

Surveying

The survey was performed on February 8, 2020. The starting point of the survey was decided prior to heading into the field and an assumed northing, easting, and elevation for that point was determined. All other point elevations were based on the assumed point. The location of the total station setup can be seen in Figure 1. The total-station set-up point was marked using rebar with painted white top.



Figure 1: Total Station Set Up Location

Using the data collected during the survey, a topographic map was made of the site. The topographic map with a reference photo of the site behind it can be seen in Figure 2. The topographic map can be seen in Figure 3. There were 94 points taken in the field in the form of point, northing, easting, elevation, and description. There were 16 points added to the surface using Google Earth for a total of 110 points. These points were deemed sufficient due to the dogs being under duress during surveying. The csv point file contains 94 points and was used to create the surface and can be seen on Page 4.



Figure 2: Surface with Photo Reference

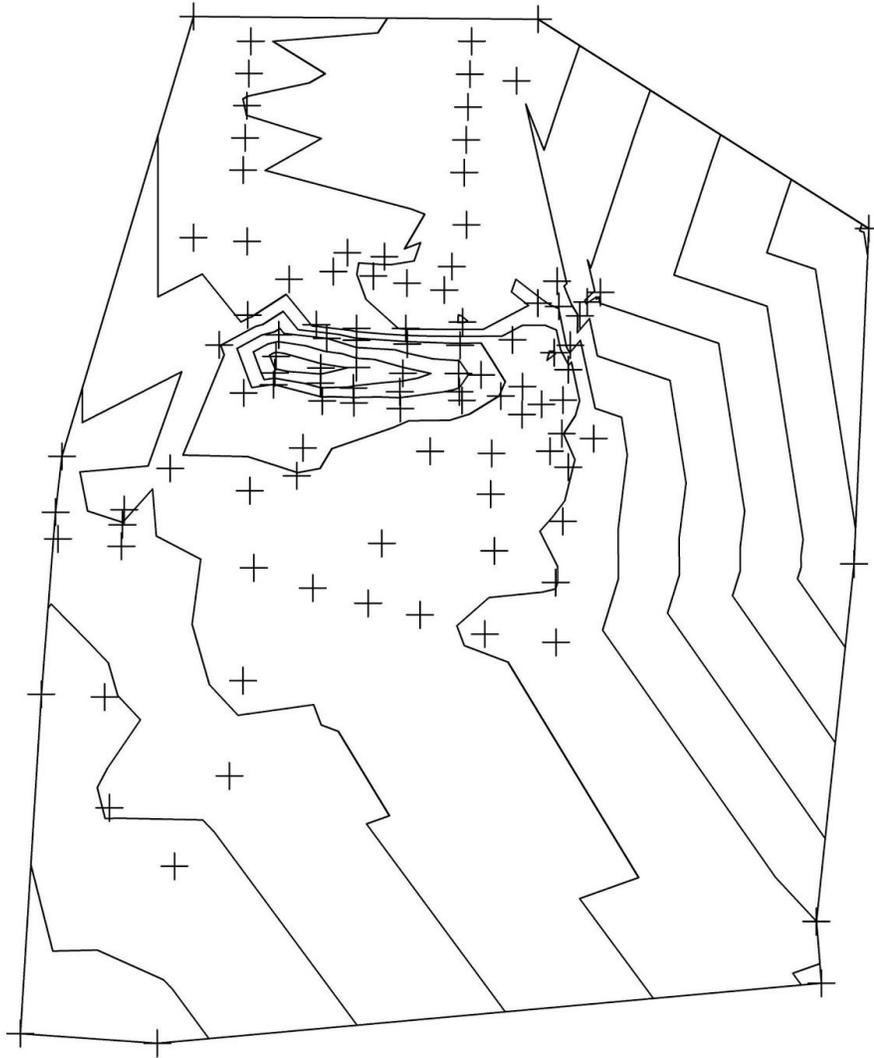


Figure 3: Surface Points

The surface seen above will be used to identify alternative designs for the drainage of the kennels.

CSV File

Point	Northing	Easting	Elevation	Description
1	5000	5000	1000.497	Start
2	5069.117	4957.348	1001.471	fence
3	5016.957	4952.07	1000.069	fence
4	5068.267	4969.488	1001.934	fence/stake 2
5	5019.659	4927.584	999.73	fence
6	5059.691	4978.993	1001.874	test loc 2
7	5007.068	4926.139	999.416	fence
8	5061.448	4989.011	1001.401	tree
9	5007.614	4941.673	1000.667	tree
10	5065.722	4992.184	1001.676	fence
11	5004.216	4941.276	999.881	fence
12	5060.419	4998.061	1002.415	tree
13	4999.349	4941.051	999.49	fence
14	5064.833	5000.567	1001.723	fence
15	5021.602	4982.118	999.863	tree
16	5058.84	5005.692	1002.64	tree
17	5034.018	4968.705	999.675	test loc 3
18	5062.585	5015.846	1002.349	fence
19	5020.826	5010.94	1000.462	tree
20	5057.281	5014.117	1002.715	tree

21	5032.308	5018.138	999.709	pt
22	5030.498	5004.184	999.816	pt
23	5034.282	5004.06	998.542	pt
24	5034.276	5017.562	999.16	pt
25	5038.414	5017.345	998.402	pt
26	5038.449	5004.757	997.592	pt
27	5045.06	5005.733	999.612	pt
28	5044.784	5017.711	999.708	pt
29	5050.042	5018.249	1003.082	pt
30	5048.577	5005.394	1002.091	pt
31	5048.565	4994.27	1001.476	pt
32	5049.427	4985.163	1001.297	pt
33	5045.899	4994.256	999.684	pt
34	5051.63	4969.635	1001.282	pt
35	5045.967	4994.298	999.702	pt
36	5039.738	4994.233	997.11	pt
37	5044.856	4963.188	1000.085	pt
38	5035.131	4993.563	998.108	pt
39	5047.14	4976.654	998.619	pt
40	5031.778	4993.666	999.517	pt
41	5042.267	4976.045	996.599	pt
42	5032.214	4986.483	999.418	pt
43	5038.545	4975.764	997.133	pt

44	5036.22	4986.099	997.514	pt
45	5035.858	4975.48	999.059	pt
46	5039.638	4986.181	996.675	pt
47	5046.351	4987.52	998.993	pt
48	4994.472	4971.013	1000.342	tree
49	5011.92	4970.098	1000.174	tree
50	4989.908	4984.362	1000.494	pt
51	5015.282	4980.741	1000.017	pt
52	4986.459	4996.905	1000.926	pt
53	4972.265	4991.151	1000.617	tree
54	4983.848	5008.623	1000.811	pt
55	4971.364	5000.651	1001.403	tree
56	4979.503	5023.305	1001.143	pt
57	4964.114	5013.387	1001.444	tree
58	4977.618	5039.442	1001.283	res
59	4957.428	5025.214	1001.305	tree
60	4991.148	5039.335	1000.967	res
61	4950.168	5038.297	1001.456	tree
62	4998.315	5025.465	1000.817	pt
63	5011.133	5024.639	1000.473	pt
64	5004.989	5040.975	1001.092	res
65	5020.335	5024.839	1000.842	pt
66	5017.253	5042.19	1000.847	res

67	5035.431	5031.836	1000.191	pt
68	5020.846	5038.038	1000.731	EOS
69	5043.112	5039.007	999.944	EOS
70	5029.136	5031.723	1000.4	EOS
71	5032.4	5041.028	1000.717	tree
72	5039.266	5042.195	1000.655	EOS
73	5023.698	5047.958	1001.425	EOS
74	5031.44	5036.132	1000.622	EOS
75	5024.826	5040.729	1000.974	EOS
76	5044.803	5042.667	1002.627	wall
77	5053.592	5040.071	1002.098	pt
78	5051.46	5044.818	1003.112	pt
79	5054.588	5046.503	1004.122	pt
80	5056.75	5049.479	1004.209	tree
81	5059.296	5039.654	1002.655	pt
82	5054.316	5035.312	1001.846	pt
83	5046.002	5029.578	1000.442	pt
84	5038.106	5022.461	999.734	pt
85	5033.301	5026.937	1000.017	pt
86	5001.01	4926.68	999.269	fence
87	4965.886	4922.906	998.626	fence
88	4889.215	4918.151	997.378	fence
89	4965.265	4937.238	998.856	pt

90	4901.924	4933.646	997.787	pt
91	4940.23	4938.304	999.081	pt
92	4902.663	4955.855	998.051	pt
93	4927.024	4953.042	998.623	pt
94	4887.01	4949.177	997.652	fence