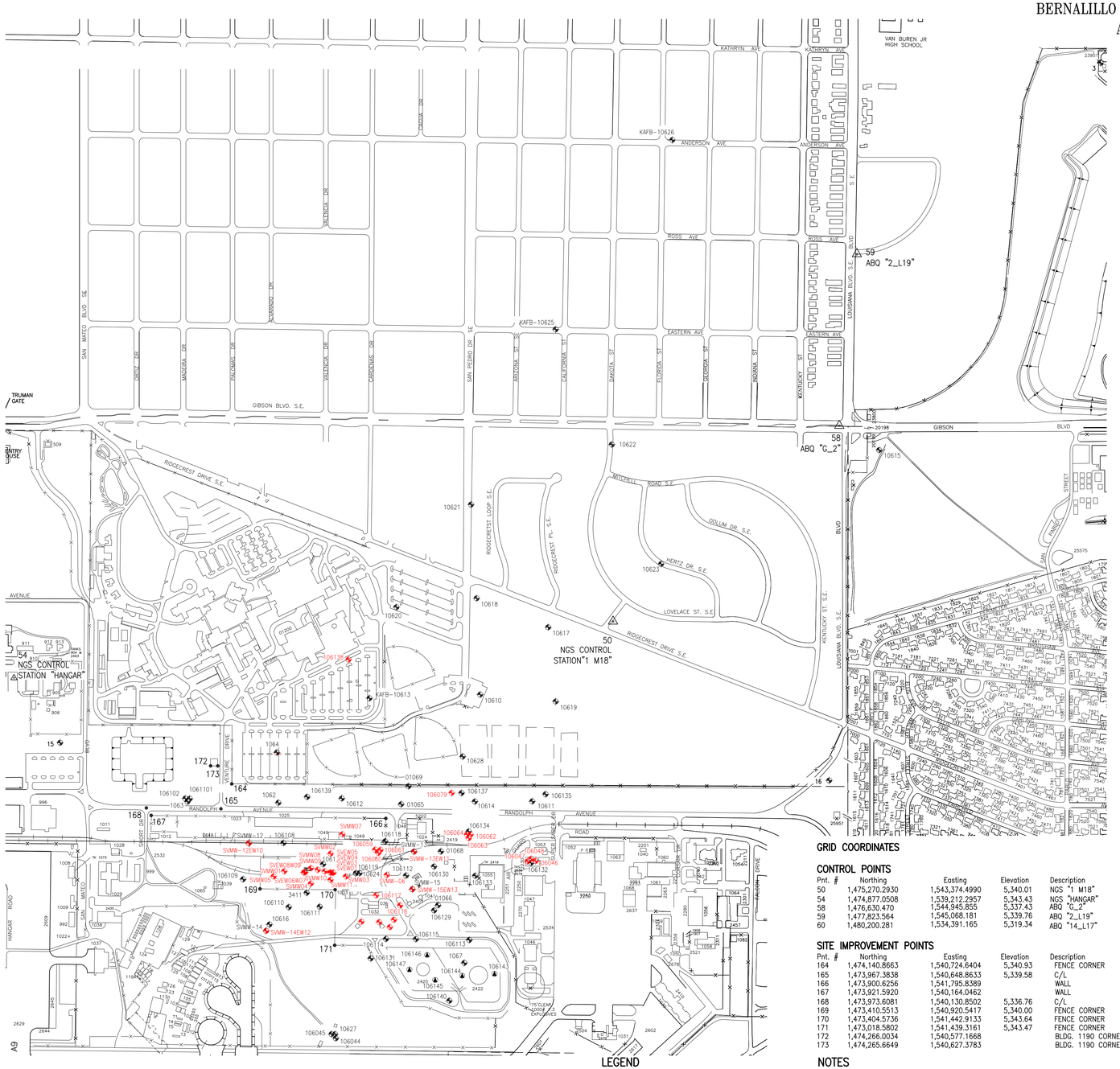
SURVEY OF

MONITORING WELLS & OTHER POINTS
BULK FUELS FACILITY
KIRTLAND AIR FORCE BASE

BERNALILLO COUNTY, NEW MEXICO

APRIL, 2011



GRID COORDINATES

POINTS SURVEYED 4/15/2011 & 4/18/2011

Pnt.#	Northing	Easting	Elevation	Description
689	1,473,685.2880	1,541,720.8575	5,344.67	106059-GROUND
690	1,473,684.3168	1,541,720.9329	5,344.80	106059-CONCRETE
691	1,473,684.2463	1,541,720.8943	5,344.80	106059-CASE
692	1,473,683.6768	1,541,720.8892	5,344.13	106059-PVC
693	1,473,684.1860	1,541,758.3176	5,344.97	106061-GROUND
694	1,473,683.1092	1,541,758.4317	5,345.19	106061-CONCRETE
695	1,473,682.9230	1,541,758.4812	5,345.23	106061-CASE
696	1,473,682.3683	1,541,758.4643	5,344.52	106061-PVC
697	1,473,368.6682	1,541,727.7381	5,345.29	106117-GROUND
698	1,473,367.2443	1,541,727.6858	5,345.58	106117-CONCRETE
699	1,473,367.1070	1,541,727.6735	5,345.59	106117-CASE
700	1,473,366.6775	1,541,727.7590	5,344.79	106117-PVC
701	1,473,366.3364	1,541,727.8422	5,344.75	106117-PVC-25
702	1,473,366.5577	1,541,727.9812	5,344.79	106117-PVC-50
703	1,473,366.8112	1,541,727.7910	5,344.76	106117-PVC-150
704	1,473,366.7027	1,541,727.5218	5,344.77	106117-PVC-250
705	1,473,366.4191	1,541,727.5347	5,344.75	106117-PVC-350
706	1,473,298.7739	1,541,894.0963	5,346.17	106116-GROUND
707	1,473,297.1294	1,541,894.4698	5,346.53	106116-CONCRETE
708	1,473,297.0327	1,541,894.5040	5,346.53	106116-CASE
709	1,473,296.7236	1,541,894.6918	5,346.01	106116-PVC
710	1,473,296.4194	1,541,894.5834	53,46.01	106116-PVC-25
711	1,473,296.4398	1,541,894.8957	5,346.03	106116-PVC-50
712	1,473,296.6695	1,541,894.4671	5,346.02	106116-PVC-150
713	1,473,296.8828	1,541,894.6911	5,346.02	106116-PVC-250
714	1,473,296.7242	1,541,894.9740	5,346.01	106116-PVC-350
715	1,473,204.6982	1,541,790.7860	5,344.74	106077-GROUND
716	1,473,203.7817	1,541,790.4194	5,344.75	106077-CONCRETE
717	1,473,203.5329	1,541,790.3906	5,344.73	106077-CASE
718	1,473,203.0570	1,541,790.4586	5,344.04	106077-PVC
719	1,473,219.6400	1,541,775.4096	5,344.63	106078-GROUND
720	1,473,218.8775	1,541,775.4521	5,344.64	106078-CONCRETE
721	1,473,218.7015	1,541,775.4165	5,344.62	106078-CASE
722	1,473,218.0947	1,541,775.2264	5,343.92	106078-PVC
723	1,473,224.3366	1,541,619.7819	5,343.80	106128-GROUND
724	1,473,223.6693	1,541,619.7436	5,343.82	106128-CONCRETE
725	1,473,223.5740	1,541,619.7378	5,343.85	106128-CASE
726	1,473,223.1455	1,541,619.7215	5,343.57	106128-PVC
727	1,473,223.2498	1,541,619.6063	5,343.58	106128-PVC-25
728	1,473,222.9841	1,541,619.4950	5,343.57	106128-PVC-50
729	1,473,222.7787	1,541,619.7200	5,343.55	106128-PVC-150
730	1,473,222.9229	1,541,619.9845	5,343.60	106128-PVC-250
731	1,473,223.2510	1,541,619.9209	5,343.57	106128-PVC-350
732	1,473,409.8341	1,541,979.0154	5,346.96	SVMW15EW13-GROUND
733	1,473,408.8030	1,541,979.5596	5,347.04	SVMW15EW13-CONCRETE
734	1,473,408.5045	1,541,979.6845	5,347.05	SVMW15EW13-CASE
735	1,473,408.1052	1,541,979.8555	5,346.48	SVMW15EW13-PVC
736	1,473,407.8908	1,541,979.7810	5,346.35	SVMW15EW13-PVC-150
737	1,473,407.9626	1,541,980.2903	5,346.27	SVMW15EW13-PVC-250
738	1,473,407.6907	1,541,979.9636	5,346.23	SVMW15EW13-PVC-350
739	1,473,408.2468	1,541,979.9596	5,346.37	SVMW15EW13-PVC-450
740	1,473,509.1520	1,541,801.5854	5,346.21	SVMW06-GROUND
741	1,473,508.0013	1,541,802.3265	5,346.35	SVMW06-CONCRETE
742	1,473,507.8354	1,541,802.4518	5,346.41	SVMW06-CASE
743	1,473,507.4427	1,541,802.4977	5,345.96	SVMW06-PVC-50
744	1,473,507.3067	1,541,802.9563	5,345.94	SVMW06-PVC-99.5
745	1,473,507.6625	1,541,802.7171	5,345.89	SVMW06-PVC-252
746	1,473,507.1310	1,541,802.6435	5,345.94	SVMW06-PVC-302.5
747	1,473,499.5685	1,541,518.4505	5,343.58	SVMW03-GROUND
748	1,473,498.3401	1,541,518.5472	5,343.75	SVMW03-CONCRETE
749	1,473,498.0244	1,541,518.5011	5,343.71	SVMW03-CASE
750	1,473,497.3845	1,541,518.3720	5,343.33	SVMW03-PVC-50
751	1,473,497.7280	1,541,518.5086	5,343.18	SVMW03-PVC-100
752	1,473,497.5257	1,541,518.7045	5,343.26	SVMW03-PVC-250
753	1,473,497.2477	1,541,518.5937	5,343.23	SVMW03-PVC-300
754	1,473,476.0578	1,541,411.5376	5,343.11	SVMW11-GROUND
755	1,473,474.4313	1,541,411.6498	5,343.20	SVMW11-CONCRETE
756	1,473,474.2952	1,541,411.6222	5,343.20	SVMW11-CASE
757	1,473,473.4885	1,541,411.7370	5,342.48	SVMW11-PVC-50
758	1,473,473.8491	1,541,411.8966	5,342.40	SVMW11-PVC-100
759	1,473,473.8522	1,541,411.3660	5,342.36	SVMW11-PVC-250
760	1,473,474.0723	1,541,411.5207	5,342.28	SVMW11-PVC-260
761	1,473,526.4909	1,541,431.2452	5,343.43	SVEW02EW03-GROUND
762	1,473,525.5896	1,541,431.1724	5,343.59	SVEW02EW03-CONCRETE
763	1,473,525.2096	1,541,431.1266	5,343.61	SVEW02EW03-CASE
764	1,473,524.8693	1,541,430.9756	5,343.60	SVEW02
765	1,473,523.7504	1,541,431.0508	5,343.62	SVEW03
766	1,473,524.2729	1,541,421.0590	5,343.25	SVEW01-GROUND
767	1,473,523.3215	1,541,421.1624	5,343.42	SVEW01-CONCRETE
768	1,473,523.1090	1,541,421.1767	5,343.46	SVEW01-CASE
769	1,473,522.6182	1,541,421.4038	5,343.42	SVEW01
770	1,473,527.1598	1,541,409.8047	5,343.42	SVEW04EW05-GROUND
771	1,473,526.1613	1,541,409.8635	5,343.57	SVEW04EW05-CONCRETE
772	1,473,525.8890	1,541,409.8464	5,343.63	SVEW04EW05-CASE
773	1,473,525.0324	1,541,409.3928	5,343.60	SVEW04
774	1,473,525.1025	1,541,410.2765	5,343.58	SVEW05
775	1,473,536.8797	1,541,371.2136	5,343.12	SVMW10-GROUND
776	1,473,535.2926	1,541,371.2684	5,343.36	SVMW10-CONCRETE
777	1,473,535.0132	1,541,371.3273	5,343.40	SVMW10-CASE
778	1,473,534.1232	1,541,371.1437	5,342.57	SVMW10-PVC-50
779	1,473,534.6011	1,541,371.1210	5,342.60	SVMW10-PVC-100
780	1,473,534.3343	1,541,371.4406	5,342.62	SVMW10-PVC-150
781	1,473,534.2187	1,541,371.0295	5,342.50	SVMW10-PVC-250
782	1,473,546.6781	1,541,322.4343	5,342.96	SVMW09-GROUND
783	1,473,545.3408	1,541,322.4170	5,343.30	SVMW09-CONCRETE
784	1,473,544.9063	1,541,322.3935	5,343.30	SVMW09-CASE
785	1,473,544.2589	1,541,322.7262	5,342.60	SVMW09-PVC-50
786	1,473,544.2396	1,541,322.6325	5,342.56	SVMW09-PVC-100
787	1,473,544.5084	1,541,322.4177	5,342.52	SVMW09-PVC-250
788	1,473,544.4290	1,541,322.1547	5,342.73	SVMW09-PVC-26
789	1,473,557.5985	1,541,274.9607	5,342.75	SVMW08-GROUND
790	1,473,556.0712	1,541,274.8117	5,342.94	SVMW08-CONCRETE
791	1,473,555.6373	1,541,274.7837	5,342.96	SVMW08-CASE
792	1,473,555.0569	1,541,274.6905	5,342.40	SVMW08-PVC-50
793	1,473,555.2554	1,541,274.7370	5,342.46	SVMW08-PVC-100
794	1,473,555.0260	1,541,274.7659	5,342.28	SVMW08-PVC-250
795	1,473,555.2888	1,541,274.6733	5,342.56	SVMW08-PVC-266
796	1,473,530.0958	1,541,235.0151	5,343.40	SVEW06EW07-GROUND
797	1,473,528.4629	1,541,234.7783	5,343.55	SVEW06EW07-CASE
799	1,473,527.2211	1,541,234.3977	5,343.56	SVEW06
800	1,473,527.1786	1,541,235.0639	5,343.55	SVEW07
801	1,473,528.4162	1,541,227.0691	5,343.36	SVEW08EW09-GROUND
802	1,473,527.2374	1,541,226.8937	5,343.62	SVEW08EW09-CONCRETE
803	1,473,526.9767	1,541,226.8474	5,343.65	SVEW08EW09-CASE
804	1,473,525.8714	1,541,226.5272	5,343.68	SVEW08
805	1,473,525.5307	1,541,226.9008	5,343.63	SVEW09
806	1,473,450.6274	1,541,274.6443	5,341.26	SVMW04-GROUND
807	1,473,449.2600	1,541,274.7052	5,341.24	SVMW04-CONCRETE
808	1,473,448.9104	1,541,274.7515	5,341.14	SVMW04-CASE
809	1,473,448.5002	1,541,274.8524	5,340.67	SVMW04-PVC-50
810	1,473,448.6421	1,541,274.4879	5,340.71	SVMW04-PVC-100
811	1,473,448.3747	1,541,274.4940	5,340.67	SVMW04-PVC-250
812	1,473,448.0722	1,541,274.6640	5,340.64	SVMW04-PVC-300
813	1,473,536.6390	1,541,090.2711	5,343.05	SVMW01-GROUND
814	1,473,535.5239	1,541,090.2264	5,343.12	SVMW01-CONCRETE
815	1,473,535.1785	1,541,090.2665	5,343.27	SVMW01-CASE
816	1,473,534.4323	1,541,090.0855	5,342.55	SVMW01-PVC-50
817	1,473,534.7868	1,541,090.4061	5,342.55	SVMW01-PVC-100
818	1,473,534.4282	1,541,090.3918	5,342.54	SVMW01-PVC-250
819	1,473,534.8808	1,541,090.1269	5,342.62	SVMW01-PVC-300
820	1,473,501.2885	1,541,016.0865	5,342.86	SVMW05-GROUND
821	1,473,499.5960	1,541,016.0453	5,342.84	SVMW05-CONCRETE
822	1,473,498.9387	1,541,016.2924	5,342.75	SVMW05-CASE
823	1,473,498.3455	1,541,016.0283	5,342.16	SVMW05-PVC-50
824	1,473,498.6165	1,541,015.7405	5,342.18	SVMW05-PVC-100
825	1,473,498.6842	1,541,016.1654	5,342.20	SVMW05-PVC-229.5
826	1,473,498.7583	1,541,015.9369	5,342.26	SVMW05-PVC-287.5
827	1,473,220.8233	1,541,808.8294	5344.82	106076-GROUND
828	1,473,219.8848	1,541,808.7359	5344.83	106076-CONCRETE
829	1,473,219.6436	1,541,808.7511	5344.84	106076-CASE
830	1,473,219.0834	1,541,808.6601	5344.08	106076-PVC
831	1,473,121.9965	1,540,963.9233	5,338.89	SVMW14EW12-GROUND
832	1,473,120.3586	1,540,963.9660	5,339.28	SVMW14EW12-CONCRETE
833	1,473,119.9543	1,540,963.9702	5,339.29	SVMW14EW12-CASE
834	1,473,119.6416	1,540,964.1967	5,338.68	SVMW14EW12-PVC
835	1,473,119.4156	1,540,963.9643	5,338.76	SVMW14EW12-PVC-150
836	1,473,119.5433	1,540,963.6957	5,338.79	SVMW14EW12-PVC-250
837	1,473,119.1867	1,540,963.7469	5,338.80	SVMW14EW12-PVC-350
838	1,473,119.1805	1,540,964.1923	5,338.78	SVMW14EW12-PVC-450
839	1,473,671.8293	1,541,991.3254	5,347.58	SVMW13EW11-GROUND
840	1,473,670.4663	1,541,991.5507	5,347.82	SVMW13EW11-CONCRETE
841	1,473,669.9162	1,541,991.6616	5,347.81	SVMW13EW11-CASE
842	1,473,669.4863	1,541,991.9903	5,347.63	SVMW13EW11-PVC
843	1,473,669.7003	1,541,991.8394	5,347.39	SVMW13EW11-PVC-150
844	1,473,669.6964	1,541,991.5041	5,347.35	SVMW13EW11-PVC-250
845	1,473,669.4812	1,541,991.5848	5,347.26	SVMW13EW11-PVC-350
846	1,473,669.2352	1,541,991.7046	5,347.34	SVMW13EW11-PVC-450
847	1,473,765.6243	1,542,371.2834	5,348.50	106063-GROUND
848	1,473,764.1293	1,542,371.1976	5,348.90	106063-CONCRETE
849	1,473,763.9874	1,542,371.2523	5,351.88	106063-CASE
850	1,473,763.8717	1,542,371.2429	5,351.19	106063-PVC
851	1,473,790.7294	1,542,385.0191	5,348.10	106062-GROUND
852	1,473,789.5474	1,542,384.9646	5,348.34	106062-CONCRETE
853	1,473,789.2687	1,542,384.9946	5,351.21	106062-CASE
854	1,473,789.1888	1,542,384.9719	5,350.59	106062-PVC
855	1,473,790.4819	1,542,358.6693	5,347.90	106064-GROUND
856	1,473,789.0150	1,542,358.6685	5,348.19	106064-CONCRETE
857	1,473,788.7924	1,542,358.7614	5,351.08	106064-CASE
858	1,473,788.6744	1,542,358.7743	5,350.50	106064-PVC
859	1,473,603.3475	1,542,779.3622	5,352.78	106047-GROUND
860	1,473,602.8809	1,542,779.2969	5,352.83	106047-CONCRETE
861	1,473,602.7078	1,542,779.2786	5,352.82	106047-CASE
862	1,473,602.0588	1,542,779.1943	5,352.11	106047-PVC
863	1,473,621.8302	1,542,804.8289	5,352.59	106048-GROUND
864	1,473,621.2932	1,542,804.7533	5,352.58	106048-CONCRETE
865	1,473,621.1469	1,542,804.7613	5,352.59	106048-CASE
866	1,473,620.5464	1,542,804.5532	5,351.93	106048-PVC
867	1,473,606.0331	1,542,835.9390	5,352.83	106046-GROUND
868	1,473,605.6180	1,542,835.8456	5,352.83	106046-CONCRETE
869	1,473,605.4586	1,542,835.6916	5,352.92	106046-CASE
870	1,473,604.9588	1,542,835.6996	5,352.18	106046-PVC

GRID COORDINATES

CONTROL POINTS

Pnt. #	Northing	Easting	Elevation	Description
50	1,475,270.2930	1,543,374.4990	5,340.01	NGS "1 M18"
54	1,474,877.0508	1,539,212.2957	5,343.43	NGS "HANGAR"
58	1,476,630.470	1,544,945.855	5,337.43	ABQ "G_2"
59	1,477,823.564	1,545,068.181	5,339.76	ABQ "2_L19"
60	1,480,200.281	1,534,391.165	5,319.34	ABQ "14_L17"

SITE IMPROVEMENT POINTS

Pnt. #	Northing	Easting	Elevation	Description
164	1,474,140.8663	1,540,724.6404	5,340.93	FENCE CORNER
165	1,473,967.3838	1,540,648.8633	5,339.58	C/L
166	1,473,900.6256	1,541,795.8389		WALL
167	1,473,921.5920	1,540,164.0462		WALL
168	1,473,973.6081	1,540,130.8502	5,336.76	C/L
169	1,473,410.5513	1,540,920.5417	5,340.00	FENCE CORNER
170	1,473,404.5736	1,541,442.9133	5,343.64	FENCE CORNER
171	1,473,018.5802	1,541,439.3161	5,343.47	FENCE CORNER
172	1,474,266.0034	1,540,577.1668		BLDG. 1190 CORNER
173	1,474,265.6649	1,540,627.3783		BLDG. 1190 CORNER

LEGEND

- CONTROL POINT
- PREVIOUSLY SURVEYED MONITORING WELLS (SEE DATES AND COORDINATES ON SHEET 2)
- PREVIOUSLY SURVEYED SSB GROUND LOCATIONS (SEE DATES AND COORDINATES ON SHEET 2)
- SITE IMPROVEMENT POINTS
- NEWLY SURVEYED MONITORING WELLS (APRIL 2011)

NOTES

1. GRID COORDINATES ARE NAD 83 DATUM VALUES BASED ON NEW MEXICO STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE. BASIS OF COORDINATES ARE PUBLISHED VALUES OF NATIONAL GEODETIC SURVEY (NGS) CONTROL STATION "HANGAR" AND BEARING N84°36'13"E BETWEEN NGS CONTROL STATION "HANGAR" AND NGS CONTROL STATION "1 M18". PROJECT CONVERSION FACTORS ARE GRID-TO-GROUND=1.000343197744 AND GROUND-TO-GRID=0.99965692.
2. ELEVATIONS ARE NAVD 88 DATUM VALUES BASED ON NGS CONTROL STATION "HANGAR", ELEVATION = 5,343.43 FEET. GPS/RTK METHODS AND GEOID99 MODEL WERE USED TO DETERMINE ELEVATIONS OF ALL SURVEYED POINTS.
3. DRAWING COORDINATES ARE GRID.
4. POINTS SHOWN IN RED COLOR WERE ADDED TO THE DRAWING IN APRIL 2011.

PROFESSIONAL SURVEYOR STATE OF NEW MEXICO NO. 10464 VLADIMIR JIRIK

VLADIMIR JIRIK, NMPS NO. 10464

APRIL 20, 2011
DATE

SCALE: 1" = 400'

400 200 0 400

26033MW-2-4-18-2011

Plat & Survey By:
ALBUQUERQUE SURVEYING CO. INC., 2119 Menaul Blvd. N.E., Albuquerque, New Mexico 87107 Ph. (505) 884-2036