



ANEJO Nº 3: TOPOGRAFÍA.

El presente anejo tiene como objeto la descripción de los trabajos cartográficos y topográficos realizados para la redacción del *“Proyecto de drenaje del Barranco de Pedros en el T.M. de Tous (Valencia)”*.

El Sistema de Referencia Planimétrico empleado es el denominado ETRS89 referido al Elipsoide GRS80 y como Sistema Cartográfico de representación la Proyección Universal Transversa de Mercator (U.T.M.) en su huso 30, utilizada en la confección de la cartografía oficial del Estado según Decreto 2303/1970 de 16 de Julio.

Se ha realizado una campaña de levantamiento topográfico del ámbito del Cauce del Barranco de Pedros y del camino de la Loma de la Llanterna mediante topografía clásica, empleando para ello estación total Leica modelo TCRP1203. Se adjunta a continuación un cuadro con el listado de puntos obtenidos del levantamiento y el plano topográfico de los mismos.

Los datos obtenidos en los trabajos de campo se procesan mediante herramientas de volcado de datos de la libreta de almacenamiento, obteniendo un fichero en formato ASCII, que con posterioridad se importa a partir del programa de topografía (MDT) hasta obtener una malla de puntos en Autocad con su cota asociada.

La unión de los puntos que nos definen la topografía del terreno y los elementos singulares se realizan en 3 dimensiones, lo que nos permite realizar la triangulación y el curvado del levantamiento.

Por último, se complementa la franja longitudinal de topografía obtenida mediante el levantamiento taquimétrico con datos LIDAR publicados por el Instituto Cartográfico Valenciano (ICV), que ofrecen una densidad de datos mínima que alcanza los 0,5 puntos por m², con una precisión en cota de aproximadamente 30 cm.



Anexo 1: Listado de puntos levantamiento topográfico.

Nombre	Coordenada X	Coordenada Y	Coordenada Z	Código
2	708284.895	4335660.021	80.344	CAMINO
3	708289.566	4335656.595	80.157	CAMINO
4	708289.241	4335650.348	80.184	CAMINO
5	708283.981	4335649.788	80.259	CAMINO
6	708284.391	4335643.572	80.235	CAMINO
7	708289.296	4335643.880	80.100	CAMINO
8	708290.512	4335638.017	79.977	CAMINO
9	708285.969	4335636.909	80.077	CAMINO
10	708289.195	4335627.569	79.916	CAMINO
11	708293.446	4335628.692	79.843	CAMINO
12	708296.598	4335620.291	79.598	CAMINO
13	708292.461	4335618.576	79.667	CAMINO
14	708299.319	4335610.802	79.351	CAMINO
15	708294.687	4335609.795	79.479	CAMINO
16	708301.369	4335602.909	79.065	CAMINO
17	708297.236	4335601.545	79.147	CAMINO
18	708302.603	4335598.949	78.962	CAMINO
19	708298.721	4335597.824	78.880	CAMINO
20	708303.846	4335593.462	78.545	CAMINO
21	708300.009	4335592.722	78.462	CAMINO
22	708304.688	4335590.409	78.460	puente
23	708304.868	4335590.049	78.461	puente
24	708305.341	4335585.420	78.465	puente
25	708306.090	4335581.055	78.382	puente
26	708306.505	4335577.155	78.350	puente
27	708301.272	4335576.750	78.359	puente
28	708301.012	4335579.150	78.375	puente
29	708300.529	4335582.434	78.477	puente
30	708299.942	4335585.792	78.510	puente
31	708299.733	4335586.742	78.482	puente
32	708305.781	4335583.633	77.408	LA
33	708305.563	4335584.641	77.432	LA
34	708305.435	4335585.710	77.405	LA
35	708305.258	4335586.972	77.524	LA
36	708299.946	4335584.303	77.577	LA
37	708300.171	4335583.206	77.576	LA
38	708300.362	4335582.204	77.580	LA
39	708300.517	4335581.094	77.591	LA
40	708306.978	4335574.257	78.495	CAMINO
41	708301.886	4335573.079	78.537	CAMINO
42	708301.955	4335569.760	78.496	CAMINO
43	708307.237	4335571.285	78.316	CAMINO
44	708306.242	4335570.392	78.324	CAMINO
45	708306.061	4335570.130	78.288	x
46	708302.467	4335569.447	78.353	x
47	708306.337	4335567.433	78.367	CAMINO
48	708301.939	4335567.131	78.401	CAMINO

Nombre	Coordenada X	Coordenada Y	Coordenada Z	Código
49	708306.244	4335563.186	78.417	CAMINO
50	708301.657	4335563.388	78.416	CAMINO
51	708305.652	4335557.399	78.488	CAMINO
52	708300.836	4335557.847	78.455	CAMINO
53	708299.544	4335552.104	78.695	CAMINO
54	708304.835	4335553.059	78.649	CAMINO
55	708285.570	4335513.374	79.090	CAMINO
56	708286.454	4335515.776	79.069	CAMINO
57	708285.329	4335516.888	79.141	CAMINO
58	708287.759	4335522.818	79.080	CAMINO
59	708289.288	4335523.440	79.013	CAMINO
60	708291.479	4335514.018	79.022	CAMINO
61	708294.683	4335522.788	78.968	CAMINO
62	708289.329	4335523.442	79.042	CAMINO
63	708291.710	4335529.743	79.065	CAMINO
64	708296.603	4335528.335	78.922	CAMINO
65	708298.598	4335533.448	78.937	CAMINO
66	708294.442	4335536.018	79.088	CAMINO
67	708284.022	4335508.905	79.173	CAMINO
68	708289.018	4335507.030	79.028	CAMINO
69	708290.524	4335505.632	78.913	CAMINO
70	708291.911	4335504.817	78.833	CAMINO
71	708289.833	4335499.390	78.877	CAMINO
72	708288.095	4335499.717	78.939	CAMINO
73	708286.317	4335499.325	79.020	CAMINO
74	708281.222	4335500.702	79.186	CAMINO
75	708280.021	4335497.381	79.141	CAMINO
76	708278.498	4335498.841	79.284	CAMINO
77	708276.864	4335494.343	79.205	CAMINO
78	708277.967	4335491.755	79.116	CAMINO
79	708276.027	4335486.441	79.055	CAMINO
80	708282.483	4335489.065	78.960	CAMINO
81	708280.086	4335482.884	78.907	CAMINO
82	708277.775	4335476.788	78.729	CAMINO
83	708275.304	4335470.741	78.527	CAMINO
84	708273.386	4335465.577	78.248	CAMINO
85	708269.069	4335467.605	78.310	CAMINO
86	708271.144	4335473.157	78.671	CAMINO
87	708271.297	4335460.033	77.793	CAMINO
88	708267.114	4335461.802	77.865	CAMINO
89	708268.340	4335452.371	77.563	CAMINO
90	708264.199	4335454.230	77.679	CAMINO
91	708265.703	4335445.129	77.569	CAMINO
92	708261.585	4335446.999	77.621	CAMINO
93	708263.432	4335439.067	77.430	CAMINO
94	708259.194	4335440.378	77.553	CAMINO
95	708261.611	4335433.778	77.514	CAMINO
96	708257.468	4335434.930	77.620	CAMINO

Nombre	Coordenada X	Coordenada Y	Coordenada Z	Código
97	708259.632	4335427.617	77.715	CAMINO
98	708255.321	4335428.996	77.864	CAMINO
99	708254.082	4335425.693	78.031	CAMINO
100	708258.450	4335424.449	77.858	CAMINO
101	708261.065	4335423.305	77.677	CAMINO
102	708259.205	4335417.594	77.804	CAMINO
103	708256.127	4335417.899	78.092	CAMINO
104	708252.030	4335419.874	78.203	CAMINO
105	708253.989	4335410.434	78.556	CAMINO
106	708249.263	4335411.652	78.494	CAMINO
107	708244.499	4335398.861	79.019	CAMINO
108	708249.205	4335397.169	78.911	CAMINO
109	708242.327	4335392.677	79.314	CAMINO
110	708246.751	4335390.216	79.519	CAMINO
111	708238.376	4335381.432	79.819	CAMINO
112	708243.334	4335380.013	79.690	CAMINO
113	708230.841	4335360.139	80.956	CAMINO
114	708235.609	4335359.155	80.879	CAMINO
115	708227.569	4335350.536	81.462	CAMINO
116	708232.261	4335349.440	81.326	CAMINO
117	708223.657	4335339.314	82.151	CAMINO
118	708228.072	4335337.836	82.074	CAMINO
119	708221.618	4335333.376	82.622	CAMINO
120	708225.506	4335330.411	82.218	CAMINO
121	708189.541	4335317.315	85.035	CAMINO
122	708187.455	4335312.220	85.148	CAMINO
123	708194.005	4335310.212	84.924	CAMINO
124	708195.755	4335315.599	84.840	CAMINO
125	708202.919	4335308.076	84.590	CAMINO
126	708204.676	4335312.996	84.448	CAMINO
127	708209.539	4335306.003	84.234	CAMINO
128	708210.339	4335301.359	84.671	CAMINO
129	708208.207	4335294.287	84.977	CAMINO
130	708212.766	4335292.168	84.895	CAMINO
131	708198.444	4335266.748	87.249	CAMINO
132	708202.075	4335263.980	87.328	CAMINO
133	708216.841	4335302.586	84.241	CAMINO
134	708218.467	4335304.187	83.972	CAMINO
135	708222.536	4335303.085	83.780	CAMINO
136	708218.511	4335305.851	83.993	CAMINO
137	708219.696	4335310.141	83.921	rot
138	708225.769	4335307.458	83.626	rot
139	708231.889	4335304.900	83.361	rot
140	708230.976	4335301.441	83.427	CAMINO
141	708230.908	4335300.356	83.385	CAMINO
142	708227.366	4335308.342	83.538	pozo
143	708231.804	4335310.350	83.296	pozo
144	708233.640	4335309.002	83.184	CAMINO

Nombre	Coordenada X	Coordenada Y	Coordenada Z	Código
145	708230.205	4335310.539	83.318	CAMINO
146	708226.172	4335314.168	83.431	CAMINO
147	708214.675	4335313.728	83.904	CAMINO
148	708217.144	4335320.016	83.391	CAMINO
149	708222.843	4335319.719	83.822	CAMINO
150	708240.113	4335371.758	80.213	CAMINO
151	708236.109	4335374.986	80.232	CAMINO
152	708275.266	4335418.445	77.127	b
153	708273.127	4335412.246	77.282	b
154	708267.046	4335414.454	77.485	b
155	708268.813	4335420.816	77.359	b
156	708264.615	4335422.339	77.529	b
157	708261.797	4335423.335	77.646	b
158	708259.372	4335417.191	77.809	b
159	708263.015	4335415.885	77.640	b
160	708262.924	4335415.530	77.778	arq
161	708262.165	4335415.822	77.788	far
162	708264.601	4335424.276	77.321	rot
163	708266.351	4335433.356	77.163	rot
164	708268.864	4335440.165	77.197	rot
165	708272.146	4335447.584	77.302	rot
166	708274.833	4335453.793	77.314	rot
167	708276.784	4335458.701	77.466	rot
168	708278.585	4335463.676	77.653	rot
169	708279.772	4335468.335	78.120	rot
170	708281.119	4335473.368	78.440	rot
171	708292.616	4335504.786	78.759	b
172	708290.228	4335498.857	78.808	b
173	708295.977	4335496.778	78.193	
174	708298.360	4335502.680	78.189	
176	708308.218	4335574.143	78.375	
177	708309.823	4335572.841	78.242	
178	708311.859	4335570.726	78.213	
179	708313.909	4335567.966	78.235	
180	708314.320	4335568.204	78.392	
181	708312.897	4335571.425	78.533	
182	708309.914	4335574.779	78.606	
183	708308.833	4335577.483	78.667	
184	708310.649	4335577.362	78.732	
185	708311.083	4335579.202	78.743	
186	708314.825	4335580.308	78.596	
187	708315.374	4335577.621	78.589	
188	708307.426	4335581.063	78.450	
189	708309.804	4335581.621	78.856	
190	708313.377	4335583.994	78.769	
191	708317.032	4335585.887	78.588	
192	708320.539	4335587.991	78.643	
193	708316.776	4335588.641	77.283	

Nombre	Coordenada X	Coordenada Y	Coordenada Z	Código
194	708314.507	4335587.134	77.423	
195	708311.600	4335585.359	77.541	
196	708306.068	4335582.444	77.374	
197	708305.222	4335588.758	77.507	
198	708310.295	4335589.730	77.460	
199	708312.862	4335590.932	77.420	
200	708315.293	4335592.466	77.368	
201	708311.456	4335563.105	78.273	
202	708313.387	4335559.812	78.283	
203	708312.959	4335555.407	78.138	
204	708311.286	4335551.215	78.213	
205	708310.281	4335547.711	78.283	
206	708306.364	4335549.753	78.462	
207	708305.900	4335546.594	79.138	
208	708310.041	4335544.693	78.681	
209	708299.209	4335530.035	78.898	
210	708302.800	4335528.052	78.834	
211	708307.669	4335536.659	78.918	
212	708304.496	4335538.518	78.984	
213	708303.548	4335539.055	79.153	
214	708306.520	4335542.310	79.131	
215	708305.256	4335544.501	79.200	
216	708309.532	4335542.380	78.838	
217	708296.801	4335524.311	78.995	
218	708300.907	4335522.645	78.785	rot
219	708294.795	4335515.721	78.964	rot
220	708297.787	4335513.548	78.720	rot
221	708293.510	4335507.926	78.906	rot
222	708297.192	4335507.105	78.825	rot
223	708297.088	4335505.348	78.250	rot
224	708293.190	4335506.316	78.645	rot
225	708294.488	4335504.688	78.844	a
226	708293.910	4335504.773	78.808	a
227	708289.974	4335497.051	78.669	rot
228	708285.857	4335488.335	78.517	rot
229	708279.227	4335474.243	78.826	rot
230	708276.390	4335467.299	78.218	rot
231	708279.511	4335466.460	77.937	rot
232	708280.924	4335470.235	78.488	rot
233	708343.201	4335608.934	79.106	AT
234	708336.036	4335606.775	79.128	AT
235	708327.708	4335602.764	79.177	AT
236	708319.104	4335598.324	79.245	AT
237	708312.421	4335594.544	79.229	AT
238	708308.431	4335591.856	79.167	AT
239	708305.070	4335591.479	79.259	AT
240	708226.724	4335318.752	83.820	Insertado
241	708229.345	4335329.272	82.220	Insertado

Nombre	Coordenada X	Coordenada Y	Coordenada Z	Código
242	708231.844	4335336.504	82.070	Insertado
243	708236.033	4335348.109	81.330	Insertado
244	708239.383	4335357.830	80.880	Insertado
245	708243.860	4335370.358	80.200	Insertado
246	708247.096	4335378.650	79.690	Insertado
247	708250.534	4335388.915	79.520	Insertado
248	708252.972	4335395.825	78.910	Insertado
249	708257.752	4335409.077	78.560	Insertado
250	708344.975	4335608.792	78.581	CabT
251	708355.779	4335611.904	78.302	CabT
252	708366.871	4335614.127	78.320	CabT
253	708370.520	4335614.816	78.241	CabT
254	708376.080	4335614.987	78.240	CabT
255	708380.350	4335613.577	77.524	CabT
256	708382.055	4335613.337	76.531	CabT
257	708391.295	4335613.372	76.576	CabT
258	708412.693	4335617.044	76.398	CabT
259	708423.274	4335618.442	76.444	CabT
260	708426.169	4335621.177	76.898	CabT
261	708431.149	4335622.202	76.615	CabT
262	708432.191	4335620.771	76.589	CabT
263	708439.103	4335621.117	76.495	CabT
264	708447.936	4335623.927	76.488	CabT
265	708455.709	4335625.471	76.352	CabT
266	708455.875	4335625.066	76.319	Mz
268	708456.898	4335625.523	76.348	Mz
269	708457.058	4335626.557	76.389	Mz
270	708456.980	4335628.085	76.364	Mz
271	708456.533	4335629.125	76.347	Mz
272	708454.490	4335633.368	76.322	Mz
273	708457.703	4335628.781	75.257	CabT
274	708460.981	4335630.326	74.944	CabT
275	708454.404	4335635.174	74.224	camino
276	708456.687	4335639.144	74.236	camino
277	708479.274	4335629.146	72.444	camino
278	708480.835	4335633.770	72.405	camino
279	708472.304	4335635.785	72.646	camino
280	708470.944	4335631.162	72.567	camino
281	708492.113	4335631.135	72.156	camino
282	708490.616	4335626.384	72.311	camino
283	708500.472	4335629.086	72.224	camino
284	708501.695	4335629.080	72.216	camino
285	708499.763	4335624.187	72.332	camino
286	708512.195	4335626.202	71.906	camino
287	708515.077	4335623.940	71.860	camino
288	708513.223	4335620.188	71.936	camino
289	708508.604	4335621.639	72.039	camino
290	708506.785	4335633.460	71.389	camino

Nombre	Coordenada X	Coordenada Y	Coordenada Z	Código
291	708510.555	4335631.323	71.462	camino
292	708511.416	4335632.441	71.186	camino
293	708514.000	4335635.939	71.454	camino
294	708515.586	4335637.942	71.536	camino
295	708517.324	4335639.573	71.596	camino
296	708521.763	4335642.359	71.478	camino
297	708519.908	4335646.647	71.681	camino
298	708517.046	4335645.509	71.709	camino
299	708513.145	4335642.456	71.636	camino
300	708511.444	4335640.628	71.605	camino
301	708509.895	4335638.575	71.557	camino
302	708508.050	4335635.853	71.272	camino
303	708513.918	4335634.700	71.333	CabT
304	708525.256	4335629.709	70.957	CabT
305	708553.310	4335633.185	68.704	CabT
306	708548.434	4335637.816	70.109	Rot
307	708544.644	4335635.437	69.828	Rot
308	708539.465	4335633.679	70.212	Rot
309	708534.465	4335633.439	70.429	Rot
310	708529.331	4335633.833	70.916	Rot
311	708521.315	4335634.836	71.181	Rot
312	708517.211	4335635.666	71.269	Rot
313	708513.882	4335633.915	70.624	PieT
314	708512.838	4335632.035	70.514	PieT
315	708519.922	4335629.763	69.909	PieT
316	708518.727	4335628.184	69.725	PieT
317	708525.308	4335627.862	68.936	PieT
318	708525.890	4335625.837	69.047	PieT
319	708528.728	4335624.085	69.050	PieT
320	708529.208	4335626.388	69.324	PieT
321	708539.671	4335622.567	68.065	PieT
322	708540.175	4335624.612	69.941	PieT
323	708548.287	4335623.128	68.617	PieT
324	708551.395	4335619.751	70.803	CabT
325	708538.339	4335619.362	71.204	CabT
326	708526.295	4335622.714	72.442	CabT
327	708517.097	4335625.178	72.514	CabT
328	708482.770	4335638.367	72.825	CabT
329	708490.453	4335639.430	72.678	CabT
330	708498.181	4335640.723	72.207	CabT
331	708506.232	4335642.404	72.040	CabT
332	708507.085	4335639.131	71.391	PieT
333	708502.479	4335634.123	71.346	PieT
334	708496.231	4335633.404	71.487	PieT
335	708495.316	4335636.428	71.427	PieT
336	708490.082	4335634.098	71.859	PieT
337	708487.158	4335636.811	72.133	PieT
338	708480.738	4335636.214	72.142	PieT

Nombre	Coordenada X	Coordenada Y	Coordenada Z	Código
339	708484.204	4335623.868	72.470	PieT
340	708489.242	4335624.368	72.367	PieT
341	708488.906	4335622.801	72.941	CabT
342	708486.914	4335621.798	73.256	CabT
343	708479.856	4335619.136	73.547	CabT
344	708468.824	4335617.036	73.822	CabT
345	708461.704	4335616.022	74.015	CabT
346	708455.787	4335614.391	74.045	CabT
347	708448.783	4335611.793	74.068	CabT
348	708449.367	4335614.291	73.314	PieT
349	708451.906	4335618.771	73.241	PieT
350	708470.174	4335620.815	72.883	PieT
351	708469.034	4335626.090	72.461	PieT
352	708418.489	4335605.893	75.729	PieT
353	708408.355	4335603.947	76.507	CabT
354	708388.638	4335604.629	76.590	CabT
355	708375.334	4335603.348	76.947	CabT
356	708357.046	4335600.474	77.538	CabT
357	708355.606	4335603.464	76.275	PieT
358	708354.726	4335606.692	76.256	PieT
359	708366.100	4335606.794	75.774	PieT
360	708365.462	4335609.371	75.788	PieT
361	708378.991	4335606.950	75.151	PieT
362	708381.430	4335609.939	74.892	PieT
363	708385.831	4335610.400	74.642	PieT
364	708388.937	4335607.309	74.830	PieT
365	708395.789	4335607.460	74.764	PieT
366	708397.462	4335610.197	74.497	PieT
367	708407.596	4335608.578	74.425	PieT
368	708407.548	4335610.080	74.193	PieT
369	708415.388	4335610.363	74.253	PieT
370	708415.029	4335612.451	74.119	PieT
372	708250.558	4335561.955	80.548	CabT
373	708235.657	4335562.867	80.958	CabT
374	708234.359	4335567.066	80.100	CabT
375	708221.093	4335568.616	80.828	CabT
376	708218.395	4335569.441	81.286	CabT
377	708214.737	4335568.948	82.990	CabT
378	708205.883	4335574.521	82.928	CabT
379	708196.574	4335581.850	82.833	CabT
380	708173.227	4335601.444	83.275	CabT
381	708163.710	4335613.849	83.350	CabT
382	708146.597	4335627.018	84.563	CabT
383	708128.119	4335629.576	84.662	CabT
384	708112.125	4335626.288	84.910	CabT
385	708129.926	4335635.695	81.735	PieT
386	708128.394	4335639.904	81.780	PieT
387	708111.116	4335631.397	81.893	PieT


Nombre	Coordenada X	Coordenada Y	Coordenada Z	Código
388	708110.433	4335635.199	81.592	PieT
389	708139.035	4335649.290	84.186	PieT
390	708139.018	4335649.388	84.166	CabT
391	708128.484	4335649.933	85.337	CabT
392	708126.086	4335643.563	83.730	CabT
393	708109.555	4335639.000	83.588	CabT
394	708126.444	4335656.762	85.836	camino
395	708126.715	4335659.998	85.718	camino
396	708118.719	4335663.700	85.893	camino
397	708117.347	4335660.878	85.964	camino
398	708142.456	4335654.483	85.204	camino
399	708145.256	4335658.709	85.249	camino
400	708159.567	4335640.171	84.065	CabT
401	708164.858	4335634.337	84.252	CabT
402	708177.722	4335622.398	84.152	CabT
403	708185.360	4335611.172	83.938	CabT
404	708191.486	4335604.165	83.775	CabT
405	708197.041	4335599.220	84.114	CabT
406	708223.018	4335584.339	83.742	CabT
407	708299.283	4335586.952	80.073	CabT
408	708299.083	4335579.338	77.244	PieT
409	708297.663	4335583.138	77.343	PieT
410	708292.433	4335576.230	77.143	PieT
411	708287.700	4335578.228	77.120	PieT
412	708283.599	4335572.603	76.565	PieT
413	708249.367	4335568.235	77.644	PieT
414	708249.418	4335571.951	77.859	PieT
415	708217.233	4335576.575	78.957	PieT
416	708218.466	4335579.067	78.960	PieT
417	708202.962	4335587.067	79.096	PieT
418	708198.830	4335586.907	79.158	PieT
419	708188.835	4335598.322	79.568	PieT
420	708188.250	4335596.136	79.428	PieT
421	708181.122	4335604.730	79.516	PieT
422	708180.005	4335603.082	79.243	PieT
423	708170.150	4335617.730	80.696	PieT
424	708168.086	4335616.462	80.332	PieT
425	708238.618	4335562.594	80.932	CabT
426	708264.649	4335564.855	82.611	CabT
427	708285.784	4335572.282	80.571	CabT
428	708148.749	4335631.654	81.050	
429	708150.449	4335635.881	81.100	
430	708250.757	4335579.718	81.920	



Anexo 2: Plano topográfico.



LEYENDA

 ZONA DE ACTUACIÓN