.4121	20.437
398	266.7935	100.4865	12.150	1.320	1.575	165.8136	12.150
399	292.8550	100.5470	12.330	1.320	1.575	191.8751	12.330
400	293.0595	100.5625	12.240	1.320	1.575	192.0796	12.240
401	308.0900	100.4455	13.410	1.320	1.575	207.1101	13.410



4. LISTADO DE COORDENADAS

PUNTO	X	Y	Z	NOMBRE
1	468354.835	4483814.045	604.445	
2	468357.493	4483822.921	604.450	
3	468354.764	4483814.974	604.640	
4	468355.372	4483817.574	604.437	
5	468373.585	4483822.319	604.479	
6	468371.356	4483811.294	604.474	
7	468368.665	4483798.410	604.526	
8	468366.150	4483785.905	604.536	
9	468374.335	4483784.214	604.511	
10	468378.836	4483783.318	604.534	
11	468379.122	4483784.280	604.472	
12	468386.697	4483782.754	604.357	
13	468384.901	4483773.120	604.504	
14	468383.500	4483765.886	604.495	
15	468376.873	4483767.088	604.466	
16	468373.369	4483748.428	604.567	
17	468371.654	4483739.436	604.565	
18	468368.653	4483743.922	604.589	
19	468357.559	4483748.845	604.675	
20	468346.665	4483753.647	604.541	
21	468343.774	4483747.204	604.472	
22	468336.957	4483750.231	604.567	
23	468337.079	4483750.612	604.579	
24	468333.197	4483752.414	604.567	
25	468330.922	4483747.175	604.569	
26	468335.696	4483747.648	605.498	
27	468333.419	4483748.670	605.501	
28	468332.420	4483746.453	604.611	
29	468332.146	4483749.419	604.764	
30	468332.512	4483749.446	604.953	
31	468332.775	4483749.323	605.134	
32	468333.055	4483749.250	605.316	
33	468328.944	4483738.850	604.513	
34	468325.375	4483730.827	604.437	
35	468344.348	4483763.584	604.708	
36	468351.951	4483807.180	604.664	
37	468350.065	4483800.893	604.608	
38	468347.950	4483795.574	604.693	
39	468344.838	4483790.059	604.741	
40	468343.452	4483788.895	604.619	
41	468342.613	4483787.471	604.574	

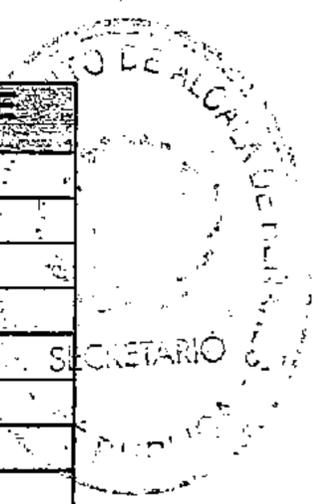
CARTOGESA



PUNTO	X	Y	Z	NOMBRE
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43	468337.126	4483772.157	604.864	
44	468341.745	4483771.578	604.758	
45	468336.533	4483766.310	604.594	
46	468331.980	4483768.856	604.747	
47	468344.477	4483763.695	604.732	
48	468329.449	4483755.470	604.534	
49	468334.296	4483764.502	604.602	
50	468342.146	4483760.135	604.509	
51	468339.018	4483753.781	604.441	
52	468351.462	4483756.643	604.574	
53	468361.122	4483753.314	604.641	
54	468370.022	4483751.120	604.519	
55	468370.627	4483762.409	604.550	
56	468362.472	4483764.762	604.599	
57	468350.006	4483770.104	604.612	
58	468340.002	4483782.271	604.389	
59	468354.621	4483776.957	604.540	
60	468368.078	4483773.123	604.488	
61	468378.332	4483771.479	604.371	
62	468380.830	4483779.253	604.110	
63	468377.543	4483782.096	604.206	
64	468369.261	4483778.974	604.408	
65	468356.524	4483783.831	604.497	
66	468346.519	4483787.102	604.491	
67	468353.215	4483795.848	604.473	
68	468361.119	4483794.067	604.407	
69	468363.915	4483792.498	604.561	
70	468365.065	4483798.333	604.557	
71	468366.798	4483807.539	604.574	
72	468361.608	4483803.513	604.417	
73	468354.917	4483804.097	604.462	
74	468358.028	4483818.413	604.450	
75	468367.890	4483817.740	604.384	
76	468372.366	4483826.781	604.459	
77	468365.241	4483827.791	604.468	
78	468371.946	4483814.641	604.375	
79	468370.957	4483814.453	604.389	
80	468366.424	4483812.161	604.397	
81	468363.895	4483808.736	604.416	
82	468362.068	4483801.015	604.403	
83	468361.716	4483792.974	604.419	
84	468362.232	4483789.285	604.458	
85	468363.500	4483786.287	604.469	
86	468367.550	4483797.501	604.492	
87	468364.353	4483785.434	604.487	
88	468365.063	4483785.102	604.487	
89	468379.001	4483782.213	603.982	
90	468379.661	4483783.199	603.908	
91	468380.780	4483783.538	603.901	
92	468384.194	4483782.885	603.899	
93	468384.801	4483782.418	603.889	
94	468384.758	4483780.943	603.945	
95	468385.773	4483780.808	604.345	
96	468386.520	4483781.493	604.532	

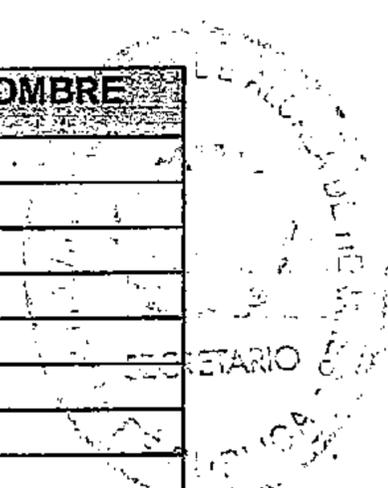
CARTOGESA

PUNTO	X	Y	Z	NOMBRE
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99	468382.452	4483768.287	604.454	
100	468383.789	4483767.818	604.484	
101	468368.630	4483743.916	604.590	
102	468365.792	4483737.464	604.635	
103	468366.345	4483737.158	604.694	
104	468361.708	4483726.888	604.676	
105	468357.122	4483716.678	604.682	
106	468369.735	4483729.617	604.655	
107	468366.933	4483714.877	604.444	
108	468368.683	4483736.744	604.555	
109	468361.809	4483717.935	604.475	
110	468370.189	4483714.223	604.458	
111	468363.271	4483705.031	604.327	
112	468351.888	4483690.089	604.322	
113	468339.510	4483673.755	604.227	
114	468320.372	4483648.622	603.847	
115	468309.224	4483633.967	603.776	
117	468316.637	4483651.850	603.843	
118	468315.785	4483646.711	603.833	
119	468327.958	4483661.831	604.016	
120	468331.997	4483670.525	604.114	
121	468342.037	4483679.639	604.226	
122	468345.178	4483687.290	604.211	
123	468345.254	4483688.349	604.210	
124	468350.744	4483701.093	604.355	
125	468346.850	4483702.802	604.396	
126	468348.318	4483706.062	604.482	
127	468343.589	4483708.199	604.552	
128	468350.995	4483707.203	604.431	
129	468350.728	4483709.024	604.645	
130	468353.927	4483697.709	604.367	
132	468348.724	4483720.437	604.557	
133	468342.268	4483723.308	604.571	
135	468332.314	4483730.506	604.609	
136	468331.234	4483728.183	604.527	
137	468326.527	4483730.330	604.525	
138	468358.488	4483711.420	604.435	
139	468348.011	4483714.709	604.479	
140	468337.684	4483720.475	604.480	
141	468326.051	4483725.953	604.406	
142	468329.745	4483720.732	604.569	
143	468328.806	4483720.863	604.540	
144	468327.333	4483717.446	604.490	
145	468325.128	4483718.373	604.315	
146	468326.638	4483721.744	604.539	
147	468355.879	4483717.083	604.539	
148	468355.356	4483716.368	604.523	
149	468348.228	4483719.393	604.352	
150	468340.923	4483722.850	604.417	
152	468332.891	4483729.015	604.378	
153	468331.768	4483726.812	604.382	
154	468322.947	4483730.836	604.283	
155	468323.297	4483731.803	604.270	



CARTOGESA

PUNTO	X	Y	Z	NOMBRE
168	468328.327	4483751.421	604.530	
169	468323.439	4483741.465	604.405	
170	468318.364	4483728.043	604.326	
171	468316.437	4483718.042	604.357	
172	468313.529	4483710.813	604.360	
173	468307.447	4483710.999	604.259	
174	468301.380	4483697.905	604.178	
175	468296.444	4483699.243	604.105	
176	468290.754	4483691.692	604.051	
177	468303.227	4483689.698	604.075	
178	468304.925	4483694.604	604.176	
179	468308.043	4483701.322	604.336	
180	468309.958	4483705.593	604.416	
181	468309.128	4483706.035	604.408	
182	468310.725	4483709.577	604.405	
183	468310.348	4483706.324	604.970	
184	468313.314	4483705.007	604.967	
185	468314.237	4483706.996	604.966	
186	468315.299	4483707.548	604.466	
187	468315.049	4483706.648	604.612	
188	468308.313	4483721.287	604.233	
189	468311.029	4483719.280	604.263	
190	468303.890	4483710.842	604.168	
191	468301.322	4483713.236	604.041	
192	468308.446	4483718.140	604.200	
193	468308.097	4483719.912	604.160	
194	468303.919	4483715.604	604.177	
195	468305.371	4483714.195	604.198	
196	468304.673	4483713.290	604.186	
197	468304.937	4483712.605	604.158	
198	468313.605	4483728.220	604.277	
199	468322.168	4483721.482	604.430	
200	468320.077	4483742.994	604.423	
201	468325.129	4483732.146	604.247	
202	468331.004	4483745.175	604.442	
203	468330.097	4483746.691	604.440	
204	468333.191	4483753.067	604.377	
205	468336.444	4483751.773	604.452	
206	468373.645	4483822.290	604.470	
207	468384.206	4483825.450	604.451	
208	468395.682	4483817.888	604.512	
209	468406.182	4483820.645	604.454	
210	468417.559	4483813.503	604.483	
211	468432.476	4483810.539	604.489	
212	468425.882	4483816.749	604.442	
213	468435.611	4483813.307	604.444	
214	468431.189	4483803.756	604.425	
215	468436.123	4483802.767	604.395	
216	468439.783	4483805.302	604.364	
217	468437.747	4483807.421	604.373	
218	468440.383	4483806.532	604.365	
219	468440.424	4483807.330	604.347	
220	468432.320	4483784.214	604.619	
221	468429.951	4483772.269	604.539	
222	468436.634	4483770.959	604.576	



BD

CARTOGESA



PUNTO	X	Y	Z	NOMBRE
223	468437.239	4483770.305	604.754	
224	468435.197	4483763.207	604.649	
225	468440.824	4483763.727	604.772	
226	468442.931	4483774.543	604.779	
227	468438.573	4483761.387	604.714	
228	468431.501	4483752.541	604.472	
229	468424.830	4483750.884	604.217	
230	468415.939	4483740.528	604.173	
231	468423.511	4483742.955	604.243	
232	468412.222	4483729.210	604.071	
233	468403.327	4483723.878	603.951	
234	468397.821	4483710.607	604.068	
235	468392.699	4483709.830	603.931	
236	468389.413	4483696.687	603.970	
237	468376.575	4483688.545	603.791	
238	468370.517	4483669.881	603.731	
239	468360.401	4483667.319	603.628	
240	468349.999	4483653.636	603.541	
241	468362.776	4483657.426	603.657	
242	468351.049	4483642.556	603.569	
243	468341.487	4483642.417	603.563	
244	468325.256	4483621.212	603.578	
245	468340.204	4483629.248	603.483	
246	468327.282	4483616.844	603.489	
247	468324.434	4483609.612	603.387	
248	468316.699	4483595.565	603.421	
249	468308.985	4483587.444	603.345	
250	468314.742	4483599.180	603.429	
251	468316.861	4483627.646	603.754	
252	468307.777	4483634.698	603.698	
253	468301.990	4483613.509	603.676	
254	468291.081	4483607.256	603.607	
255	468279.968	4483603.436	603.533	
256	468288.224	4483612.777	603.675	
257	468292.801	4483618.445	603.803	
258	468442.736	4483827.900	604.191	
259	468440.625	4483827.408	604.212	
260	468439.933	4483830.161	604.445	
261	468424.144	4483825.952	604.487	
262	468425.190	4483821.676	604.346	
263	468430.158	4483822.239	604.385	
264	468434.153	4483821.155	604.409	
265	468442.954	4483821.394	604.447	
266	468441.311	4483815.923	604.460	
267	468442.005	4483810.657	604.461	
268	468446.714	4483810.195	604.758	
269	468450.292	4483815.953	604.671	
270	468451.949	4483819.662	604.724	
271	468446.957	4483821.792	604.728	
272	468459.985	4483823.158	604.832	
273	468448.054	4483806.533	604.731	
274	468444.526	4483807.608	604.750	
275	468447.516	4483805.706	604.768	
276	468448.521	4483797.996	604.783	
277	468453.693	4483809.562	604.732	

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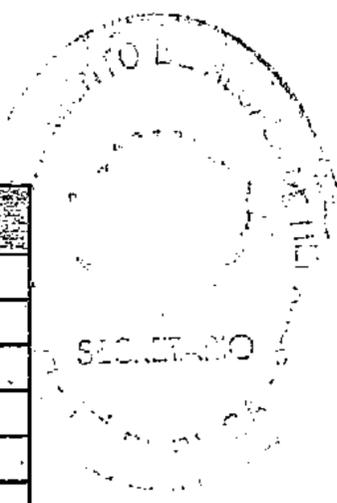
PUNTO	X	Y	Z	NOMBRE
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279	468469.272	4483831.456	604.886	
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281	468457.196	4483831.565	604.184	
282	468461.986	4483834.799	604.795	
283	468455.524	4483836.203	603.920	
284	468455.307	4483840.592	603.970	
285	468451.135	4483834.830	603.814	
286	468450.493	4483827.168	604.024	
287	468442.525	4483827.826	604.033	
288	468442.989	4483827.172	604.038	
289	468443.615	4483827.148	604.013	
290	468448.975	4483828.497	604.008	
291	468449.278	4483828.934	603.989	
292	468449.293	4483829.507	603.977	
293	468435.568	4483826.222	604.324	
294	468420.260	4483823.750	604.392	
295	468418.993	4483831.319	604.296	
296	468417.100	4483833.277	604.304	
297	468416.210	4483829.486	604.308	
298	468417.514	4483825.690	604.392	
299	468413.026	4483827.531	604.448	
300	468415.294	4483826.959	604.789	
301	468416.422	4483832.063	604.228	
302	468442.094	4483830.551	604.390	
303	468444.050	4483831.083	604.418	
304	468446.778	4483838.954	603.970	
305	468446.416	4483838.852	604.131	
306	468440.673	4483843.834	604.368	
307	468437.293	4483856.224	604.332	
308	468441.275	4483859.280	604.057	
309	468440.797	4483859.875	604.052	
310	468440.365	4483859.901	604.045	
311	468437.730	4483859.236	603.985	
312	468437.101	4483858.772	603.984	
313	468437.073	4483858.204	603.989	
314	468441.821	4483862.847	604.248	
315	468447.599	4483862.763	604.495	
316	468449.892	4483857.429	604.387	
317	468452.514	4483861.062	604.625	
318	468455.721	4483857.362	604.698	
319	468448.843	4483852.437	604.014	
320	468452.239	4483851.894	604.404	
321	468449.714	4483846.425	604.014	
322	468454.933	4483841.885	603.955	
323	468461.346	4483845.906	604.739	
324	468461.433	4483854.005	604.470	
325	468468.711	4483847.330	604.696	
326	468462.604	4483858.672	604.579	
327	468447.020	4483870.182	604.549	
328	468438.487	4483874.889	604.593	
329	468436.899	4483869.045	604.391	
330	468425.701	4483853.086	604.216	
331	468424.536	4483851.232	604.222	
332	468437.416	4483858.245	604.301	

CARTOGESA



PUNTO	X	Y	Z	NOMBRE
333	468428.587	4483855.832	604.227	
334	468420.734	4483855.045	604.242	
335	468421.684	4483851.490	604.216	
336	468426.179	4483879.833	604.224	
337	468428.663	4483873.669	604.227	
338	468429.806	4483868.056	604.273	
339	468428.811	4483858.046	604.226	
340	468432.605	4483863.083	604.294	
341	468433.236	4483870.632	604.477	
342	468435.737	4483876.871	604.590	
343	468425.520	4483889.002	604.506	
344	468414.423	4483905.630	604.318	
345	468407.210	4483916.285	604.163	
346	468401.776	4483923.317	603.818	
347	468402.510	4483904.135	604.181	
348	468396.587	4483913.180	604.125	
349	468387.316	4483902.971	603.990	
350	468396.703	4483897.386	604.140	
351	468396.123	4483885.517	604.135	
352	468396.245	4483884.941	604.124	
353	468405.298	4483882.037	604.213	
354	468410.405	4483883.088	604.232	
355	468414.642	4483885.663	604.263	
356	468416.171	4483883.285	604.191	
357	468408.187	4483895.243	604.107	
358	468424.968	4483878.095	604.240	
359	468436.299	4483878.335	604.499	
360	468410.239	4483871.060	604.210	
361	468406.305	4483879.045	604.140	
362	468413.870	4483879.483	604.141	
363	468425.843	4483881.086	604.235	
364	468426.301	4483879.895	604.297	
365	468410.087	4483868.072	604.221	
366	468418.750	4483852.866	604.320	
367	468390.068	4483828.782	604.483	
368	468401.566	4483827.024	604.537	
369	468426.803	4483842.657	604.197	
370	468427.708	4483842.747	604.125	
371	468428.722	4483838.910	604.146	
372	468421.103	4483836.949	604.341	
373	468405.830	4483849.880	604.261	
374	468405.746	4483848.270	604.249	
375	468422.279	4483850.189	604.266	
376	468424.610	4483841.767	604.134	
377	468413.428	4483840.735	604.263	
378	468409.823	4483839.297	604.198	
379	468407.005	4483847.175	604.346	
380	468413.208	4483848.332	604.431	
381	468419.111	4483849.185	604.374	
382	468420.712	4483843.897	604.280	
383	468409.516	4483843.573	604.282	
384	468402.001	4483835.354	604.250	
385	468402.624	4483851.329	604.224	
386	468400.117	4483868.148	604.286	
387	468384.016	4483878.711	604.110	

CARTOGESA

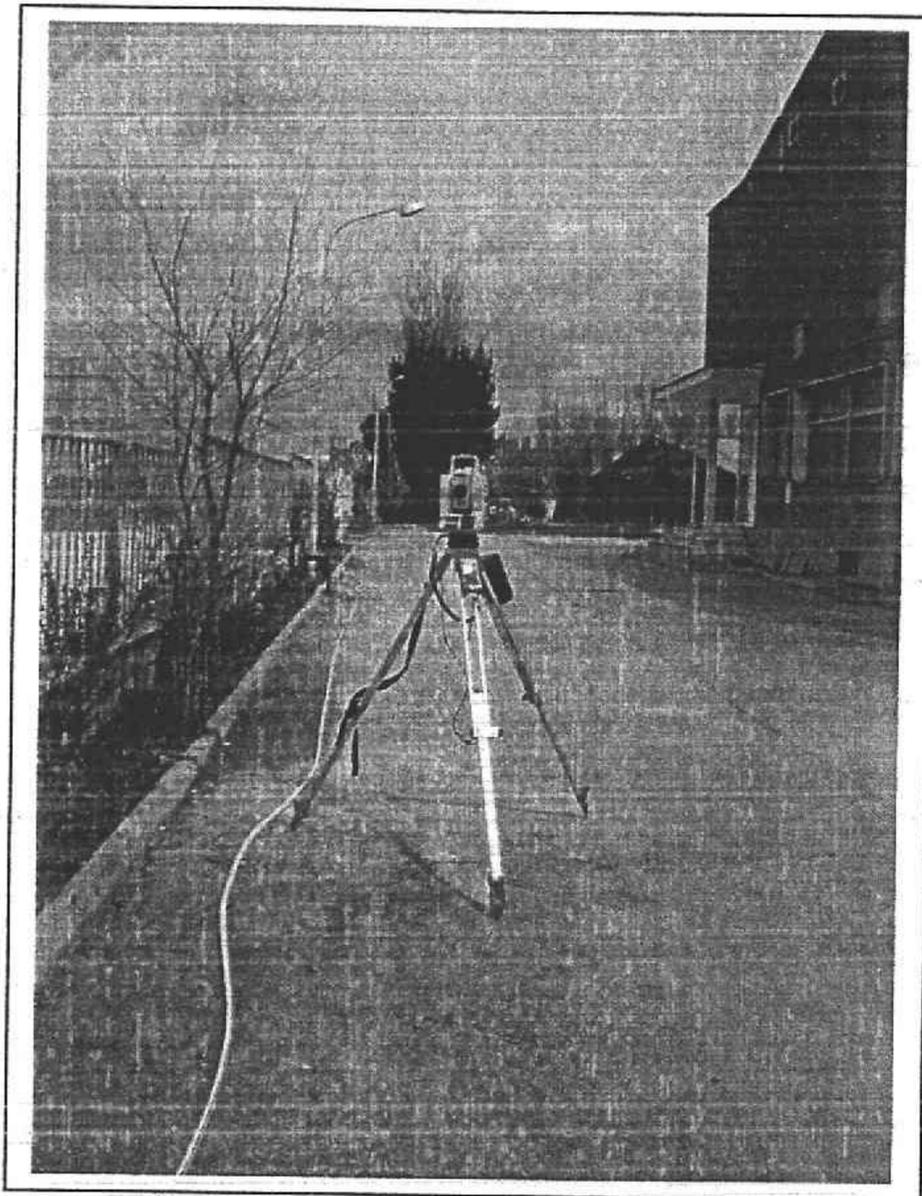


PUNTO	X	Y	Z	NOMBRE
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389	468386.450	4483857.357	604.092	
390	468377.946	4483854.028	603.920	
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392	468368.604	4483859.811	603.955	
393	468370.055	4483847.172	604.033	
394	468370.510	4483840.686	604.058	
395	468362.027	4483838.718	604.217	
396	468361.070	4483840.194	604.363	
397	468387.003	4483842.253	603.999	
398	468397.177	4483851.863	604.270	
399	468392.531	4483850.073	604.257	
400	468392.481	4483850.158	604.255	
401	468389.467	4483848.976	604.269	
5001	468348.776	4483790.867	604.544	B-5001
5002	468316.223	4483730.569	604.294	B-5002
5100	468370.871	4483740.908	604.564	AUX-5100
5101	468380.630	4483773.940	604.340	AUX-5101
5102	468371.983	4483827.025	604.438	AUX-5102
5103	468363.084	4483707.200	604.303	AUX-5103
5104	468330.537	4483709.387	604.596	AUX-5104
5105	468405.073	4483840.825	604.254	AUX-5105
5106	468384.269	4483834.347	604.229	AUX-5106
5107	468434.459	4483811.247	604.491	AUX-5107
5108	468445.214	4483777.755	604.930	AUX-5108
5109	468435.261	4483819.896	604.464	AUX-5109
5110	468370.755	4483654.064	603.549	AUX-5110
5111	468326.557	4483618.841	603.510	AUX-5111
5112	468454.529	4483829.957	604.102	AUX-5112
5113	468421.687	4483884.399	604.210	AUX-5113
5114	468390.962	4483862.303	604.108	AUX-5114

CARTOGESA



VÉRTICE	X	Y	Z	ANAMORFOSIS
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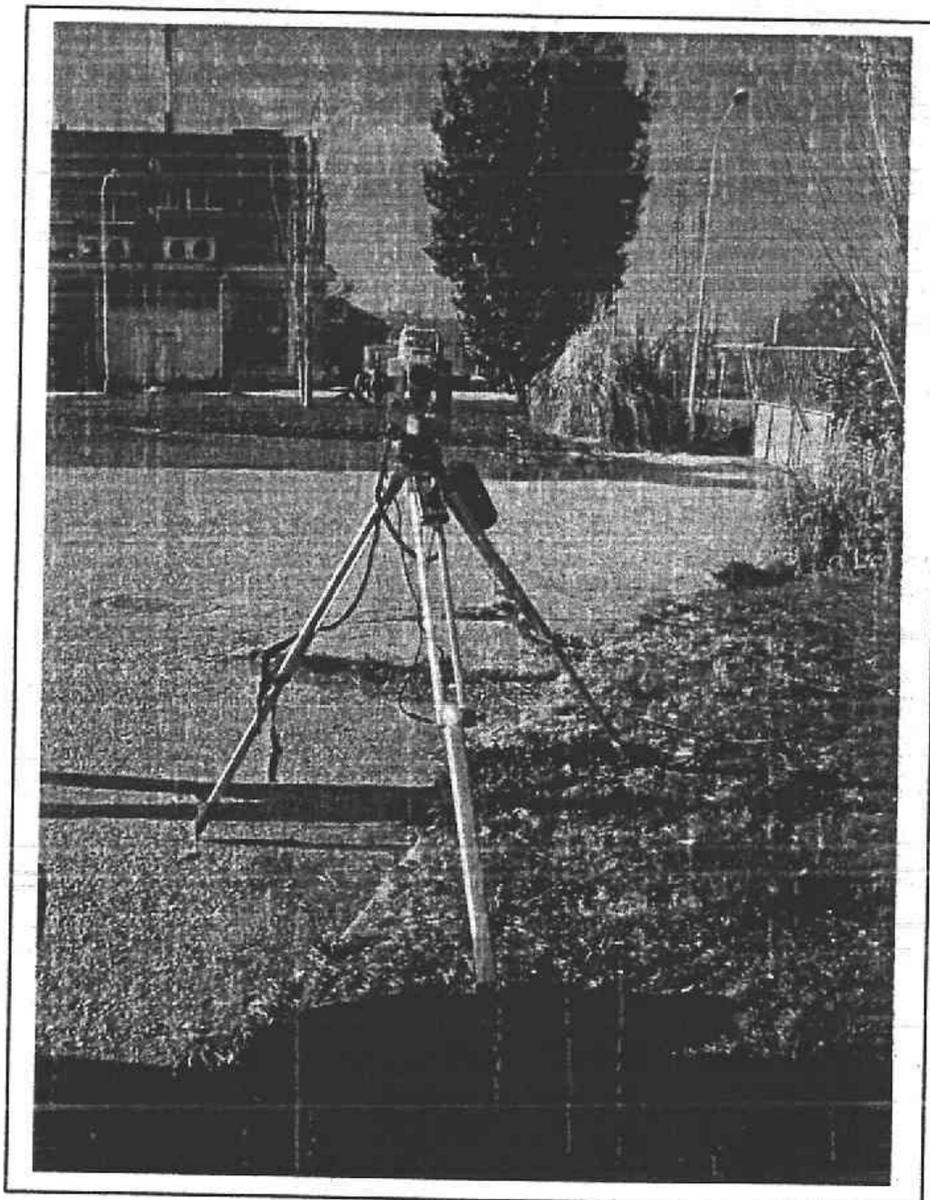


SITUACIÓN : CLAVO DE BRONCE JUNTO A EDIFICIO PRINCIPAL EN PARTE ESTE DEL MISMO



5. RESEÑA DE VÉRTICES

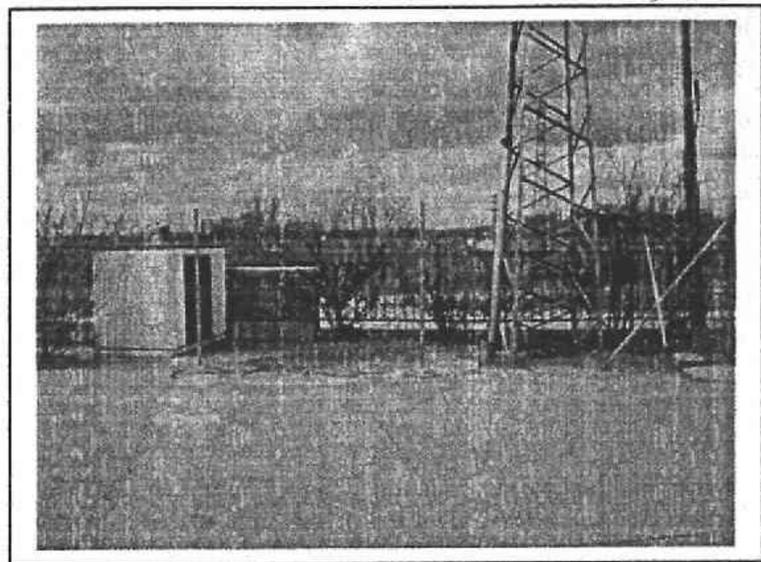
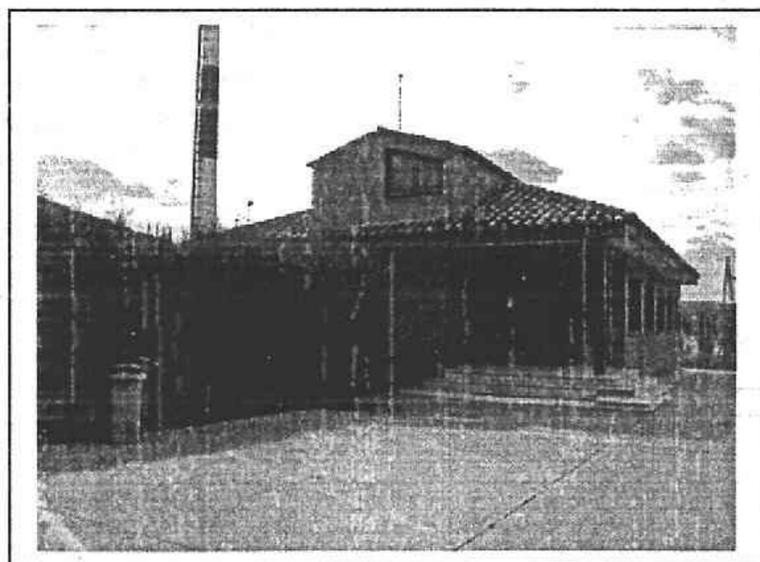
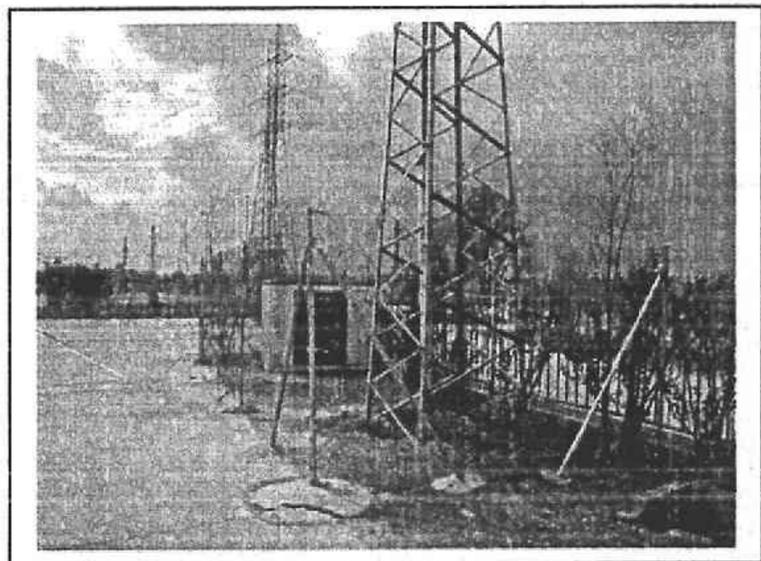
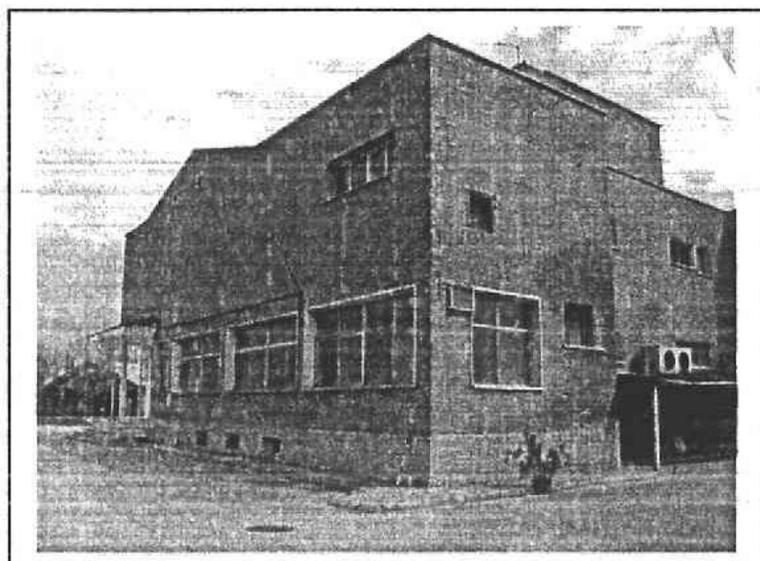
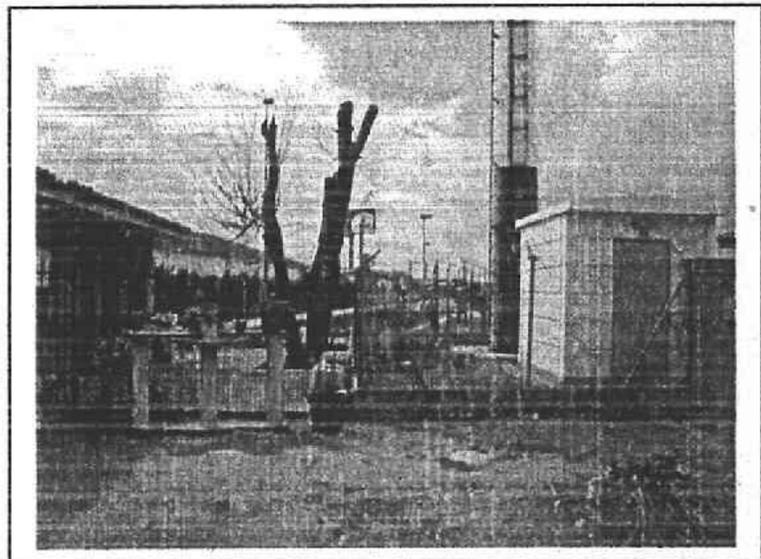
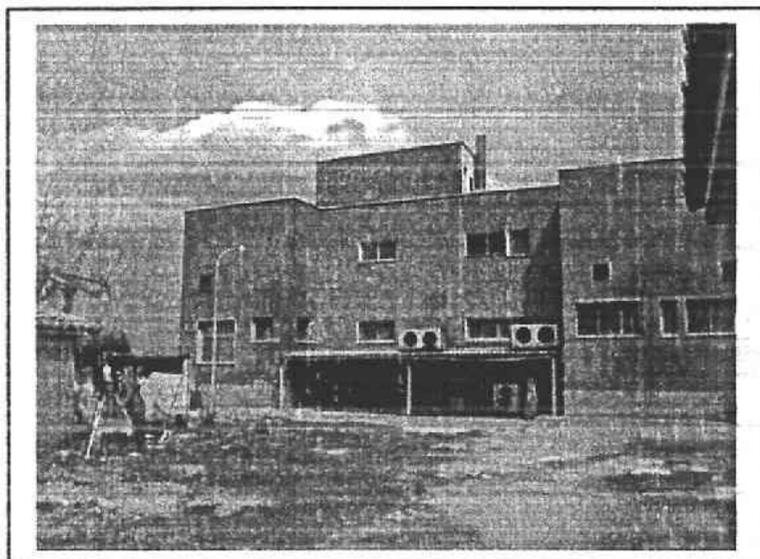
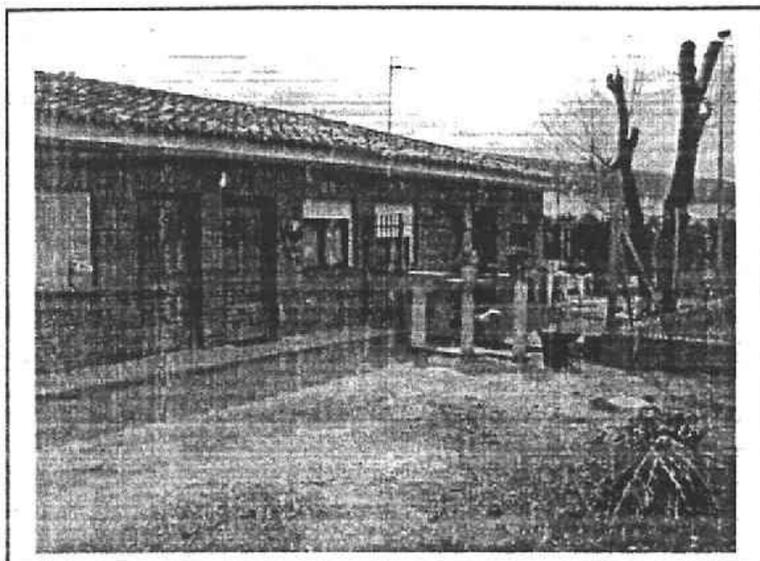
VÉRTICE	X	Y	Z	ANAMORFOSIS
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SITUACIÓN : CLAVO DE BRONCE EN BORDILLO CURVO DE ACERA JUNTO A LA ENTRADA SITUADA EN LA PARTE N.O. DE LA FINCA

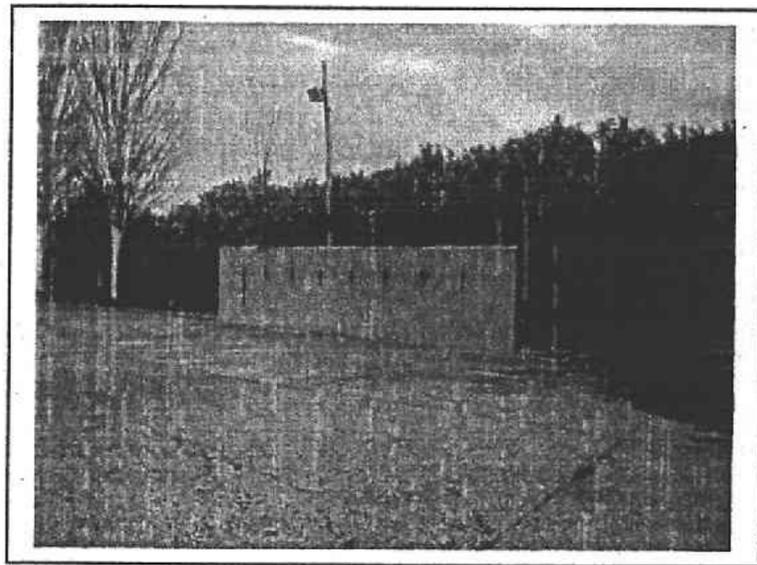
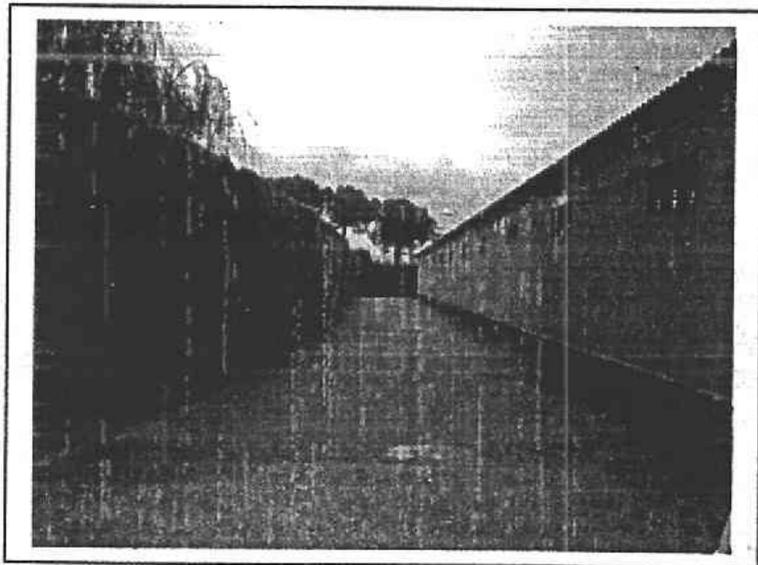
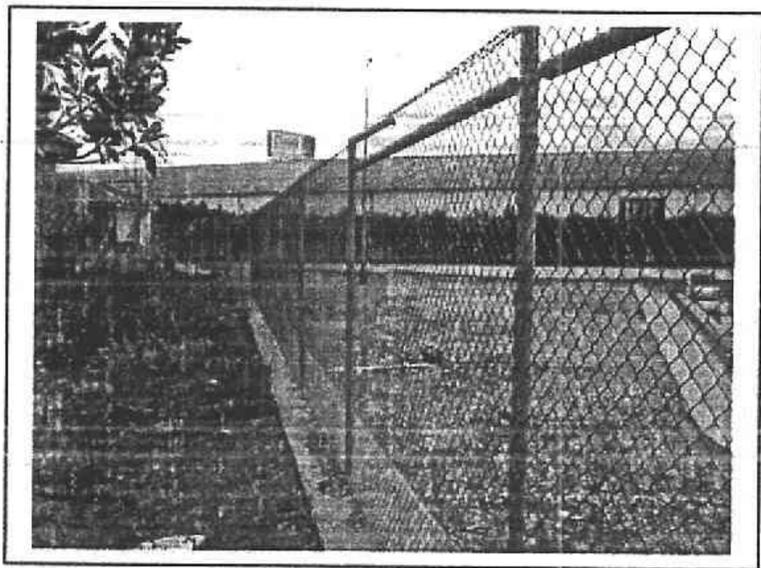
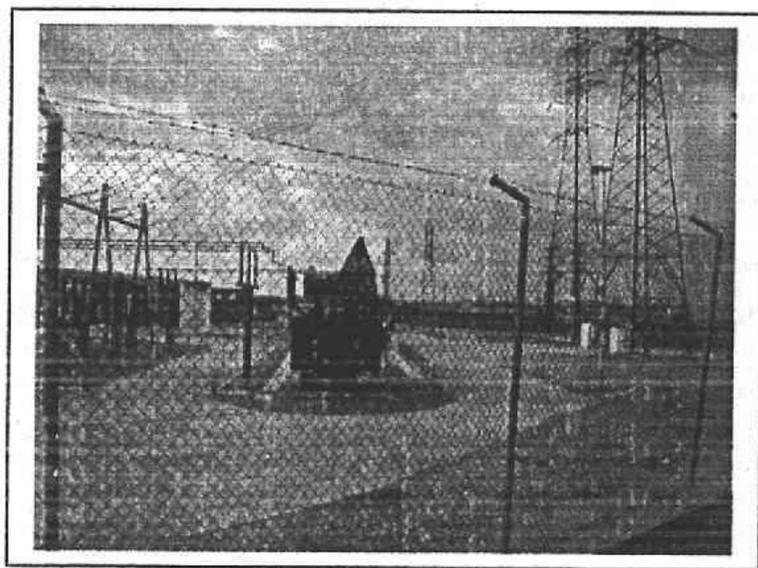
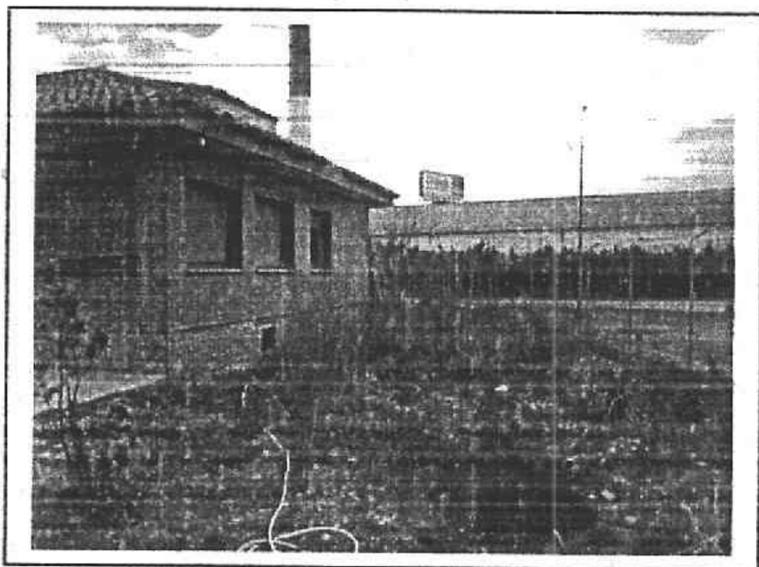
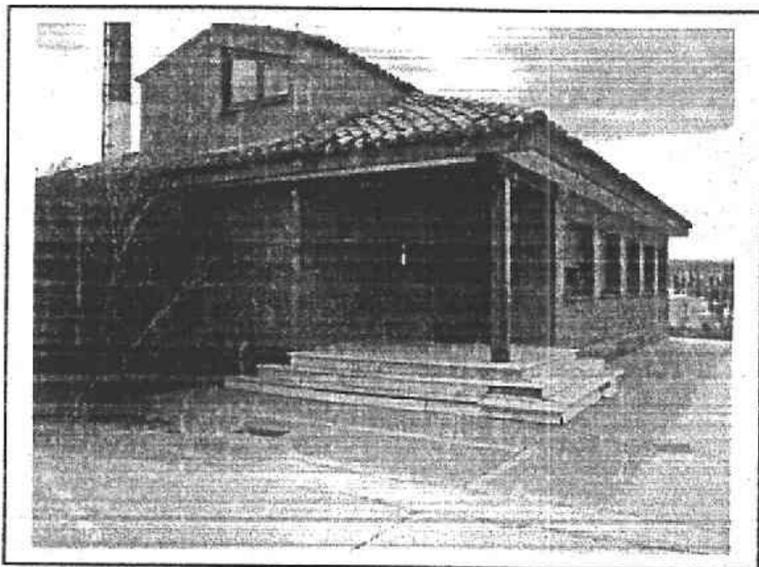
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ALCALÁ DE HENARES



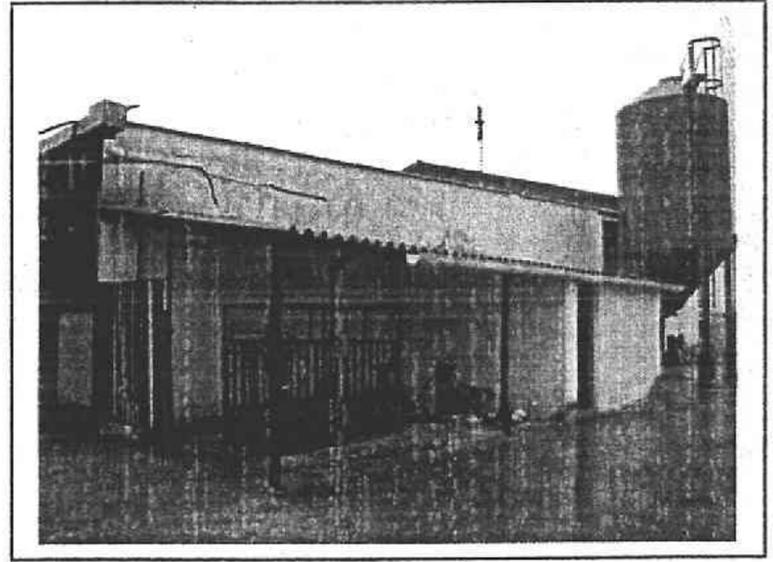
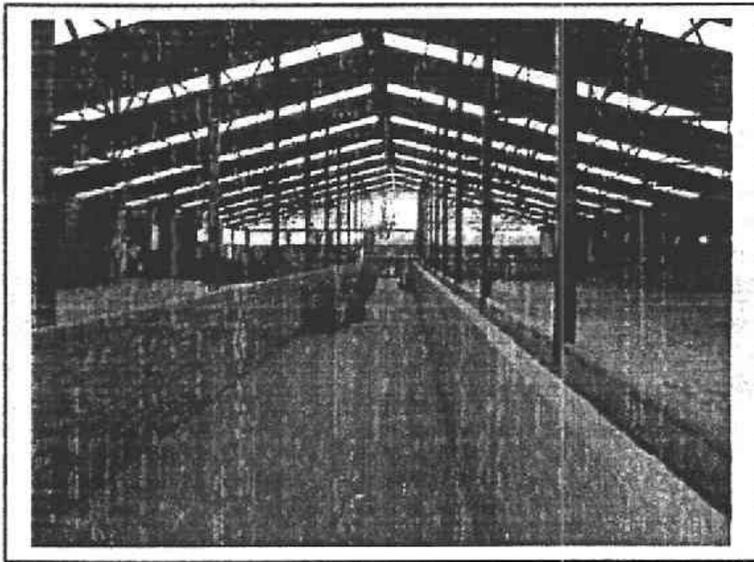
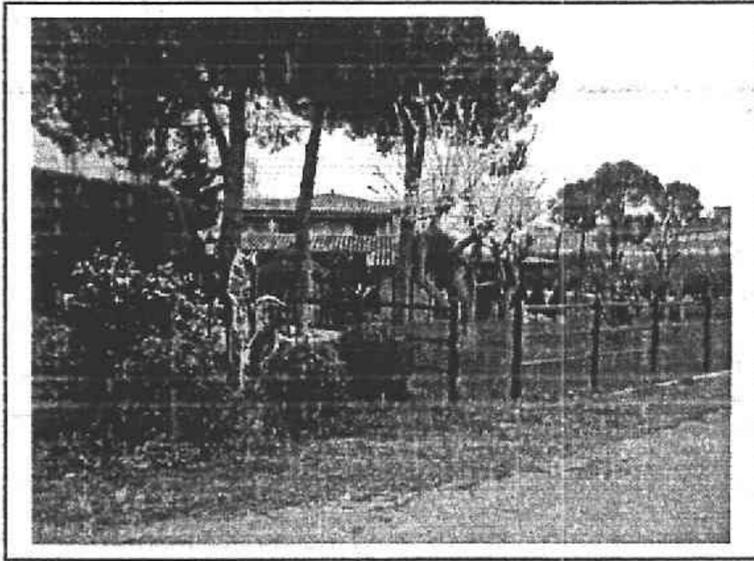
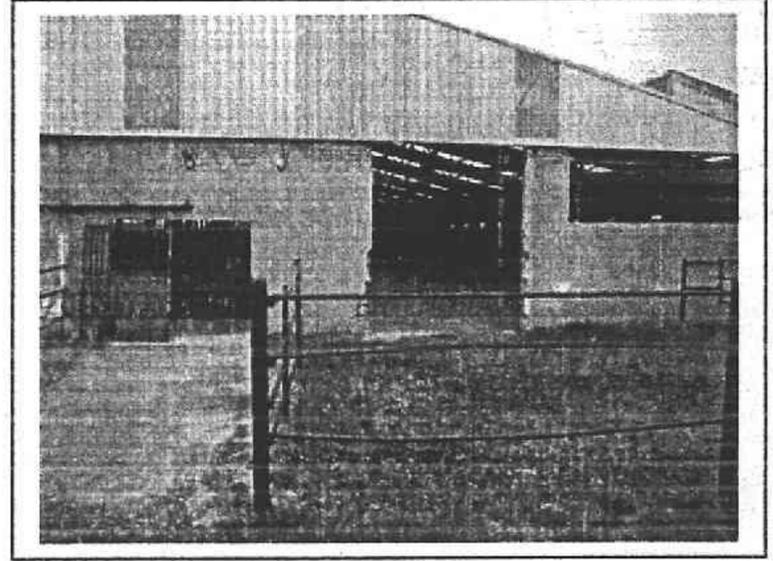
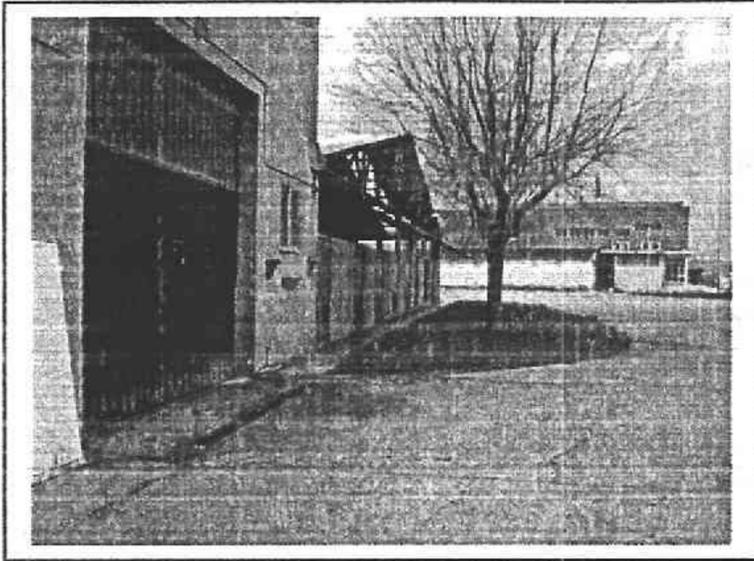
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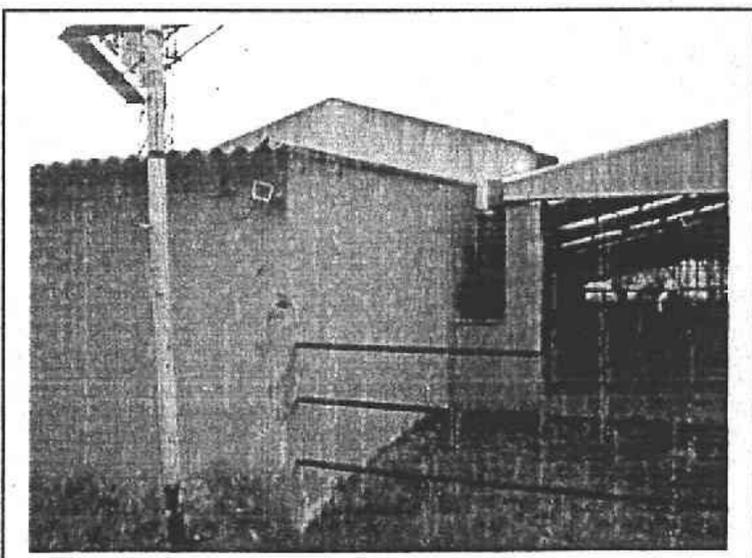
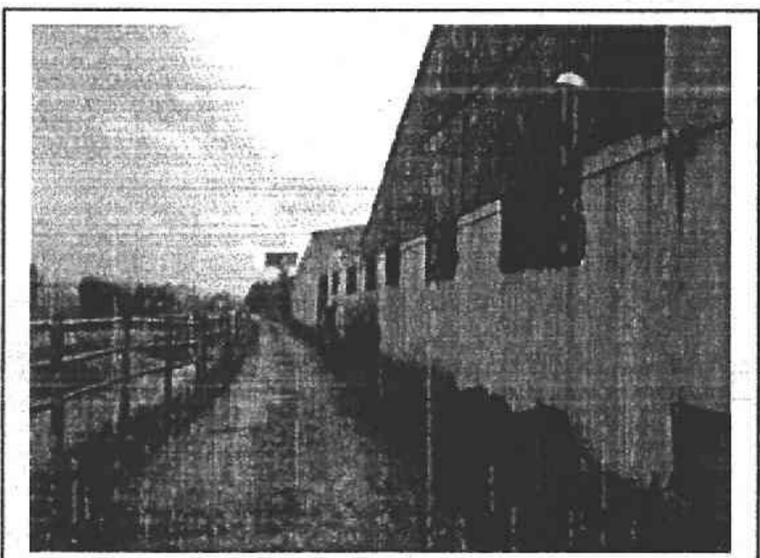
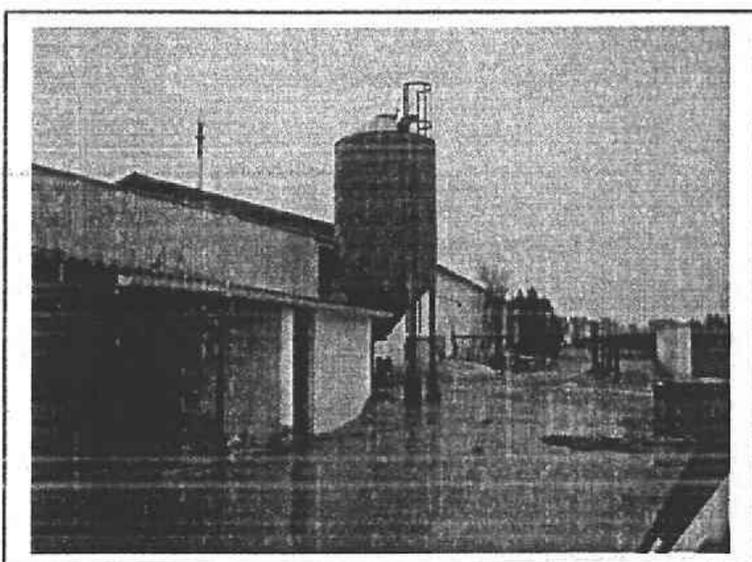
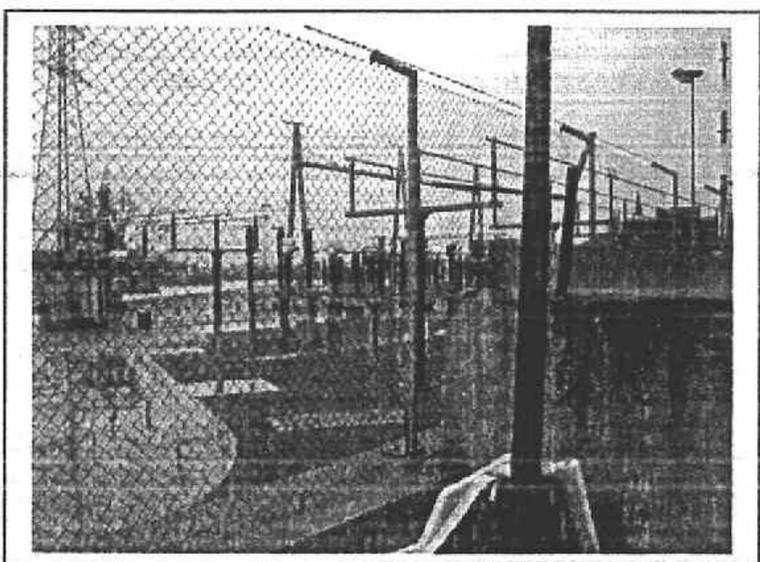
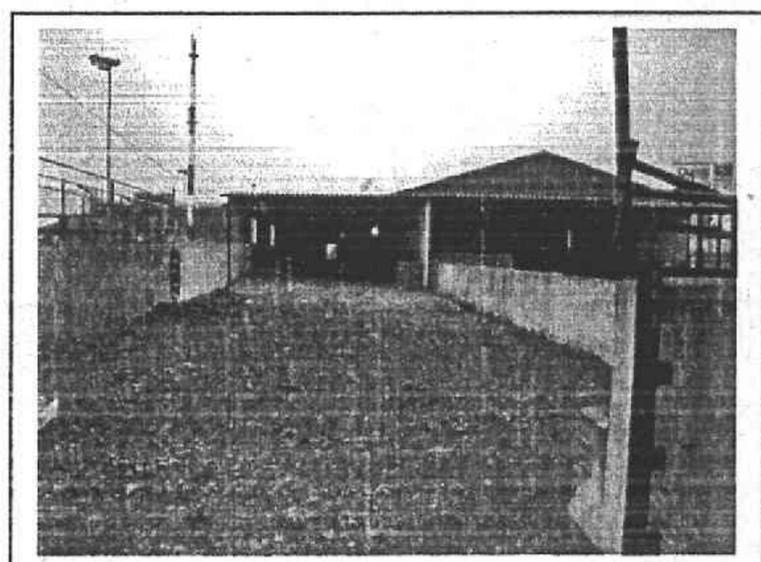
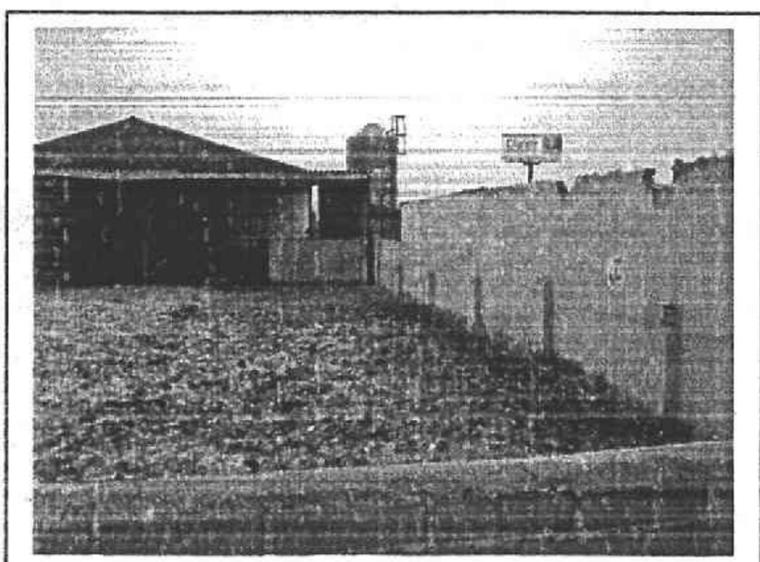
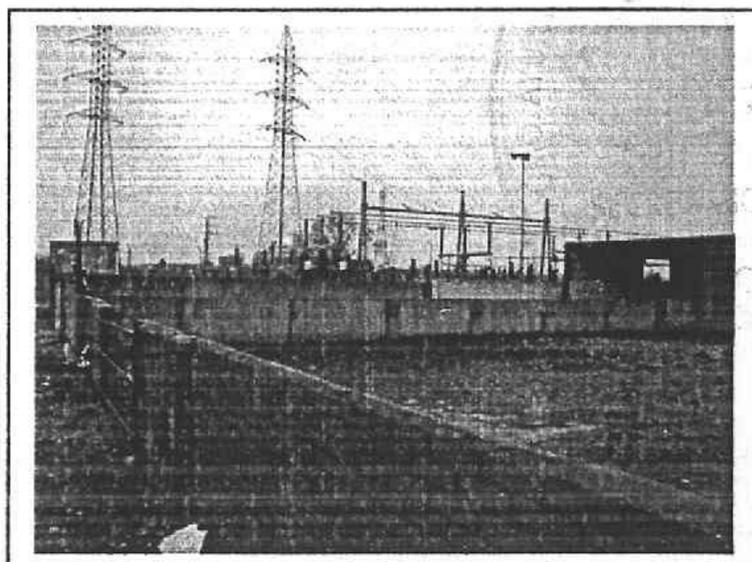
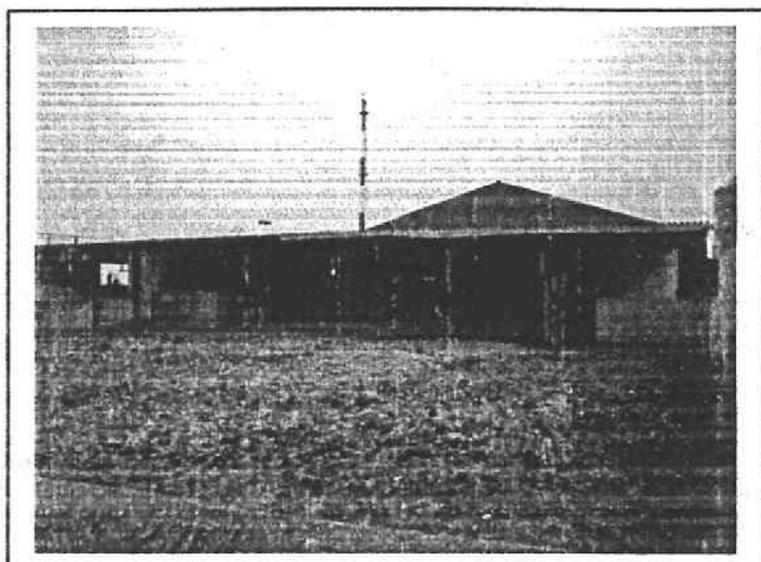


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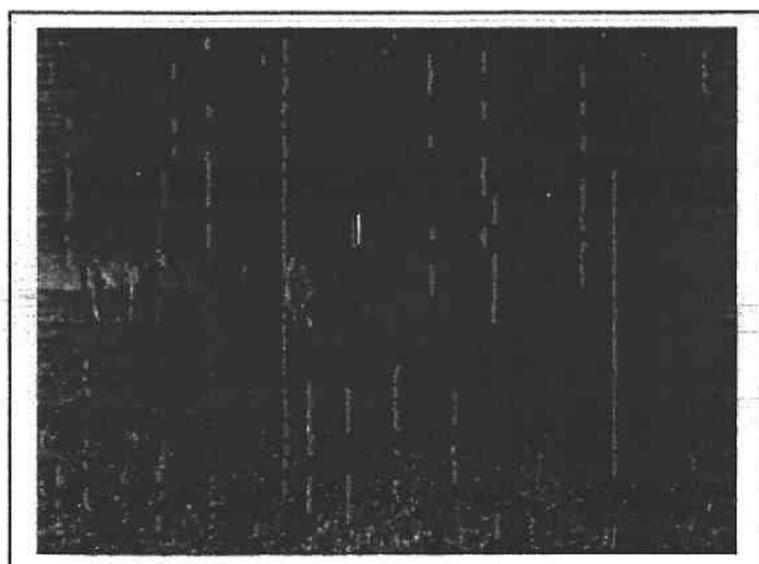
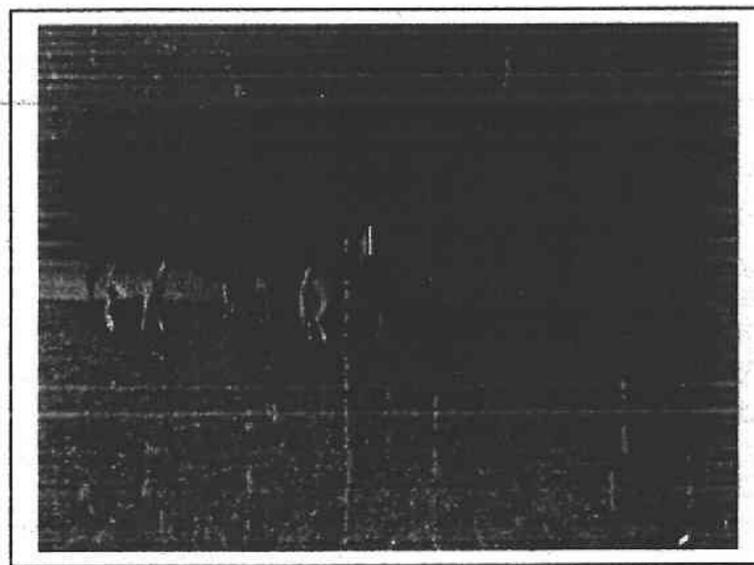
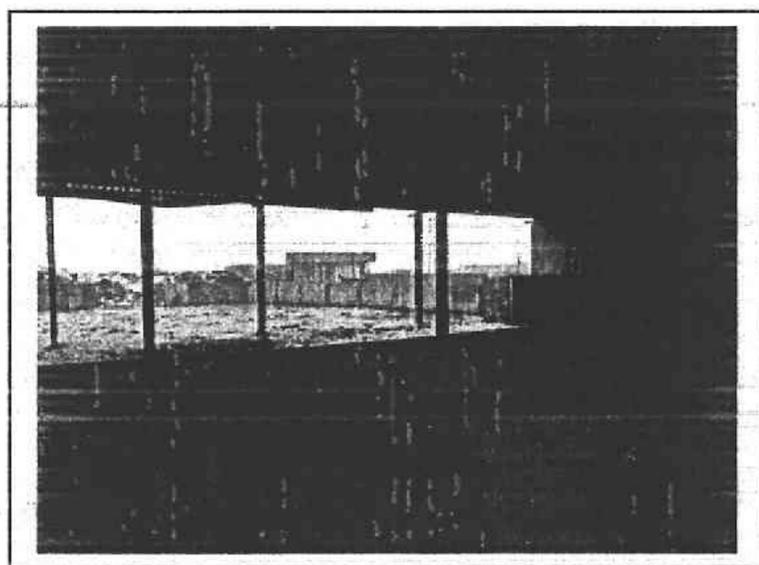
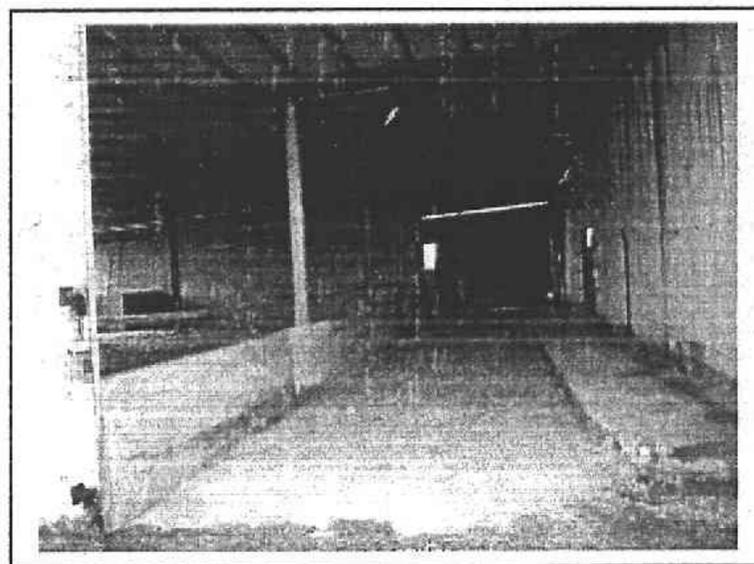
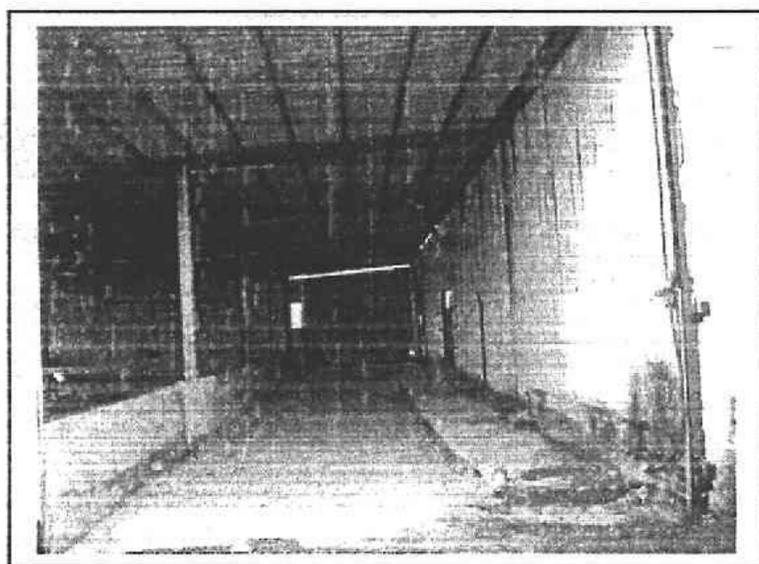
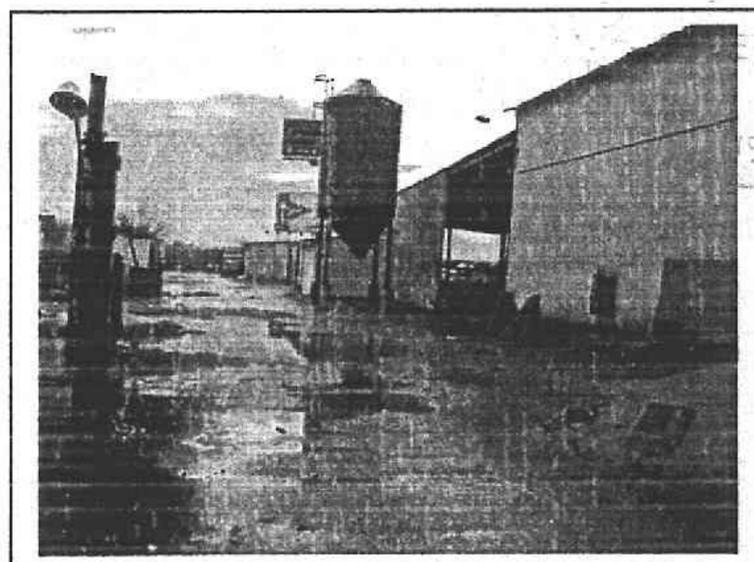
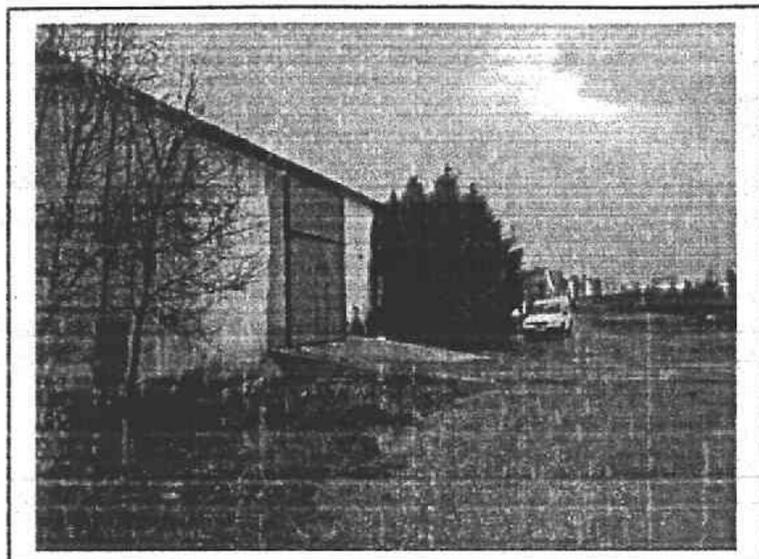
ALCALÁ DE HENARES



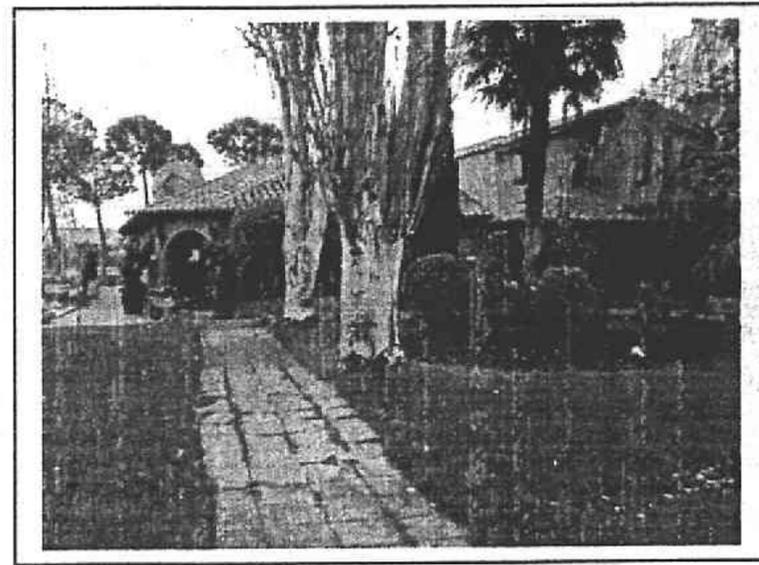
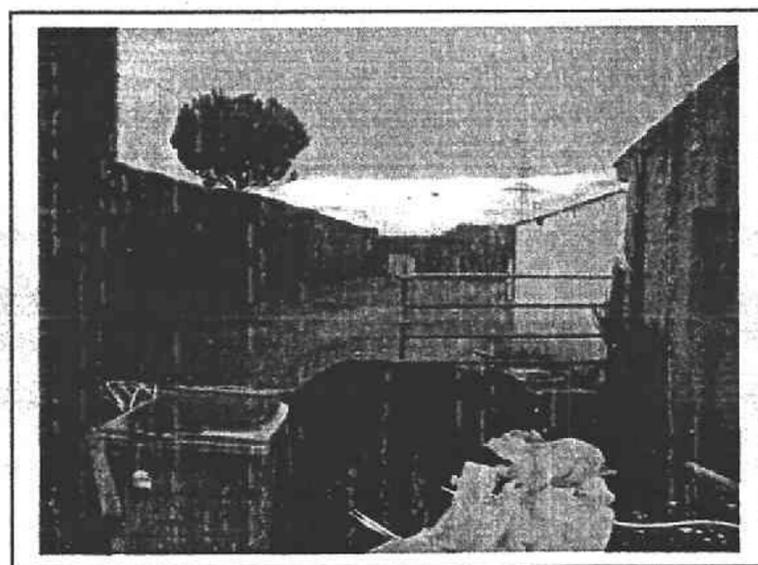
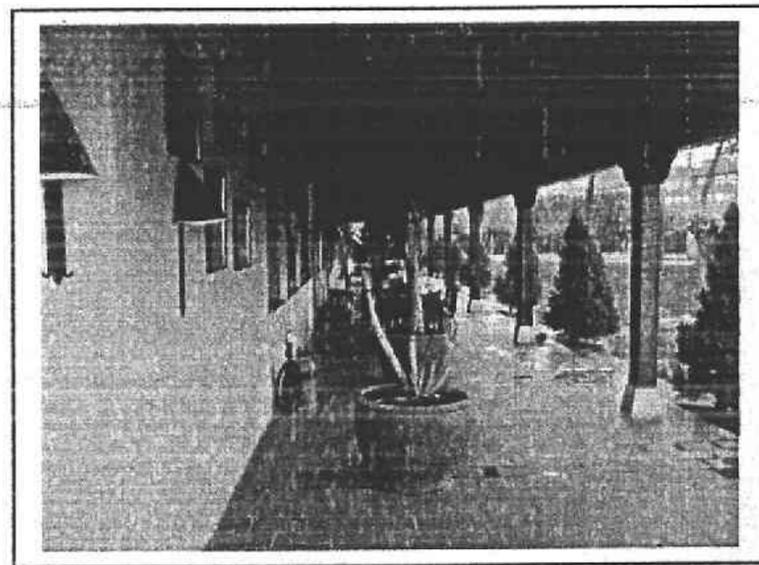
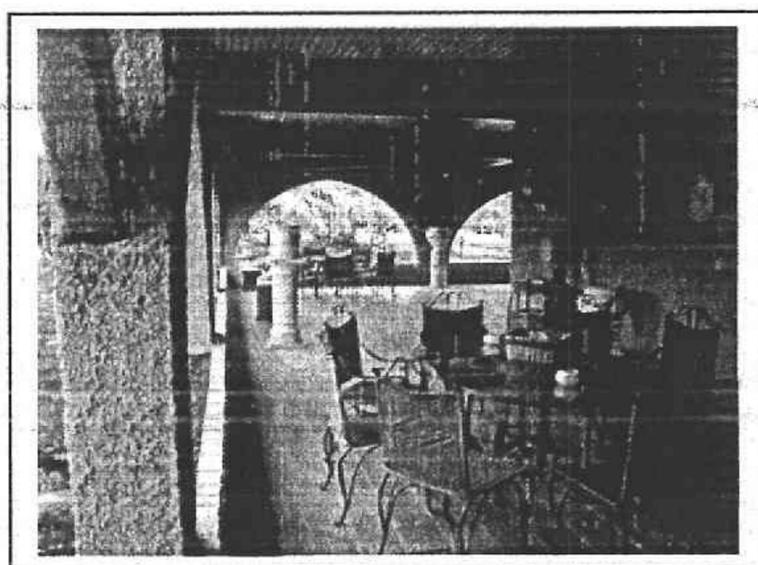
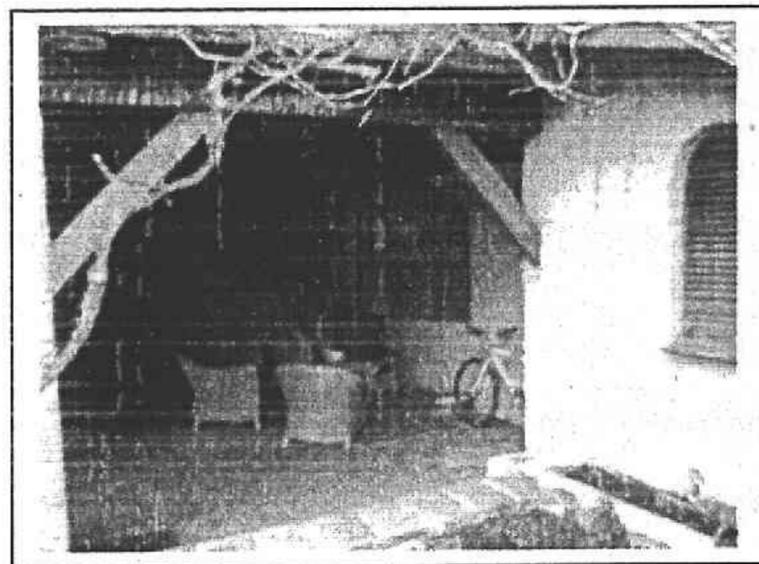
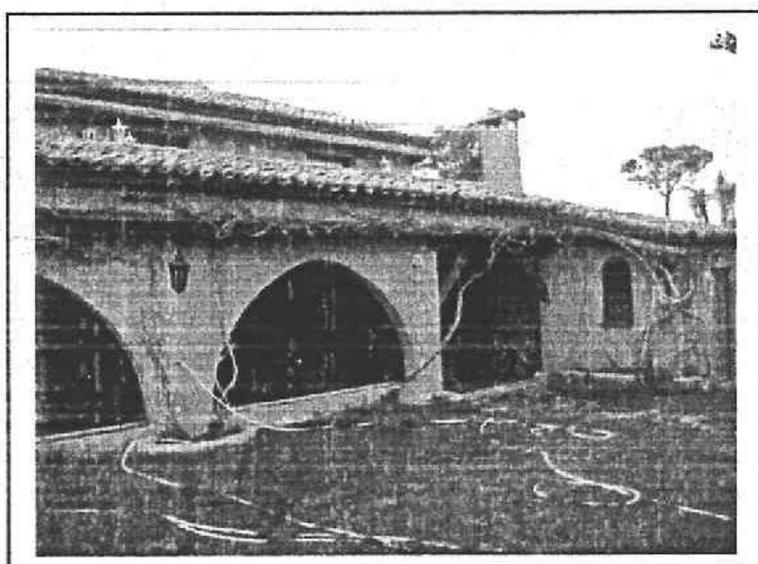
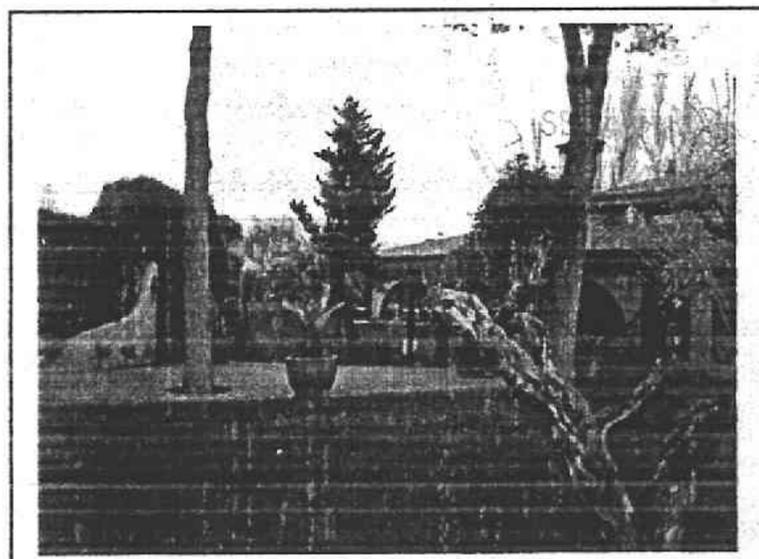
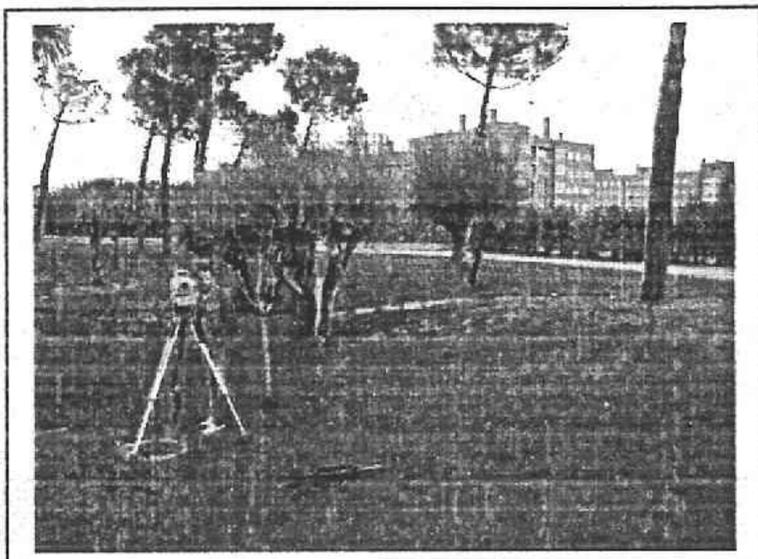
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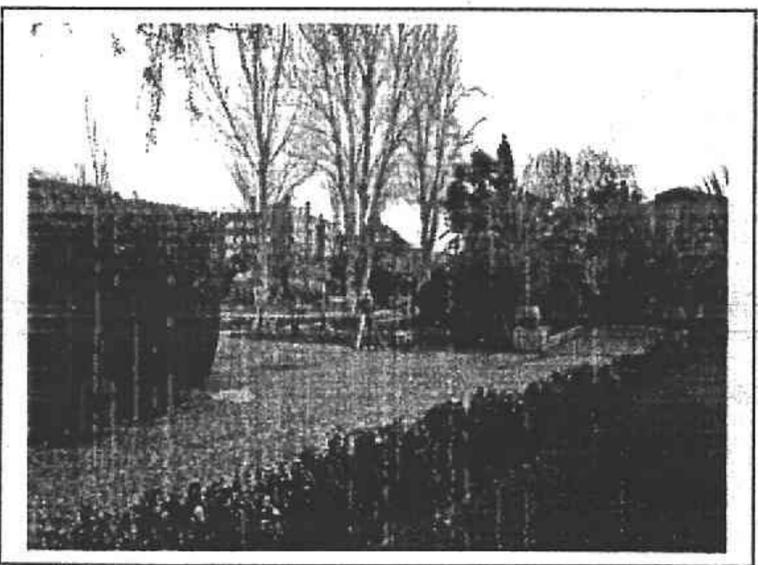
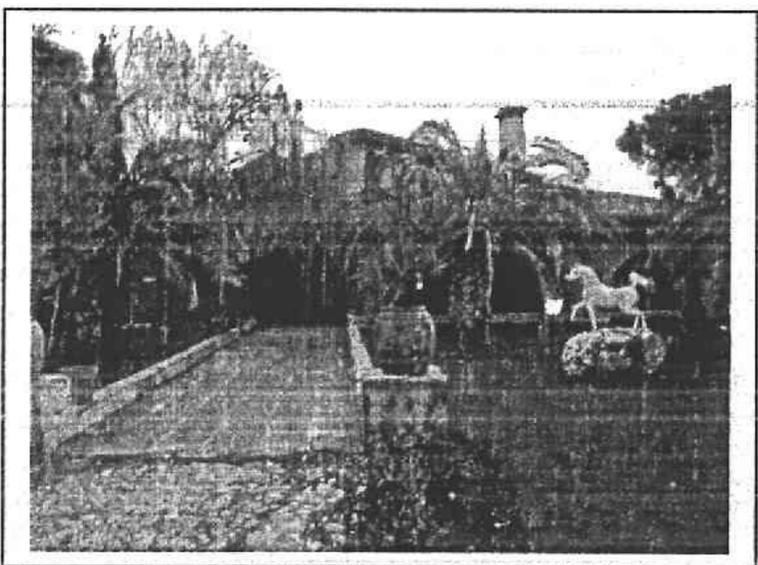
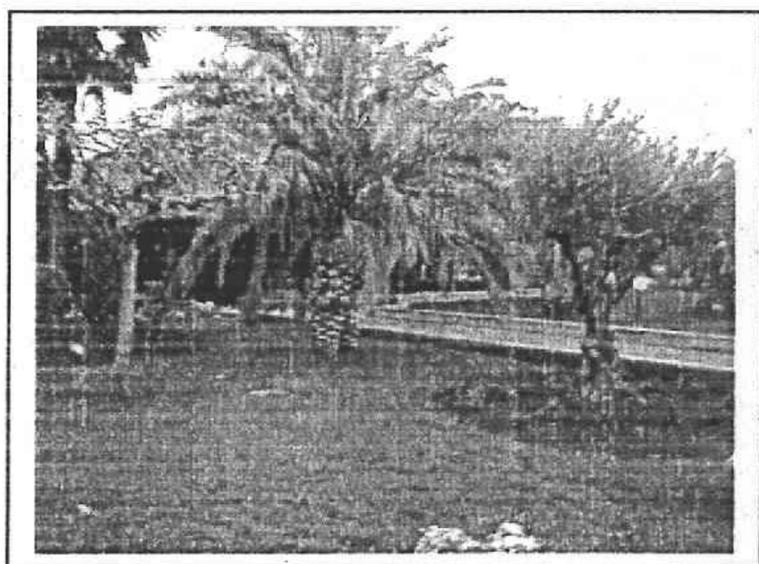
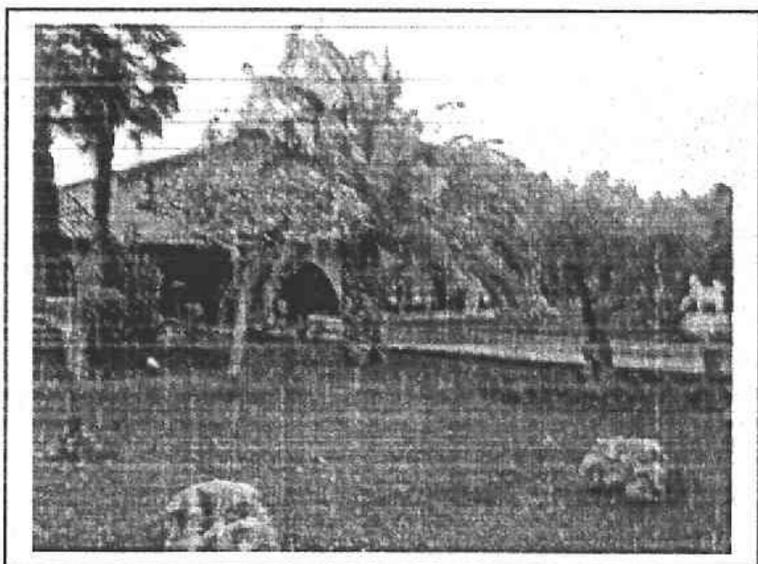
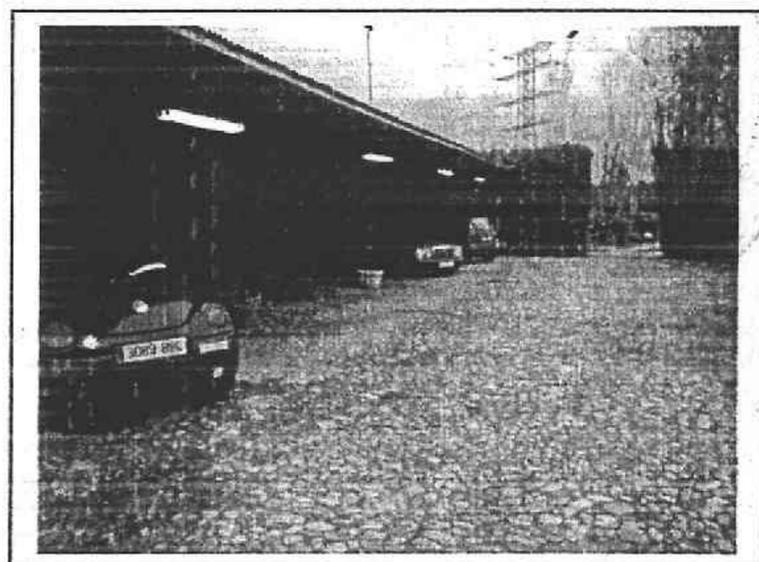
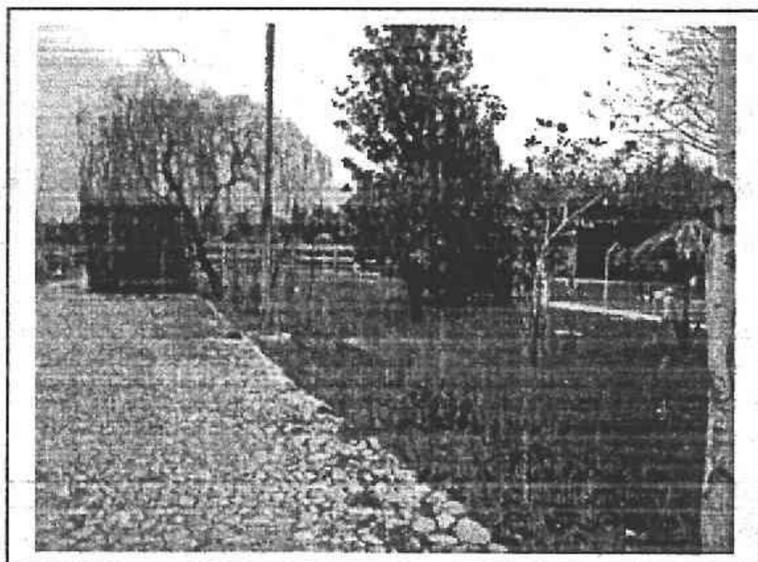
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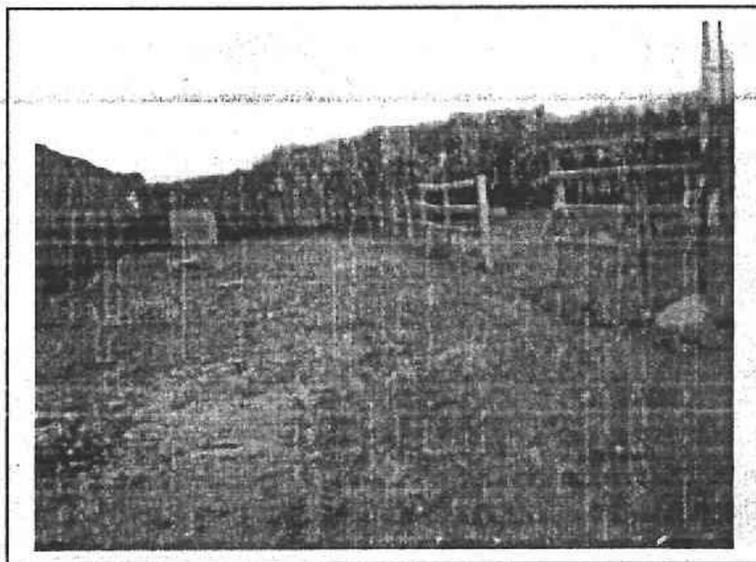
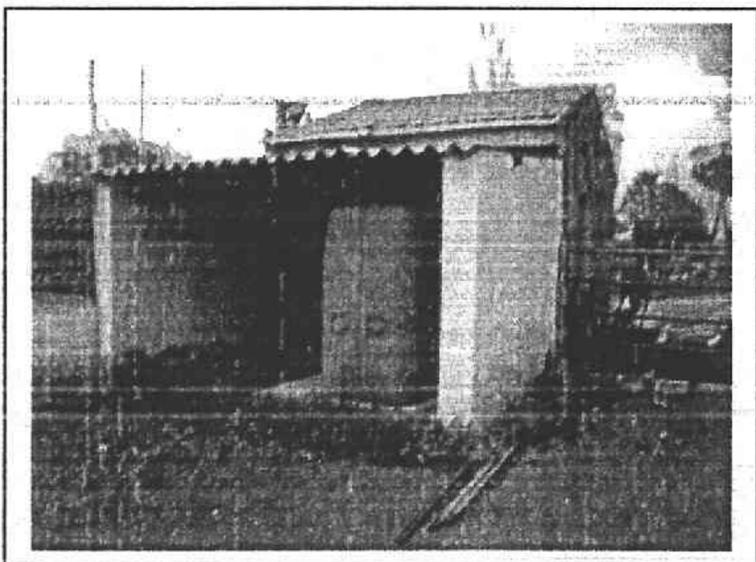
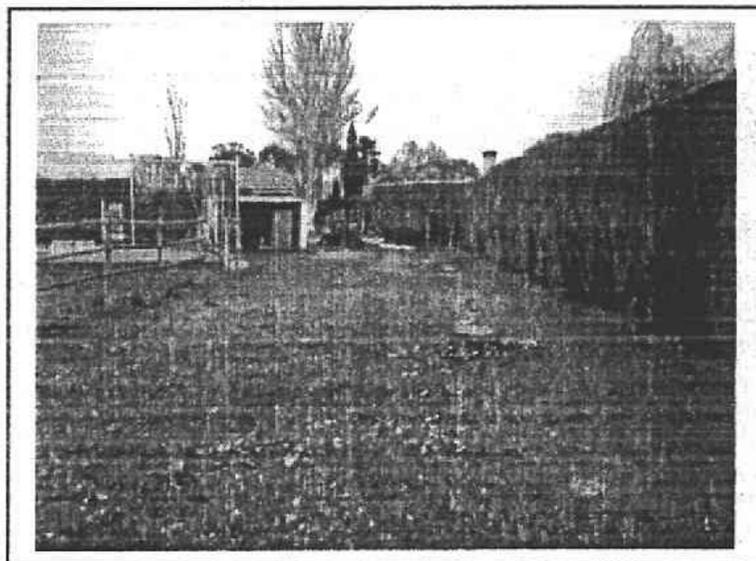
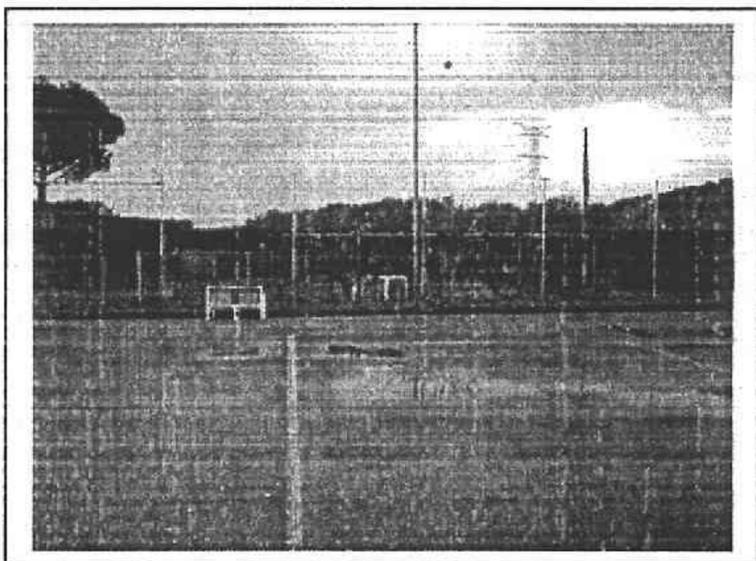
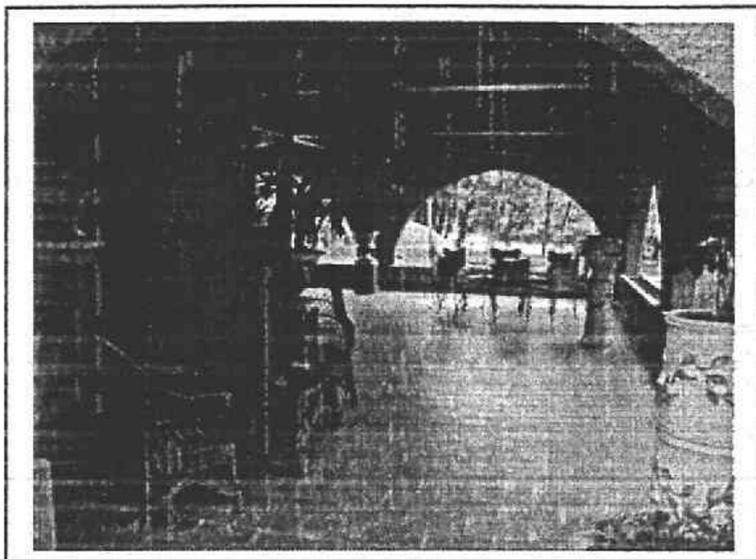


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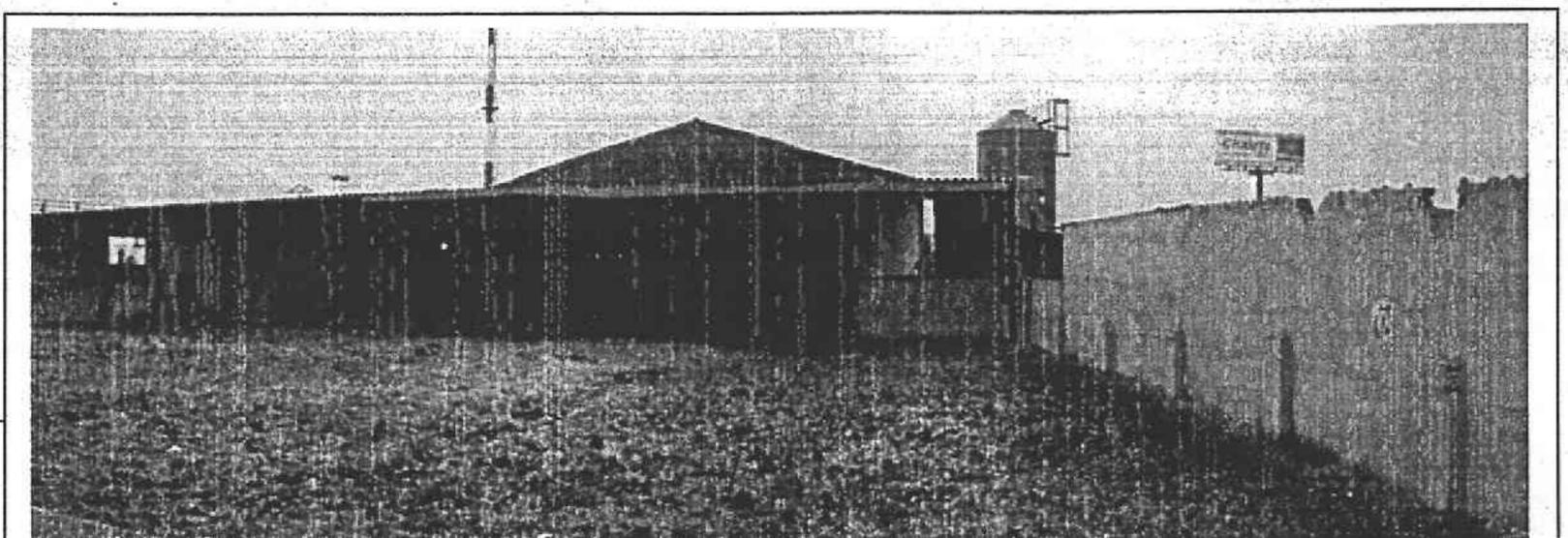
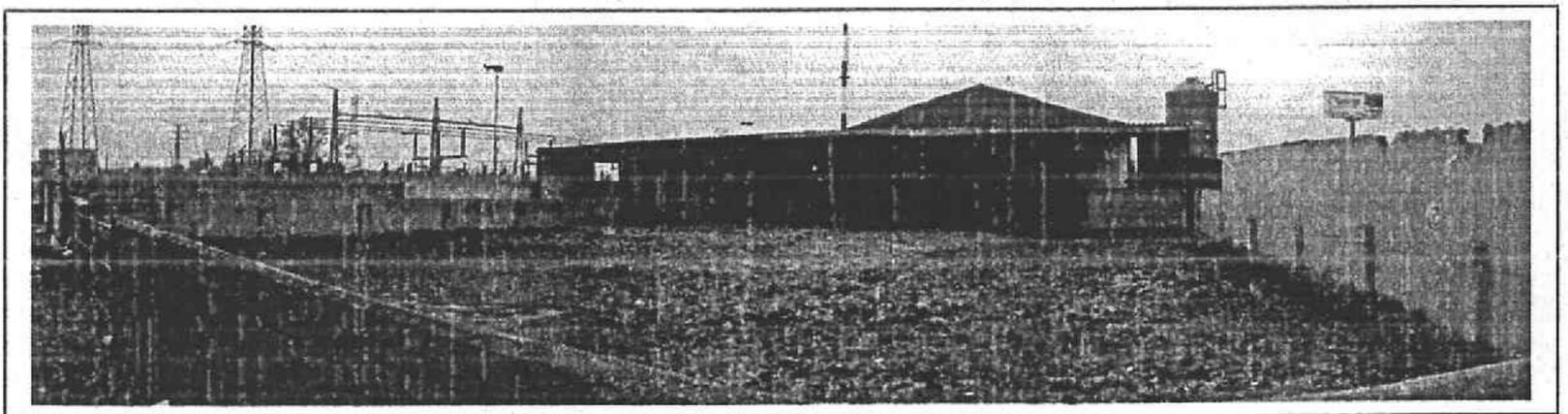
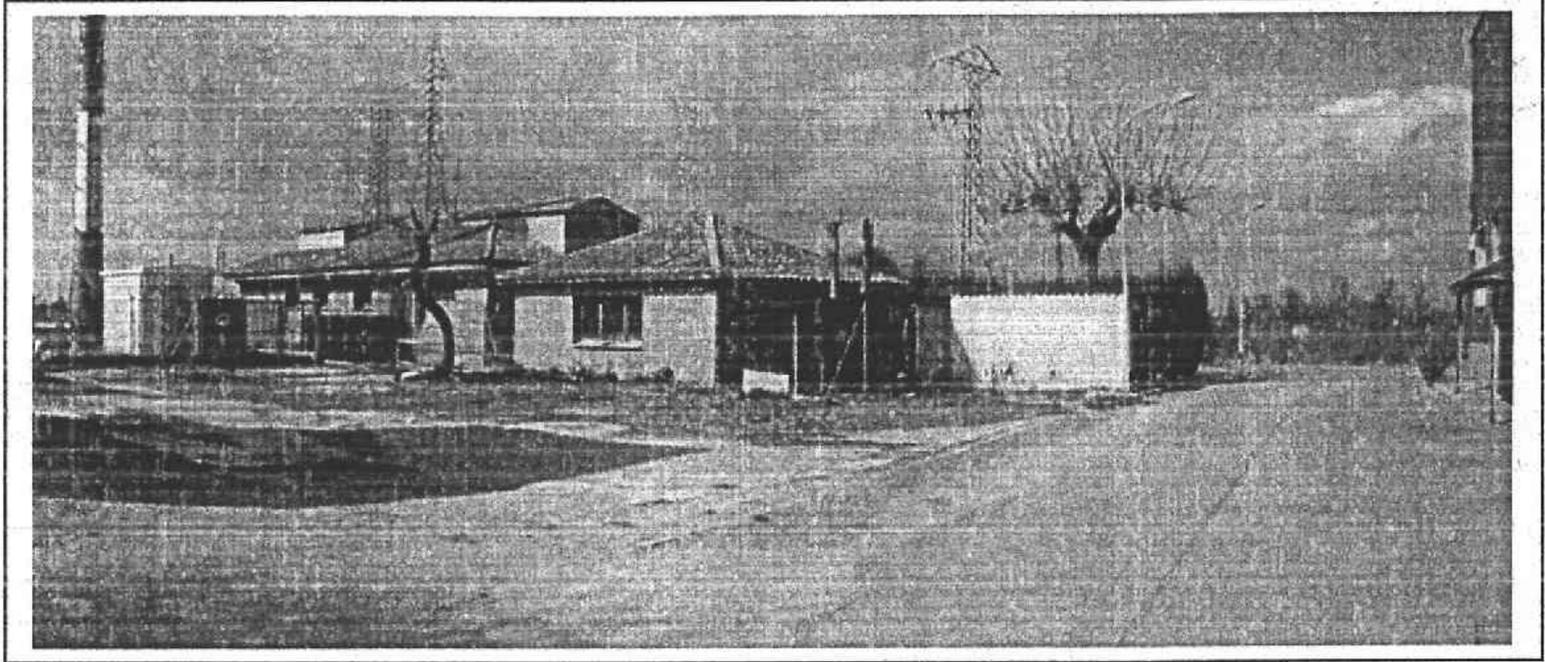
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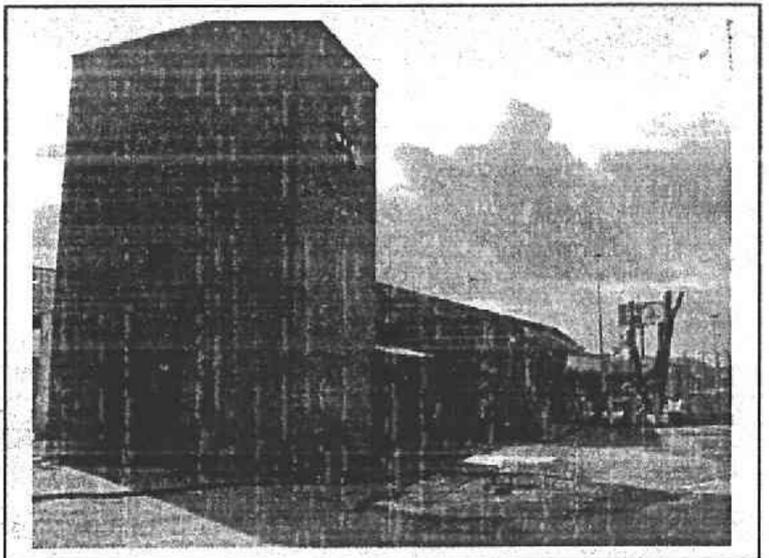
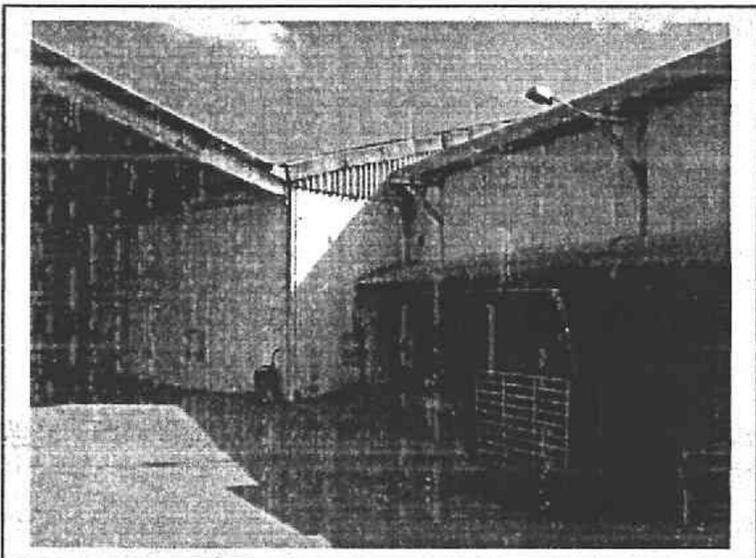
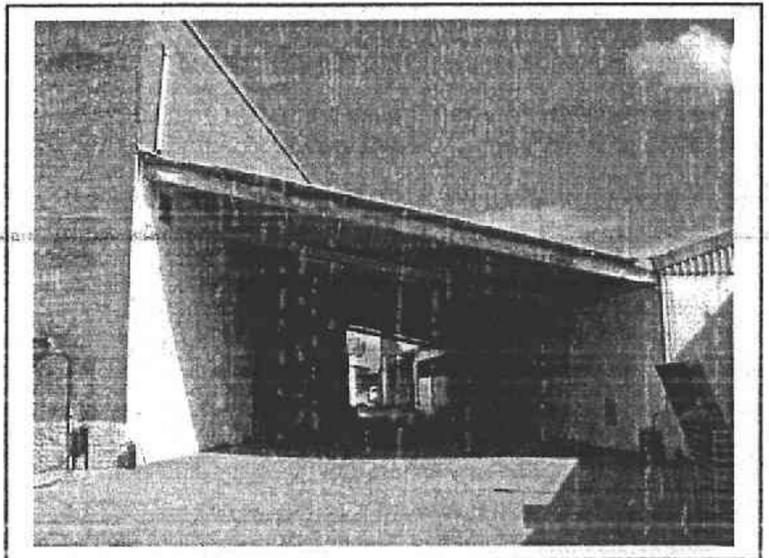
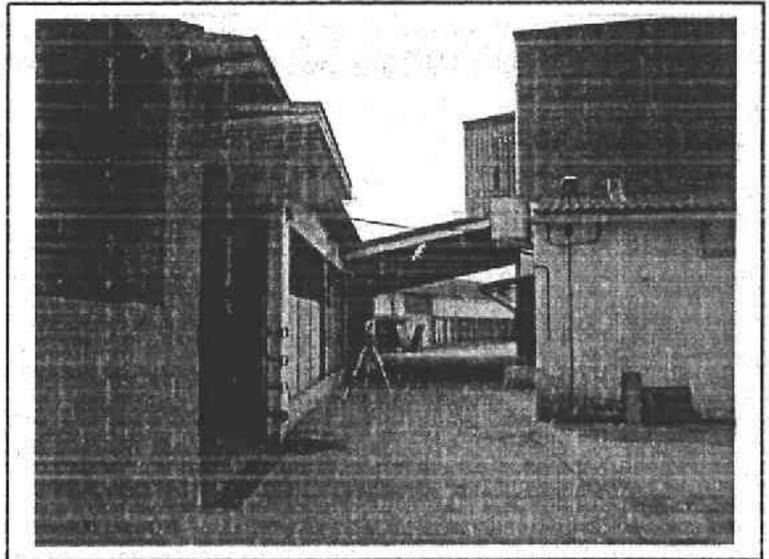
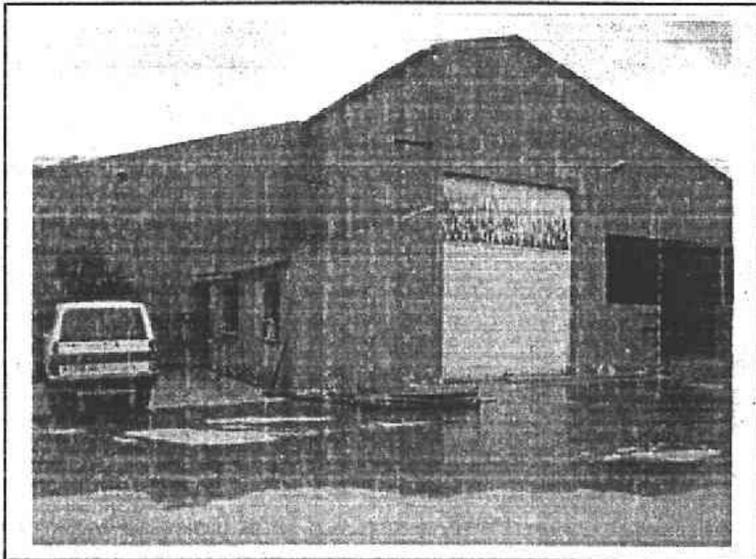
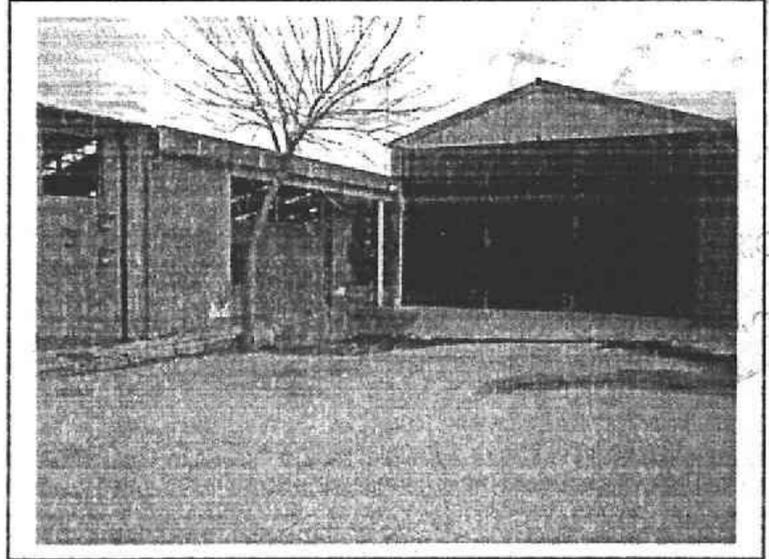


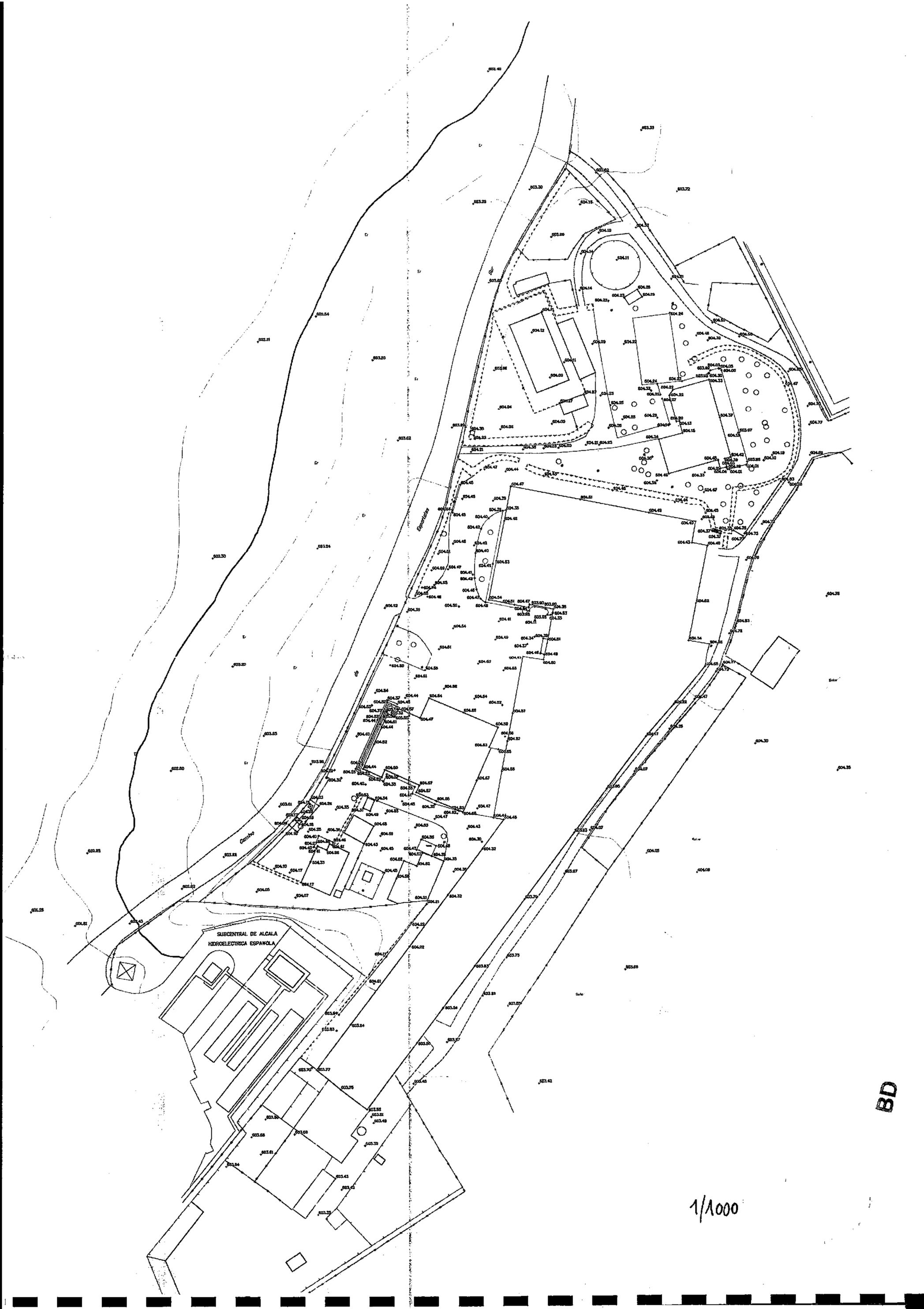


6. REPORTAJE FOTOGRÁFICO



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SUBCENTRAL DE ALCALA
HIDROELECTRICA ESPANOLA

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