

GROUND CONTROL SURVEY

LIDAR SURVEY

PUERTO RICO
Task Order No. 0005

Services provided by:



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ABSTRACT

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This report documents the GPS ground surveys conducted in support of LIDAR data collection for the Puerto Rico LIDAR Survey project. The LIDAR data and the ground survey data were collected during January and February, 2004. Initially a static GPS control network covering the area of the LIDAR surveys was performed utilizing two Trimble 5700 units and one Trimble 4700 unit, with fixed-height tripods.

Following the Control network surveys, Real-Time Kinematic surveys were conducted at 21 sites utilizing the Base stations established in the static network. These surveys established "Ground Truth" data at each site on different surface types, including asphalt, mowed grass, and dirt. The locations of the base stations and the ground truth sites did not warrant obtaining any Right-of-Entry permission from property owners.

Statistical comparisons were made between ground truth points collected in the survey and airborne LIDAR points which fell within 1 meter of the ground truth points.

MAIN REPORT

LIDAR DATA CAPTURE

The LIDAR was flown between January 10 and February 8, 2004. A minimum of two base stations were used for each flight. The base stations used for each flight can be seen on the flight logs, which are included in Section 6. At the end of each flight, the LIDAR data was processed to check for complete coverage, and to verify that there were no data voids in the data. The GPS for the airborne GPS was processed with Applanix POSPac software.

STATIC GPS SUMMARY

The Standard Operating Procedure for the data collection includes a geodetic control network plan designed to maximize the use of the highest order control points in the area of interest, and to optimize the spatial distribution of geodetic control across the network.

Also included is the simultaneous occupation of points designed to provide redundant vectors and loop closures, as well as a collection of a superfluity of points to compare observed values against published values of geodetic control points.

In addition, the static GPS network was established to verify the compatibility and correlation of existing published NGS and COE furnished controls in the project area. Horizontal and vertical constraints were selected based on the order of accuracy and correlation of the controls selected.

PRELIMINARY ANALYSIS

The baselines were processed using GPSurvey's baseline processing module, WAVE (*Weighted Ambiguity Vector Estimator*). Ionosphere-free fixed solutions were found to provide the best results. Preliminary blunder detections were undertaken using "Redundant Vectors" and Global Network Closures and any extremely large errors were eliminated.

EQUIPMENT

GPS Equipment: There were two Trimble 5700 units and one Trimble 4700 unit, with fixed-height tripods used for both the static and the RTK GPS. Two Ashtech Z-XII3 units were used for the static GPS network. One NovAtel OEM3 GPS receiver was used with the LIDAR equipment on the plane.

LIDAR Equipment: The LIDAR was flown with a Sessena 335 airplane. The LIDAR sensor used in the plane is a Leica ALS40, upgraded to an ALS50.

MINIMALLY CONSTRAINED ADJUSTMENT

The data are then processed using a minimally constrained geodetic control network to test the network internally, without external constraints, and produce a statistical summary. The

statistics from this process are required to be within the tolerance outlined in the Geometric Geodetic Accuracy Standards and Specifications for using GPS Relative Positioning Techniques, published by the FGCC. These tolerances are represented as ellipsoids showing the margin of error value on a graph of the theoretical points, covariance values that indicate the degree of error of the vectors relative to the other vectors in the network, and a chi-squared test that compares the predicted variance determined through a least-squares analysis to the observed variance. The summary is evaluated to eliminate vectors that are outside of the error tolerances to be replaced with redundant vectors that are within the tolerances until all tolerances are met.

FULLY CONSTRAINED ADJUSTMENT

The quality of the existing horizontal controls is assessed before undertaking the constrained adjustment. Geodetic inverses between the published NAD83 Coordinates of existing stations were compared with the geodetic inverses derived from the minimally constrained least square adjustment results. This distance analysis is especially useful, since it provides a datum invariant means of comparison.

Once the minimally constrained network satisfies the requirements of the above tests, the highest order control points in the control network are selected with an optimum spatial relationship to fully constrain the network to known control points, and have their published values entered as the position for those points and the network re-adjusted. The fully constrained report is given in Section 3-A. The same statistical tests are rerun on the adjusted network, as well as visually comparing adjusted values of geodetic control points to published values of control points not used as constraints. Again, the summary is evaluated to identify vectors outside of the tolerances and constraining points reselected to obtain the best fit to the geoid where all vectors are within the prescribed tolerances.

ERROR ELLIPSES

The adjustment results show that the a posteriori variance factor of the network was close to 1.0 as should be desired, and passed the χ^2 test. None of the residual components in the network were flagged for possible rejection under the τ -max test at the 0.05 level of significance. The relative confidence ellipses reveal that the horizontal positional accuracy between all directly connected pairs of stations in the network were better than (1:100,000) at the 95% level of confidence. The GPSurvey-generated horizontal and vertical Error ellipses are included in this report in Section 3-B.

RTK GPS SUMMARY

Real Time Kinematic (RTK) GPS surveys were conducted to establish ground-truth data at representative sites throughout the project area. These sites were selected on the basis of the various types of ground surfaces and vegetation covers that would be encountered by the LIDAR surveys. As a quality control measure, a number of “check-in” points were surveyed along with the ground surface points. These “check-in” points consisted of published horizontal and vertical

control points within the area. The RTK Base stations used in the surveys were included in the static GPS network, and were selected on the basis of their having an unobstructed view of the sky, as well as their suitability for broadcasting raw GPS observables to one or more roving receivers which use the information to calculate an accurate vector from each Base to rover. The horizontal and vertical accuracy of each base station was determined by the statistical tests performed in the least squares adjustment process. The RTK was processed using Trimble Geomatics Office, Version 1.61.

SAMPLE POINTS/TEST POINTS

The test points were distributed and categorized into sites as shown in the Project Area RTK Site Map attached in this report (Section 4-A). These sites were selected on the basis of various types of ground surfaces and vegetation covers. At the time of LIDAR data acquisition, checkpoints were collected on surfaces with asphalt, mowed grass, and dirt.

DATA ANALYSIS

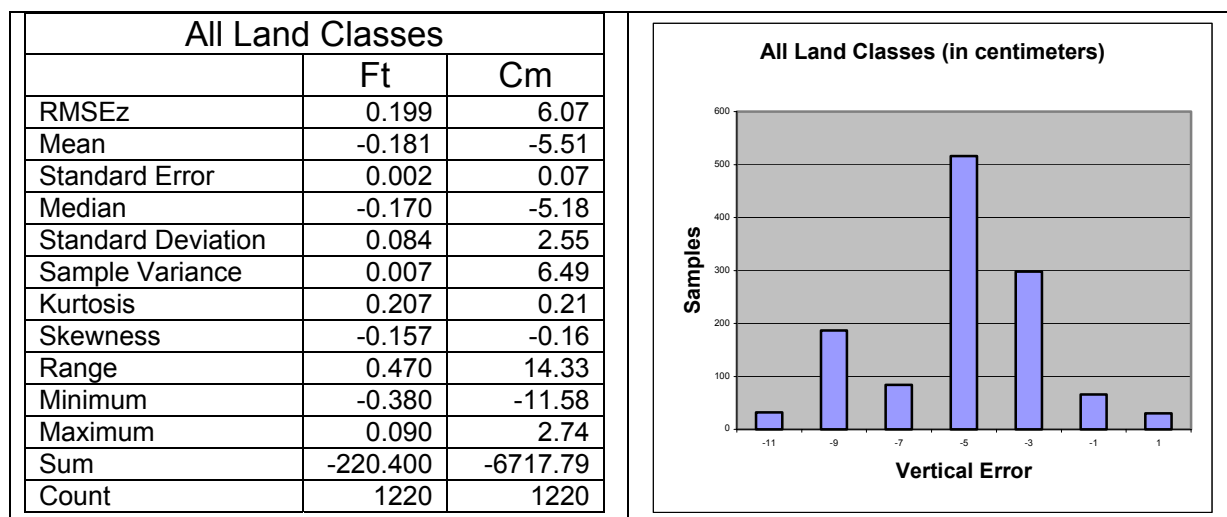
Data analysis was accomplished by comparing ground truth checkpoints with LIDAR points from the edited data set, which were within 1 meter, horizontally from the ground truth points. The only exception to this were the ground truth points collected under tree canopy, where comparisons were made with LIDAR points that fell within 3 meters of the check points. This is because fewer LIDAR pulses are able to reach the ground in heavily forested areas, so the point spacing is larger than in cleared areas. Note that the edited LIDAR points are simply a subset of the raw LIDAR points. The points that fell above the ground surface on vegetation canopies, buildings, or other obstructions were removed from the data set.

LIDAR POINT COMPARISON

The result of these comparisons of these values indicated a Vertical Root Mean Square Error (RMSEz) of 6.07 centimeters, which equates to Vertical Accuracy (Accuracyz) of 11.90 centimeters at the 95 percent confidence level.

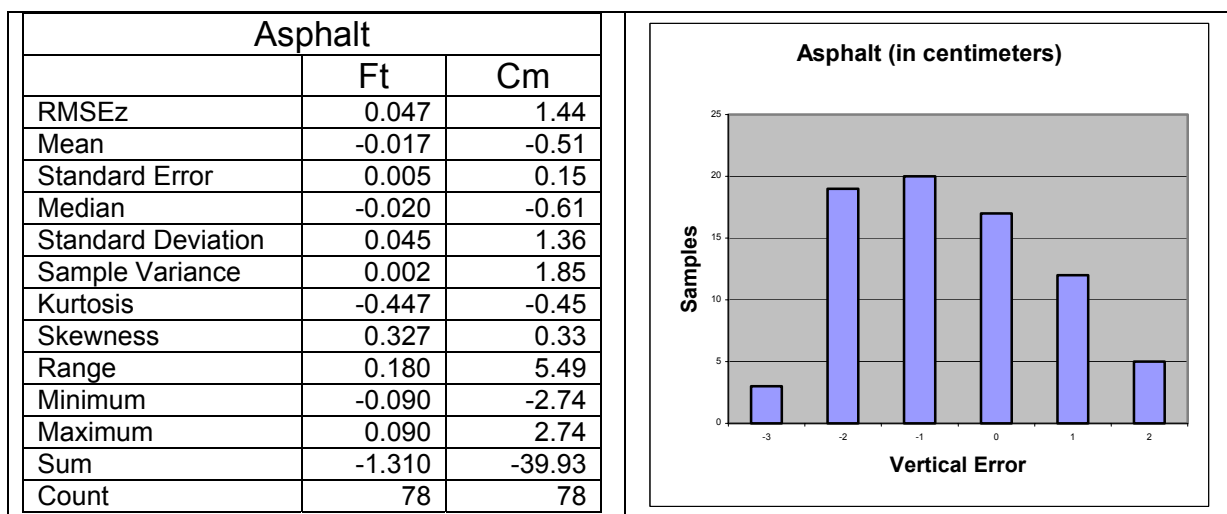
OVERALL ACCURACY

A comparison of these values indicated a Vertical Root Mean Square Error (RMSEz) of 6.07 centimeters. This is within the vertical accuracy tolerance. The mean elevation difference for all points is -5.51 centimeters. Skewness is -0.16, indicating an approximately normal distribution. Descriptive statistics and a histogram of the vertical error distribution for all sample points are shown below.



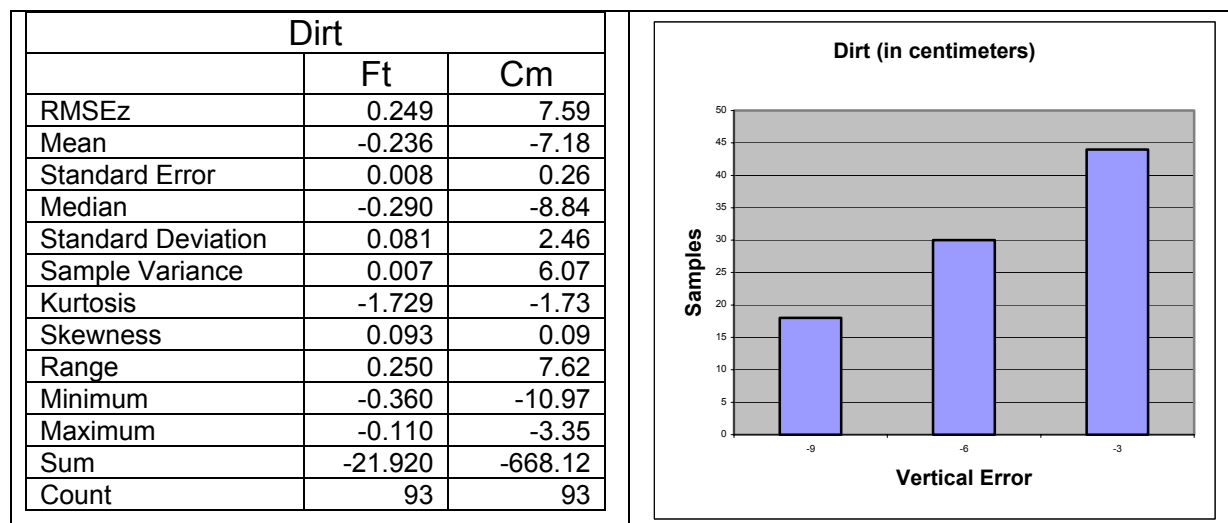
ASPHALT

This set includes only those points that were collected on asphalt road surfaces. The resulting RMSEz is 1.44 centimeters, which is within the accuracy specification. The skewness value is 0.33.



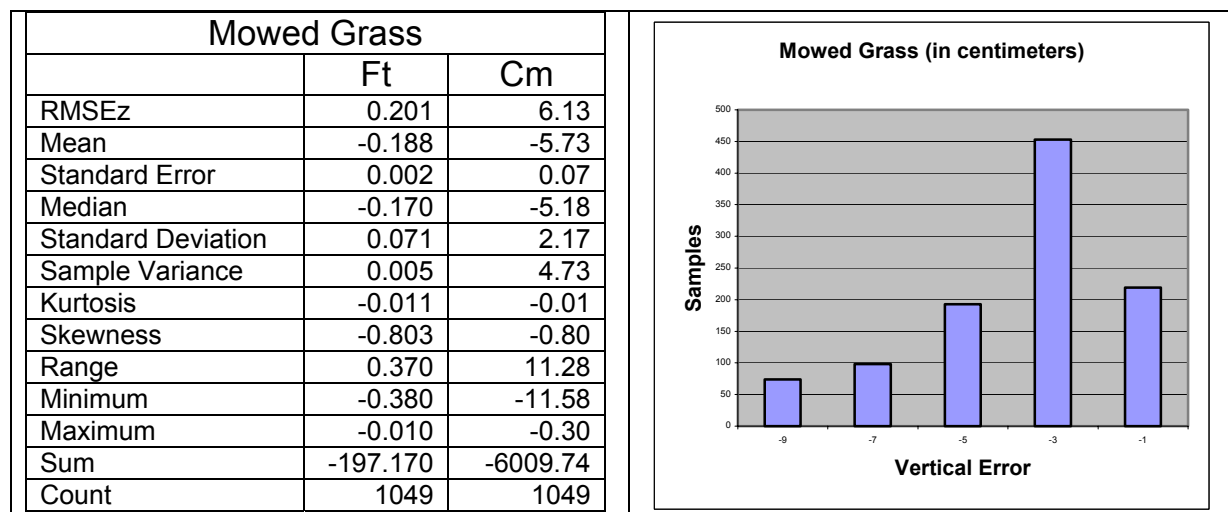
DIRT

This set includes only those points that were collected on areas of dirt. The resulting RMSEz is 7.59 centimeters, which is within the accuracy specification. The skewness value is 0.09.



MOWED GRASS

This set includes only those points that were collected in mowed grass. The resulting RMSEz is 6.13 centimeters, which is within the accuracy specification. The skewness value is -0.80.



GPS NETWORK

A. Fully Constrained

Puerto Rico LIDAR Survey

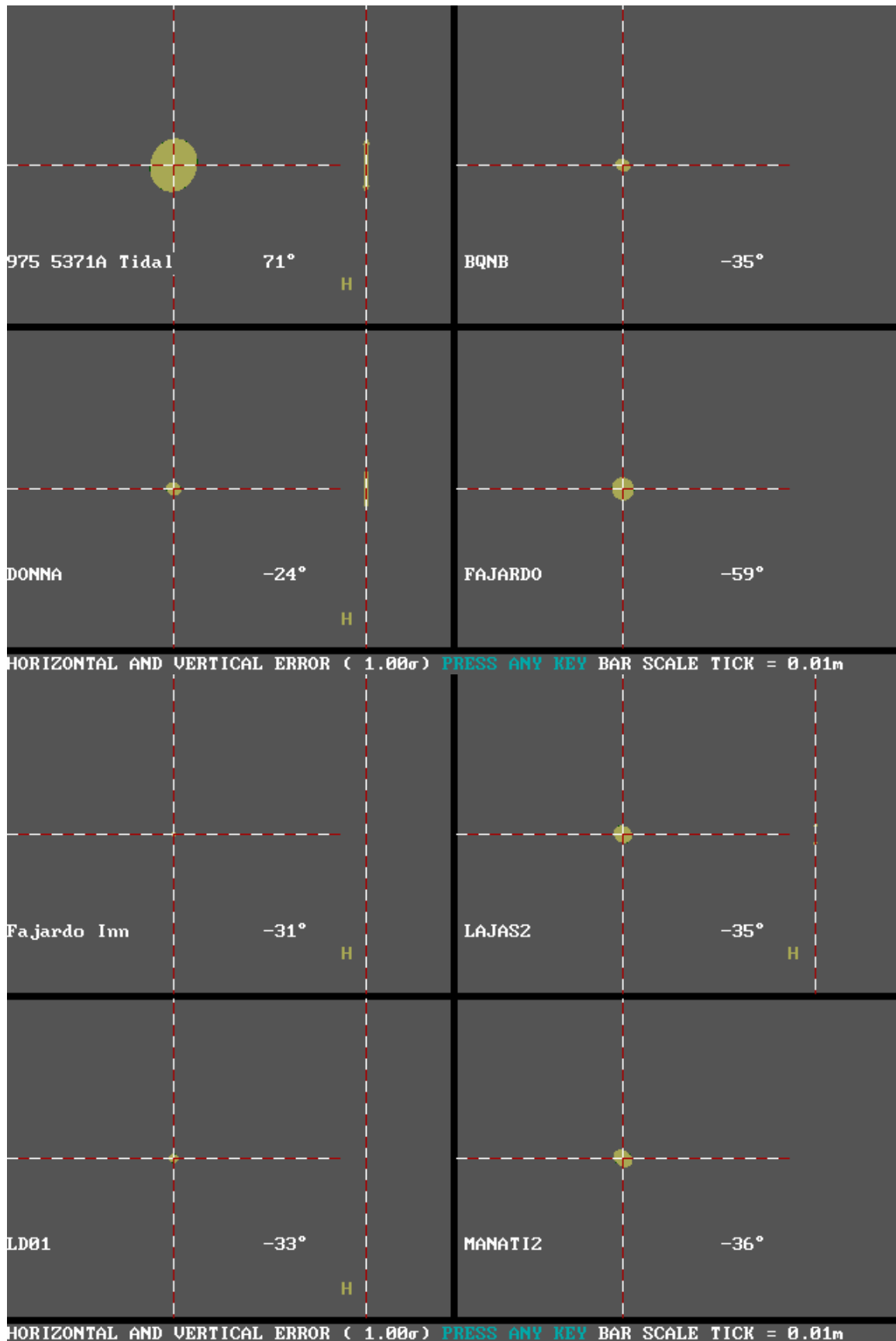
GPS Primary Control Network
(Fully-Constrained Adjustment)

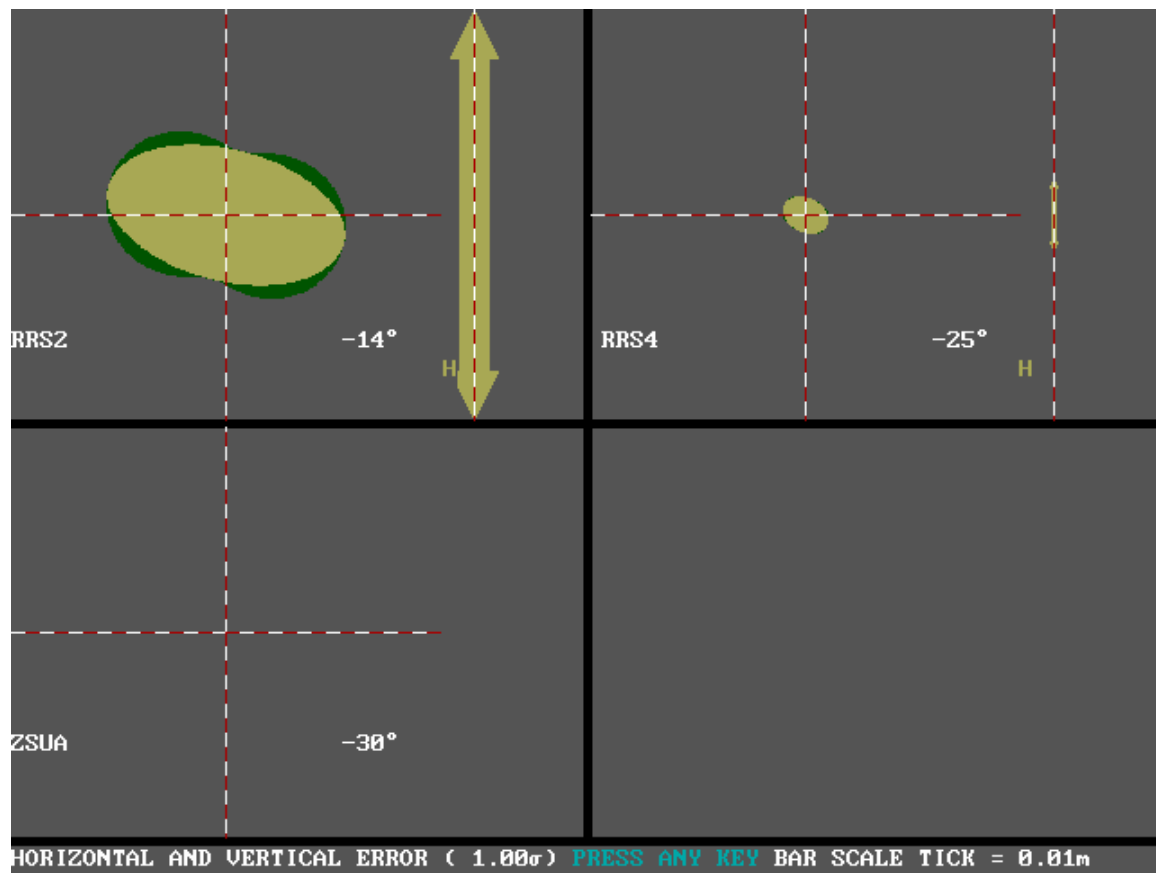
Horizontal Datum: NAD83

Station	Latitude	Longitude	Ellipsoid Ht. (meters)	Ellipsoid Ht. (US Survey ft)
975 5371A Tidal	18 27 32.236525	66 06 59.205580	-41.6288	-136.577
BQNB*	18 29 31.295719	67 08 01.033006	24.0260	78.825
CRO1*	17 45 24.820740	64 35 03.558910	-29.9600	-98.294
DONNA	18 04 24.868629	66 34 38.007998	67.6223	221.857
FAJARDO*	18 21 16.982685	65 38 56.295740	-6.2450	-20.489
Fajardo Inn	18 20 06.243691	65 38 08.133316	4.5079	14.790
LAJAS2	18 04 19.166997	66 57 33.082235	48.5857	159.402
LD01	18 07 07.898410	67 04 59.124131	-0.9023	-2.960
MANATI2*	18 26 23.404578	66 30 04.440533	-21.5560	-70.722
PSEARP*	18 00 31.469167	66 33 47.641140	-31.3240	-102.769
PUR3*	18 27 46.702530	67 04 01.050800	91.4500	300.032
RRS2	17 59 10.757159	66 06 47.224080	43.1502	141.569
RRS4	18 23 38.890917	66 13 53.208797	21.6535	71.042
ZSU1*	18 25 52.803084	65 59 36.517472	-27.1380	-89.035
ZSUA*	18 25 49.034202	65 59 36.814548	-40.4740	-132.788

* Constrained horizontally and vertically to NGS Published values

B. Error Ellipses

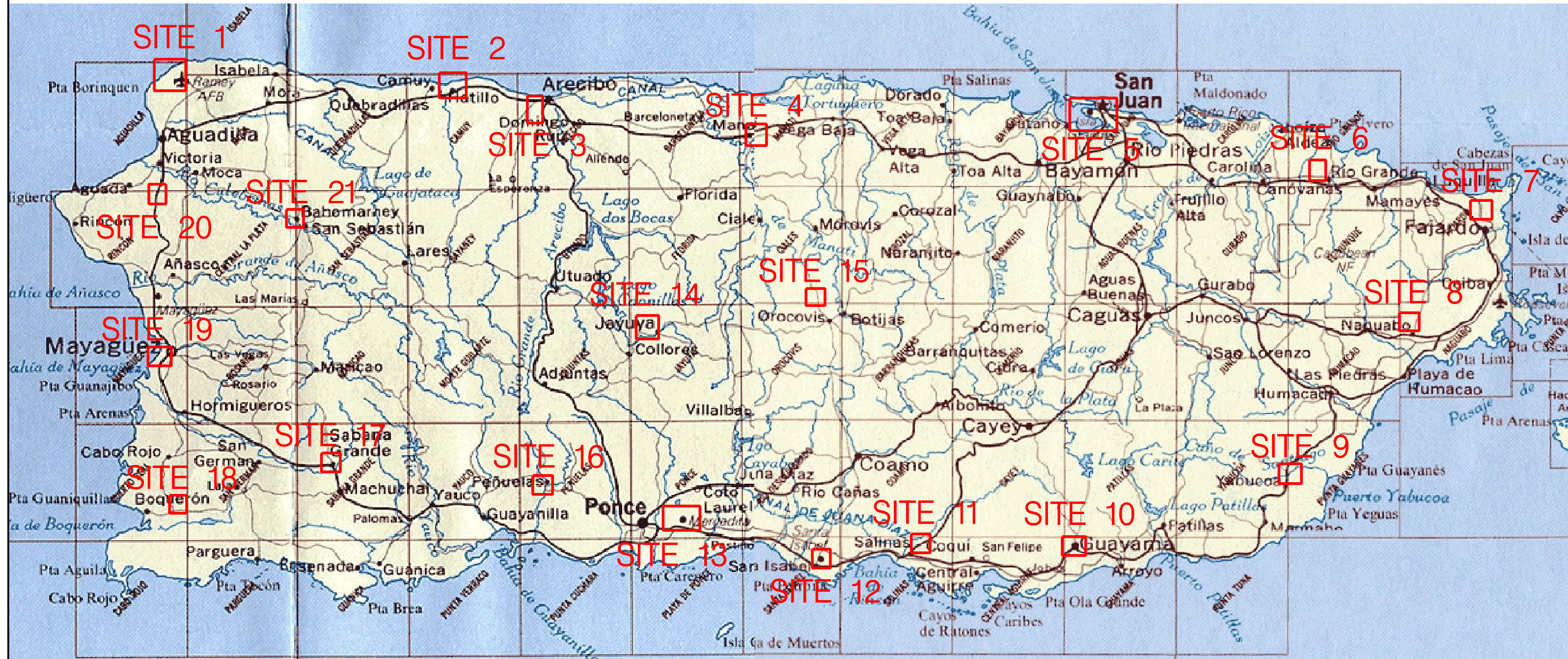




**RTK SURVEY
QUALITY CONTROL DATA**

A. Ground Truth Site Map

Puerto Rico LIDAR Ground Truth Locations



B. Ground Truth Analysis of LIDAR Points

GROUND TRUTH ANALYSIS
Comparison of Lidar points to RTK Ground-Truth points

Horizontal units = US Survey Feet (UTM Coordinates, Zone 19)
 Vertical units = U.S. Survey Feet (ellipsoid heights)

PointName	Survey X	Survey Y	Survey Z	LIDAR X	LIDAR Y	LIDAR Z	dx	dy	dz	dist	Feature Code
1	774081.25	2019297.35	583.17	774079.21	2019296.41	583.34	2.04	0.94	-0.17	2.25	Dirt
2	774081.25	2019297.35	583.17	774080.27	2019294.94	583.29	0.98	2.41	-0.12	2.61	Dirt
3	774081.25	2019297.35	583.17	774082.87	2019295.45	583.31	-1.62	1.90	-0.14	2.50	Dirt
4	774081.25	2019297.35	583.17	774079.29	2019299.13	583.34	1.96	-1.78	-0.17	2.65	Dirt
5	774081.25	2019297.35	583.17	774080.35	2019297.66	583.33	0.90	-0.31	-0.16	0.95	Dirt
6	774081.25	2019297.35	583.17	774082.95	2019298.17	583.29	-1.70	-0.82	-0.12	1.88	Dirt
7	774081.25	2019297.35	583.17	774083.84	2019297.91	583.25	-2.59	-0.56	-0.08	2.65	Dirt
8	774080.88	2019303.18	583.21	774080.44	2019300.37	583.32	0.44	2.81	-0.11	2.84	Dirt
9	774080.88	2019303.18	583.21	774079.46	2019304.59	583.38	1.42	-1.41	-0.17	2.00	Dirt
10	774080.88	2019303.18	583.21	774079.38	2019301.87	583.39	1.50	1.31	-0.18	1.99	Dirt
11	774080.88	2019303.18	583.21	774080.52	2019303.07	583.36	0.36	0.11	-0.15	0.37	Dirt
12	774080.88	2019303.18	583.21	774080.61	2019305.78	583.34	0.27	-2.60	-0.13	2.62	Dirt
13	774080.88	2019303.18	583.21	774083.11	2019303.64	583.36	-2.23	-0.46	-0.15	2.28	Dirt
14	774078.46	2019308.67	583.20	774075.91	2019308.42	583.35	2.55	0.25	-0.15	2.56	Dirt
15	774078.46	2019308.67	583.20	774077.22	2019307.48	583.37	1.24	1.19	-0.17	1.72	Dirt
16	774078.46	2019308.67	583.20	774077.31	2019310.21	583.35	1.15	-1.54	-0.15	1.92	Dirt
17	774078.46	2019308.67	583.20	774079.62	2019310.06	583.36	-1.16	-1.39	-0.16	1.81	Dirt
18	774078.46	2019308.67	583.20	774079.54	2019307.32	583.34	-1.08	1.35	-0.14	1.73	Dirt
19	774078.46	2019308.67	583.20	774080.70	2019308.51	583.33	-2.24	0.16	-0.13	2.24	Dirt
20	774074.63	2019313.08	583.20	774075.99	2019311.15	583.36	-1.36	1.93	-0.16	2.36	Dirt
21	774074.63	2019313.08	583.20	774072.32	2019314.71	583.33	2.31	-1.63	-0.13	2.83	Dirt
22	774074.63	2019313.08	583.20	774072.23	2019311.96	583.32	2.40	1.12	-0.12	2.65	Dirt
23	774074.63	2019313.08	583.20	774073.78	2019312.36	583.38	0.85	0.72	-0.18	1.11	Dirt

24	774074.63	2019313.08	583.20	774073.86	2019315.09	583.36	0.77	-2.01	-0.16	2.16	Dirt
25	774074.63	2019313.08	583.20	774076.07	2019313.89	583.36	-1.44	-0.81	-0.16	1.65	Dirt
26	774074.63	2019313.08	583.20	774077.40	2019312.96	583.36	-2.77	0.12	-0.16	2.77	Dirt
27	774070.19	2019317.52	583.18	774068.60	2019315.50	583.33	1.59	2.02	-0.15	2.57	Dirt
28	774070.19	2019317.52	583.18	774068.68	2019318.28	583.37	1.51	-0.76	-0.19	1.69	Dirt
29	774070.19	2019317.52	583.18	774070.22	2019316.91	583.38	-0.03	0.61	-0.20	0.61	Dirt
30	774070.19	2019317.52	583.18	774070.31	2019319.64	583.33	-0.12	-2.12	-0.15	2.12	Dirt
31	774070.19	2019317.52	583.18	774072.40	2019317.46	583.32	-2.21	0.06	-0.14	2.21	Dirt
32	774057.95	2019318.28	583.15	774057.70	2019320.70	583.33	0.25	-2.42	-0.18	2.43	Dirt
33	774057.95	2019318.28	583.15	774057.61	2019317.93	583.34	0.34	0.35	-0.19	0.49	Dirt
34	774057.95	2019318.28	583.15	774058.58	2019317.26	583.30	-0.63	1.02	-0.15	1.20	Dirt
35	774057.95	2019318.28	583.15	774058.66	2019320.00	583.28	-0.71	-1.72	-0.13	1.86	Dirt
36	774049.53	2019318.66	583.14	774047.43	2019317.52	583.23	2.10	1.14	-0.09	2.39	Dirt
37	774049.53	2019318.66	583.14	774047.52	2019320.27	583.31	2.01	-1.61	-0.17	2.58	Dirt
38	774049.53	2019318.66	583.14	774049.93	2019319.55	583.35	-0.40	-0.89	-0.21	0.98	Dirt
39	774049.53	2019318.66	583.14	774049.84	2019316.79	583.28	-0.31	1.87	-0.14	1.89	Dirt
40	774049.53	2019318.66	583.14	774051.33	2019318.44	583.26	-1.80	0.22	-0.12	1.81	Dirt
41	774063.69	2019318.81	583.15	774065.03	2019316.29	583.35	-1.34	2.52	-0.20	2.85	Dirt
42	774063.69	2019318.81	583.15	774061.47	2019320.57	583.31	2.22	-1.76	-0.15	2.84	Dirt
43	774063.69	2019318.81	583.15	774061.39	2019317.82	583.33	2.30	0.99	-0.18	2.51	Dirt
44	774063.69	2019318.81	583.15	774062.45	2019317.48	583.29	1.24	1.33	-0.13	1.82	Dirt
45	774063.69	2019318.81	583.15	774062.54	2019320.23	583.30	1.15	-1.42	-0.14	1.83	Dirt
46	774063.69	2019318.81	583.15	774065.11	2019319.04	583.33	-1.42	-0.23	-0.18	1.43	Dirt
47	774063.69	2019318.81	583.15	774066.50	2019318.59	583.32	-2.81	0.22	-0.17	2.81	Dirt
48	845605.95	2016374.08	16.24	845606.29	2016374.78	16.56	-0.34	-0.70	-0.32	0.78	Dirt
49	845614.42	2016376.56	16.27	845613.94	2016376.46	16.56	0.48	0.10	-0.29	0.49	Dirt
50	845614.42	2016376.56	16.27	845615.79	2016376.33	16.56	-1.37	0.23	-0.29	1.39	Dirt
51	845601.52	2016379.14	16.24	845600.21	2016378.98	16.57	1.31	0.16	-0.33	1.32	Dirt
52	845601.52	2016379.14	16.24	845602.72	2016377.93	16.57	-1.20	1.21	-0.33	1.71	Dirt
53	845619.94	2016380.34	16.27	845621.61	2016379.58	16.59	-1.67	0.76	-0.32	1.83	Dirt
54	845619.94	2016380.34	16.27	845619.90	2016380.20	16.56	0.04	0.14	-0.29	0.15	Dirt
55	845612.60	2016380.53	16.27	845614.08	2016379.26	16.58	-1.48	1.27	-0.31	1.95	Dirt

56	845612.60	2016380.53	16.27	845612.03	2016380.01	16.59	0.57	0.52	-0.32	0.77	Dirt
57	845625.13	2016384.81	16.25	845624.02	2016384.45	16.59	1.11	0.36	-0.34	1.17	Dirt
58	845625.13	2016384.81	16.25	845625.64	2016383.67	16.61	-0.51	1.14	-0.36	1.25	Dirt
59	845625.13	2016384.81	16.25	845625.79	2016386.49	16.61	-0.66	-1.68	-0.36	1.80	Dirt
60	845597.00	2016384.95	16.27	845595.59	2016383.99	16.61	1.41	0.96	-0.34	1.70	Dirt
61	845597.00	2016384.95	16.27	845596.80	2016385.74	16.58	0.20	-0.79	-0.30	0.82	Dirt
62	845601.03	2016387.73	16.26	845599.43	2016387.69	16.57	1.60	0.04	-0.31	1.60	Dirt
63	845601.03	2016387.73	16.26	845600.64	2016387.37	16.59	0.39	0.36	-0.33	0.53	Dirt
64	845630.64	2016389.48	16.25	845629.78	2016388.16	16.57	0.86	1.32	-0.32	1.57	Dirt
65	845630.64	2016389.48	16.25	845629.93	2016390.98	16.60	0.71	-1.50	-0.35	1.66	Dirt
66	845630.64	2016389.48	16.25	845631.86	2016390.50	16.55	-1.22	-1.02	-0.30	1.59	Dirt
67	845619.70	2016389.73	16.28	845618.33	2016389.12	16.59	1.37	0.60	-0.31	1.50	Dirt
68	845619.70	2016389.73	16.28	845620.34	2016388.62	16.56	-0.64	1.10	-0.28	1.28	Dirt
69	845619.70	2016389.73	16.28	845620.49	2016391.43	16.57	-0.79	-1.70	-0.29	1.88	Dirt
70	845592.13	2016390.38	16.26	845592.12	2016391.02	16.57	0.01	-0.64	-0.31	0.64	Dirt
71	845592.13	2016390.38	16.26	845593.40	2016390.66	16.57	-1.27	-0.28	-0.31	1.30	Dirt
72	845613.05	2016392.62	16.27	845612.62	2016391.20	16.55	0.43	1.42	-0.29	1.48	Dirt
73	845613.05	2016392.62	16.27	845612.77	2016394.00	16.59	0.28	-1.38	-0.32	1.41	Dirt
74	845613.05	2016392.62	16.27	845614.80	2016393.36	16.55	-1.75	-0.74	-0.29	1.90	Dirt
75	845625.19	2016393.88	16.27	845624.47	2016392.87	16.56	0.72	1.01	-0.29	1.24	Dirt
76	845625.19	2016393.88	16.27	845626.07	2016392.12	16.60	-0.88	1.76	-0.33	1.97	Dirt
77	845625.19	2016393.88	16.27	845624.61	2016395.66	16.56	0.58	-1.78	-0.29	1.87	Dirt
78	845625.19	2016393.88	16.27	845626.22	2016394.93	16.57	-1.03	-1.05	-0.30	1.47	Dirt
79	845604.09	2016394.41	16.25	845604.80	2016394.55	16.55	-0.71	-0.14	-0.30	0.72	Dirt
80	845604.09	2016394.41	16.25	845603.57	2016394.82	16.56	0.52	-0.41	-0.31	0.66	Dirt
81	845588.00	2016395.51	16.25	845586.40	2016396.15	16.55	1.60	-0.64	-0.30	1.72	Dirt
82	845588.00	2016395.51	16.25	845588.51	2016395.53	16.57	-0.51	-0.02	-0.32	0.51	Dirt
83	845618.84	2016396.66	16.27	845618.77	2016397.59	16.57	0.07	-0.93	-0.30	0.94	Dirt
84	845618.84	2016396.66	16.27	845618.62	2016394.76	16.57	0.22	1.90	-0.30	1.91	Dirt
85	845618.84	2016396.66	16.27	845620.78	2016397.03	16.56	-1.94	-0.37	-0.29	1.98	Dirt
86	845630.85	2016398.04	16.25	845630.36	2016399.44	16.54	0.49	-1.40	-0.29	1.48	Dirt
87	845630.85	2016398.04	16.25	845630.22	2016396.63	16.54	0.63	1.42	-0.29	1.55	Dirt

88	845630.85	2016398.04	16.25	845632.30	2016398.91	16.55	-1.45	-0.86	-0.30	1.68	Dirt
89	845624.11	2016400.64	16.27	845622.62	2016399.32	16.58	1.49	1.32	-0.31	1.99	Dirt
90	845624.11	2016400.64	16.27	845624.91	2016401.28	16.55	-0.80	-0.64	-0.29	1.03	Dirt
91	845614.67	2016403.58	16.27	845613.21	2016402.41	16.59	1.46	1.17	-0.32	1.87	Dirt
92	845614.67	2016403.58	16.27	845615.38	2016404.66	16.58	-0.71	-1.08	-0.31	1.29	Dirt
93	845614.67	2016403.58	16.27	845615.23	2016401.83	16.60	-0.56	1.75	-0.34	1.83	Dirt
94	845620.34	2016408.16	16.25	845619.35	2016408.89	16.57	0.99	-0.73	-0.32	1.23	Dirt
95	845620.34	2016408.16	16.25	845621.38	2016408.25	16.55	-1.04	-0.09	-0.30	1.04	Dirt
96	834387.43	2034703.08	10.32	834386.19	2034702.43	10.29	1.24	0.66	0.03	1.40	Asphalt
97	834387.43	2034703.08	10.32	834387.61	2034701.82	10.34	-0.18	1.26	-0.02	1.28	Asphalt
98	834387.43	2034703.08	10.32	834387.46	2034704.21	10.32	-0.03	-1.12	0.00	1.13	Asphalt
99	834380.79	2034705.43	10.32	834379.59	2034706.00	10.33	1.20	-0.57	-0.01	1.33	Asphalt
100	834380.79	2034705.43	10.32	834381.93	2034706.17	10.34	-1.14	-0.74	-0.02	1.36	Asphalt
101	834389.52	2034709.03	10.33	834389.75	2034708.85	10.36	-0.23	0.18	-0.03	0.30	Asphalt
102	834389.52	2034709.03	10.33	834390.94	2034710.12	10.35	-1.42	-1.09	-0.02	1.79	Asphalt
103	834383.19	2034711.22	10.39	834381.64	2034710.97	10.37	1.55	0.25	0.02	1.57	Asphalt
104	834383.19	2034711.22	10.39	834383.29	2034709.90	10.33	-0.10	1.32	0.06	1.33	Asphalt
105	834383.19	2034711.22	10.39	834383.15	2034712.33	10.41	0.04	-1.11	-0.02	1.11	Asphalt
106	834391.88	2034714.59	10.36	834393.38	2034715.12	10.45	-1.50	-0.53	-0.09	1.59	Asphalt
107	834386.09	2034717.59	10.46	834385.30	2034716.90	10.40	0.79	0.69	0.06	1.05	Asphalt
108	834386.09	2034717.59	10.46	834386.75	2034716.21	10.37	-0.66	1.38	0.09	1.53	Asphalt
109	834386.09	2034717.59	10.46	834386.61	2034718.66	10.47	-0.52	-1.07	-0.01	1.19	Asphalt
110	834394.30	2034720.17	10.56	834394.26	2034718.24	10.52	0.04	1.93	0.04	1.93	Asphalt
111	834394.30	2034720.17	10.56	834393.08	2034719.98	10.46	1.22	0.19	0.10	1.23	Asphalt
112	834394.30	2034720.17	10.56	834394.12	2034720.66	10.55	0.18	-0.49	0.01	0.53	Asphalt
113	834388.51	2034723.21	10.52	834388.86	2034723.41	10.51	-0.35	-0.20	0.01	0.40	Asphalt
114	834397.46	2034726.27	10.75	834396.60	2034726.23	10.75	0.86	0.04	0.00	0.86	Asphalt
115	834397.46	2034726.27	10.75	834397.69	2034725.63	10.77	-0.23	0.64	-0.02	0.68	Asphalt
116	834397.46	2034726.27	10.75	834397.55	2034728.05	10.70	-0.09	-1.78	0.05	1.78	Asphalt
117	834391.16	2034728.85	10.61	834389.79	2034729.56	10.66	1.37	-0.71	-0.05	1.54	Asphalt
118	834391.16	2034728.85	10.61	834392.48	2034729.75	10.59	-1.32	-0.90	0.02	1.60	Asphalt
119	834400.99	2034732.47	10.88	834400.16	2034732.91	10.85	0.83	-0.44	0.04	0.94	Asphalt

120	834400.99	2034732.47	10.88	834401.15	2034731.67	10.91	-0.16	0.80	-0.03	0.82	Asphalt
121	834400.99	2034732.47	10.88	834401.00	2034734.09	10.86	-0.01	-1.62	0.03	1.62	Asphalt
122	834393.82	2034734.46	10.73	834393.39	2034732.87	10.64	0.43	1.59	0.09	1.65	Asphalt
123	834393.82	2034734.46	10.73	834392.18	2034734.68	10.69	1.64	-0.22	0.04	1.66	Asphalt
124	834393.82	2034734.46	10.73	834393.25	2034735.31	10.74	0.57	-0.85	-0.01	1.02	Asphalt
125	834403.85	2034738.21	10.92	834403.75	2034738.89	10.95	0.10	-0.68	-0.03	0.69	Asphalt
126	834403.85	2034738.21	10.92	834403.90	2034736.43	10.96	-0.05	1.78	-0.04	1.78	Asphalt
127	834403.85	2034738.21	10.92	834404.68	2034737.52	10.99	-0.83	0.69	-0.07	1.08	Asphalt
128	834403.85	2034738.21	10.92	834404.53	2034739.99	10.98	-0.68	-1.78	-0.06	1.91	Asphalt
129	834396.32	2034739.74	10.82	834395.86	2034738.47	10.83	0.46	1.27	-0.01	1.35	Asphalt
130	834396.32	2034739.74	10.82	834395.71	2034740.93	10.88	0.61	-1.19	-0.06	1.33	Asphalt
131	834396.32	2034739.74	10.82	834396.82	2034740.28	10.79	-0.50	-0.54	0.03	0.74	Asphalt
132	834407.05	2034743.88	10.98	834407.41	2034742.86	11.00	-0.36	1.02	-0.02	1.08	Asphalt
133	834407.05	2034743.88	10.98	834408.14	2034743.61	11.02	-1.09	0.27	-0.04	1.13	Asphalt
134	834407.05	2034743.88	10.98	834407.26	2034745.32	10.98	-0.21	-1.44	0.00	1.46	Asphalt
135	834399.01	2034745.64	10.92	834399.42	2034745.25	10.90	-0.41	0.39	0.02	0.57	Asphalt
136	834399.01	2034745.64	10.92	834400.27	2034746.36	10.89	-1.26	-0.72	0.03	1.45	Asphalt
137	834410.38	2034749.56	11.05	834410.99	2034747.76	11.07	-0.61	1.80	-0.02	1.90	Asphalt
138	834410.38	2034749.56	11.05	834411.77	2034749.12	11.11	-1.39	0.44	-0.06	1.46	Asphalt
139	834401.88	2034751.30	11.01	834399.98	2034751.34	11.06	1.90	-0.04	-0.05	1.90	Asphalt
140	834401.88	2034751.30	11.01	834402.99	2034751.28	11.02	-1.11	0.02	-0.01	1.11	Asphalt
141	834414.56	2034756.11	11.20	834414.39	2034754.30	11.27	0.17	1.81	-0.07	1.82	Asphalt
142	834414.56	2034756.11	11.20	834414.24	2034756.79	11.28	0.32	-0.68	-0.08	0.75	Asphalt
143	834414.56	2034756.11	11.20	834415.56	2034755.27	11.28	-1.00	0.84	-0.08	1.31	Asphalt
144	834414.56	2034756.11	11.20	834415.41	2034757.73	11.21	-0.85	-1.61	-0.01	1.82	Asphalt
145	834405.09	2034757.34	11.16	834403.50	2034757.32	11.19	1.59	0.02	-0.03	1.59	Asphalt
146	834405.09	2034757.34	11.16	834406.51	2034757.75	11.12	-1.42	-0.41	0.04	1.48	Asphalt
147	834417.79	2034761.48	11.32	834417.68	2034762.96	11.36	0.11	-1.48	-0.04	1.48	Asphalt
148	834417.79	2034761.48	11.32	834417.83	2034760.47	11.40	-0.04	1.01	-0.08	1.01	Asphalt
149	834417.79	2034761.48	11.32	834419.17	2034762.02	11.41	-1.38	-0.54	-0.09	1.48	Asphalt
150	834420.25	2034766.91	11.35	834418.88	2034766.99	11.28	1.37	-0.08	0.07	1.37	Asphalt
151	834420.25	2034766.91	11.35	834421.20	2034767.32	11.48	-0.95	-0.41	-0.13	1.03	Asphalt

152	834422.54	2034772.46	11.34	834420.90	2034772.33	11.37	1.64	0.13	-0.03	1.64	Asphalt
153	834422.54	2034772.46	11.34	834422.70	2034771.28	11.41	-0.16	1.18	-0.07	1.19	Asphalt
154	834422.54	2034772.46	11.34	834422.55	2034773.78	11.38	-0.01	-1.32	-0.04	1.32	Asphalt
155	834426.00	2034778.04	11.30	834424.54	2034777.92	11.39	1.46	0.12	-0.09	1.47	Asphalt
156	834426.00	2034778.04	11.30	834426.31	2034776.81	11.41	-0.31	1.23	-0.11	1.27	Asphalt
157	834429.38	2034782.68	11.30	834428.30	2034782.02	11.35	1.08	0.66	-0.05	1.27	Asphalt
158	834429.38	2034782.68	11.30	834429.85	2034783.26	11.41	-0.47	-0.58	-0.11	0.74	Asphalt
159	834432.16	2034788.24	11.35	834431.92	2034788.20	11.39	0.24	0.04	-0.04	0.25	Asphalt
160	834432.16	2034788.24	11.35	834433.48	2034786.97	11.43	-1.32	1.27	-0.08	1.83	Asphalt
161	834432.16	2034788.24	11.35	834433.33	2034789.50	11.43	-1.17	-1.26	-0.08	1.72	Asphalt
162	834435.78	2034793.10	11.41	834436.94	2034793.32	11.41	-1.16	-0.22	0.00	1.19	Asphalt
163	834435.78	2034793.10	11.41	834435.53	2034794.90	11.47	0.25	-1.80	-0.06	1.82	Asphalt
164	834440.46	2034797.90	11.47	834439.28	2034798.47	11.49	1.18	-0.57	-0.02	1.31	Asphalt
165	834440.46	2034797.90	11.47	834440.49	2034797.82	11.47	-0.03	0.08	0.00	0.08	Asphalt
166	834444.95	2034802.23	11.51	834444.03	2034800.99	11.52	0.92	1.24	-0.01	1.54	Asphalt
167	834444.95	2034802.23	11.51	834443.88	2034803.55	11.55	1.07	-1.32	-0.04	1.70	Asphalt
168	834449.14	2034806.89	11.55	834450.26	2034808.13	11.55	-1.12	-1.24	0.00	1.67	Asphalt
169	834449.14	2034806.89	11.55	834450.42	2034805.56	11.55	-1.28	1.33	0.00	1.85	Asphalt
170	834452.37	2034811.15	11.59	834450.88	2034811.36	11.64	1.49	-0.21	-0.05	1.50	Asphalt
171	834452.37	2034811.15	11.59	834453.79	2034811.87	11.61	-1.42	-0.72	-0.02	1.60	Asphalt
172	834446.42	2034813.26	11.65	834446.07	2034814.22	11.73	0.35	-0.96	-0.08	1.02	Asphalt
173	834446.42	2034813.26	11.65	834446.22	2034811.60	11.59	0.20	1.66	0.06	1.68	Asphalt
174	834446.42	2034813.26	11.65	834447.03	2034813.42	11.65	-0.61	-0.16	0.00	0.63	Asphalt
175	834440.36	2034814.90	11.68	834439.59	2034813.19	11.66	0.77	1.71	0.02	1.87	Asphalt
176	834440.36	2034814.90	11.68	834439.44	2034815.76	11.76	0.92	-0.86	-0.08	1.26	Asphalt
177	834440.36	2034814.90	11.68	834442.16	2034815.65	11.73	-1.80	-0.75	-0.05	1.95	Asphalt
178	774089.75	2019304.56	583.13	774087.62	2019302.54	583.27	2.13	2.02	-0.14	2.93	Mowed Grass
179	774089.75	2019304.56	583.13	774087.71	2019305.26	583.26	2.04	-0.70	-0.13	2.16	Mowed Grass
180	774089.75	2019304.56	583.13	774090.16	2019305.03	583.31	-0.41	-0.47	-0.18	0.63	Mowed Grass
181	774089.75	2019304.56	583.13	774090.07	2019302.30	583.26	-0.32	2.26	-0.13	2.28	Mowed Grass
182	774089.75	2019304.56	583.13	774091.44	2019303.08	583.26	-1.69	1.48	-0.13	2.25	Mowed Grass
183	774089.75	2019304.56	583.13	774091.52	2019305.79	583.25	-1.77	-1.23	-0.12	2.16	Mowed Grass

184	774086.08	2019308.08	583.15	774084.09	2019306.05	583.30	1.99	2.03	-0.15	2.84	Mowed Grass
185	774086.08	2019308.08	583.15	774086.71	2019305.76	583.35	-0.63	2.32	-0.20	2.40	Mowed Grass
186	774086.08	2019308.08	583.15	774083.28	2019309.11	583.37	2.80	-1.03	-0.22	2.98	Mowed Grass
187	774086.08	2019308.08	583.15	774084.18	2019308.79	583.30	1.90	-0.71	-0.15	2.02	Mowed Grass
188	774086.08	2019308.08	583.15	774086.79	2019308.49	583.36	-0.71	-0.41	-0.21	0.82	Mowed Grass
189	774086.08	2019308.08	583.15	774087.80	2019307.98	583.29	-1.72	0.10	-0.14	1.73	Mowed Grass
190	774094.33	2019308.47	583.09	774091.61	2019308.51	583.27	2.72	-0.04	-0.18	2.72	Mowed Grass
191	774094.33	2019308.47	583.09	774093.85	2019309.46	583.28	0.48	-0.99	-0.19	1.10	Mowed Grass
192	774094.33	2019308.47	583.09	774093.76	2019306.73	583.24	0.57	1.74	-0.15	1.83	Mowed Grass
193	774094.33	2019308.47	583.09	774095.25	2019306.72	583.27	-0.92	1.75	-0.18	1.98	Mowed Grass
194	774094.33	2019308.47	583.09	774095.34	2019309.44	583.28	-1.01	-0.97	-0.19	1.40	Mowed Grass
195	774098.83	2019312.68	583.10	774099.15	2019310.31	583.24	-0.32	2.37	-0.14	2.39	Mowed Grass
196	774098.83	2019312.68	583.10	774097.83	2019314.52	583.29	1.00	-1.84	-0.19	2.09	Mowed Grass
197	774098.83	2019312.68	583.10	774097.75	2019311.77	583.24	1.08	0.91	-0.14	1.41	Mowed Grass
198	774098.83	2019312.68	583.10	774099.24	2019313.06	583.32	-0.41	-0.38	-0.22	0.56	Mowed Grass
199	774098.83	2019312.68	583.10	774101.60	2019313.74	583.30	-2.77	-1.06	-0.20	2.97	Mowed Grass
200	774081.38	2019313.55	583.18	774080.78	2019311.23	583.34	0.60	2.32	-0.16	2.39	Mowed Grass
201	774081.38	2019313.55	583.18	774079.71	2019312.81	583.35	1.67	0.74	-0.17	1.82	Mowed Grass
202	774081.38	2019313.55	583.18	774079.79	2019315.57	583.41	1.59	-2.02	-0.23	2.57	Mowed Grass
203	774081.38	2019313.55	583.18	774080.87	2019313.94	583.35	0.51	-0.39	-0.17	0.64	Mowed Grass
204	774081.38	2019313.55	583.18	774083.44	2019314.61	583.38	-2.06	-1.06	-0.20	2.32	Mowed Grass
205	774081.38	2019313.55	583.18	774083.36	2019311.86	583.35	-1.98	1.69	-0.17	2.60	Mowed Grass
206	774090.19	2019313.90	583.18	774087.97	2019313.44	583.32	2.22	0.46	-0.14	2.27	Mowed Grass
207	774090.19	2019313.90	583.18	774090.49	2019316.02	583.40	-0.30	-2.12	-0.22	2.15	Mowed Grass
208	774090.19	2019313.90	583.18	774090.41	2019313.28	583.37	-0.22	0.61	-0.19	0.65	Mowed Grass
209	774090.19	2019313.90	583.18	774091.78	2019313.96	583.37	-1.59	-0.06	-0.19	1.59	Mowed Grass
210	774084.00	2019314.62	583.19	774083.44	2019314.61	583.38	0.56	0.01	-0.19	0.56	Mowed Grass
211	774084.00	2019314.62	583.19	774083.36	2019311.86	583.35	0.64	2.76	-0.16	2.84	Mowed Grass
212	774084.00	2019314.62	583.19	774084.35	2019314.27	583.33	-0.35	0.35	-0.14	0.50	Mowed Grass
213	774084.00	2019314.62	583.19	774083.53	2019317.36	583.41	0.47	-2.74	-0.22	2.78	Mowed Grass
214	774084.00	2019314.62	583.19	774084.44	2019317.01	583.39	-0.44	-2.39	-0.20	2.43	Mowed Grass
215	774103.66	2019316.93	583.15	774101.68	2019316.50	583.32	1.98	0.43	-0.17	2.03	Mowed Grass

216	774103.66	2019316.93	583.15	774102.98	2019316.00	583.31	0.68	0.93	-0.16	1.15	Mowed Grass
217	774103.66	2019316.93	583.15	774105.33	2019314.83	583.28	-1.67	2.10	-0.13	2.68	Mowed Grass
218	774103.66	2019316.93	583.15	774101.76	2019319.24	583.33	1.90	-2.31	-0.18	3.00	Mowed Grass
219	774103.66	2019316.93	583.15	774103.06	2019318.72	583.31	0.60	-1.79	-0.16	1.89	Mowed Grass
220	774103.66	2019316.93	583.15	774105.41	2019317.60	583.35	-1.75	-0.67	-0.20	1.87	Mowed Grass
221	774103.66	2019316.93	583.15	774106.51	2019316.95	583.32	-2.85	-0.02	-0.17	2.85	Mowed Grass
222	774085.32	2019318.62	583.23	774083.61	2019320.12	583.43	1.71	-1.50	-0.20	2.27	Mowed Grass
223	774085.32	2019318.62	583.23	774083.53	2019317.36	583.41	1.79	1.26	-0.18	2.19	Mowed Grass
224	774085.32	2019318.62	583.23	774084.44	2019317.01	583.39	0.88	1.61	-0.16	1.83	Mowed Grass
225	774085.32	2019318.62	583.23	774084.53	2019319.74	583.35	0.79	-1.12	-0.12	1.37	Mowed Grass
226	774085.32	2019318.62	583.23	774087.13	2019319.49	583.41	-1.81	-0.87	-0.18	2.01	Mowed Grass
227	774085.32	2019318.62	583.23	774087.04	2019316.74	583.40	-1.72	1.88	-0.17	2.55	Mowed Grass
228	774085.32	2019318.62	583.23	774088.14	2019318.92	583.38	-2.82	-0.30	-0.15	2.84	Mowed Grass
229	774076.78	2019318.65	583.19	774073.95	2019317.83	583.32	2.83	0.82	-0.13	2.94	Mowed Grass
230	774076.78	2019318.65	583.19	774076.24	2019319.36	583.34	0.54	-0.71	-0.15	0.89	Mowed Grass
231	774076.78	2019318.65	583.19	774076.15	2019316.61	583.34	0.63	2.04	-0.15	2.13	Mowed Grass
232	774076.78	2019318.65	583.19	774077.57	2019318.43	583.36	-0.79	0.22	-0.17	0.82	Mowed Grass
233	774076.78	2019318.65	583.19	774077.66	2019321.16	583.36	-0.88	-2.51	-0.17	2.66	Mowed Grass
234	774089.54	2019319.12	583.19	774087.13	2019319.49	583.41	2.41	-0.37	-0.22	2.44	Mowed Grass
235	774089.54	2019319.12	583.19	774088.14	2019318.92	583.38	1.40	0.20	-0.19	1.41	Mowed Grass
236	774089.54	2019319.12	583.19	774090.66	2019321.51	583.42	-1.12	-2.39	-0.23	2.64	Mowed Grass
237	774089.54	2019319.12	583.19	774090.58	2019318.76	583.40	-1.04	0.36	-0.21	1.10	Mowed Grass
238	774089.54	2019319.12	583.19	774091.96	2019319.43	583.39	-2.42	-0.31	-0.20	2.44	Mowed Grass
239	774089.54	2019319.12	583.19	774088.23	2019321.66	583.37	1.31	-2.54	-0.18	2.85	Mowed Grass
240	774094.53	2019319.29	583.22	774091.96	2019319.43	583.39	2.57	-0.14	-0.17	2.58	Mowed Grass
241	774094.53	2019319.29	583.22	774094.18	2019320.46	583.41	0.35	-1.17	-0.19	1.22	Mowed Grass
242	774094.53	2019319.29	583.22	774094.10	2019317.72	583.43	0.43	1.57	-0.21	1.63	Mowed Grass
243	774094.53	2019319.29	583.22	774095.60	2019317.68	583.36	-1.07	1.61	-0.14	1.93	Mowed Grass
244	774094.53	2019319.29	583.22	774095.69	2019320.42	583.41	-1.16	-1.13	-0.19	1.61	Mowed Grass
245	774049.80	2019319.35	583.17	774047.43	2019317.52	583.23	2.37	1.83	-0.06	2.99	Mowed Grass
246	774049.80	2019319.35	583.17	774047.52	2019320.27	583.31	2.28	-0.92	-0.14	2.46	Mowed Grass
247	774049.80	2019319.35	583.17	774049.93	2019319.55	583.35	-0.13	-0.20	-0.18	0.24	Mowed Grass

248	774049.80	2019319.35	583.17	774049.84	2019316.79	583.28	-0.04	2.56	-0.11	2.56	Mowed Grass
249	774049.80	2019319.35	583.17	774051.33	2019318.44	583.26	-1.53	0.91	-0.09	1.78	Mowed Grass
250	774049.80	2019319.35	583.17	774051.41	2019321.20	583.31	-1.61	-1.85	-0.14	2.45	Mowed Grass
251	774049.80	2019319.35	583.17	774050.01	2019322.29	583.29	-0.21	-2.94	-0.12	2.95	Mowed Grass
252	774076.96	2019320.45	583.17	774074.04	2019320.58	583.35	2.92	-0.13	-0.18	2.92	Mowed Grass
253	774076.96	2019320.45	583.17	774076.24	2019319.36	583.34	0.72	1.09	-0.17	1.31	Mowed Grass
254	774076.96	2019320.45	583.17	774077.57	2019318.43	583.36	-0.61	2.02	-0.19	2.11	Mowed Grass
255	774076.96	2019320.45	583.17	774077.66	2019321.16	583.36	-0.70	-0.71	-0.19	1.00	Mowed Grass
256	774076.96	2019320.45	583.17	774076.32	2019322.10	583.33	0.64	-1.65	-0.16	1.77	Mowed Grass
257	774108.70	2019321.04	583.15	774106.60	2019319.70	583.34	2.10	1.34	-0.19	2.49	Mowed Grass
258	774108.70	2019321.04	583.15	774109.22	2019319.57	583.34	-0.52	1.47	-0.19	1.56	Mowed Grass
259	774108.70	2019321.04	583.15	774110.20	2019320.12	583.33	-1.50	0.92	-0.18	1.76	Mowed Grass
260	774108.70	2019321.04	583.15	774106.69	2019322.45	583.39	2.01	-1.41	-0.24	2.46	Mowed Grass
261	774108.70	2019321.04	583.15	774109.30	2019322.33	583.38	-0.60	-1.29	-0.23	1.43	Mowed Grass
262	774108.70	2019321.04	583.15	774110.29	2019322.87	583.34	-1.59	-1.83	-0.19	2.43	Mowed Grass
263	774056.95	2019321.88	583.19	774057.70	2019320.70	583.33	-0.75	1.18	-0.14	1.39	Mowed Grass
264	774056.95	2019321.88	583.19	774058.66	2019320.00	583.28	-1.71	1.88	-0.09	2.54	Mowed Grass
265	774056.95	2019321.88	583.19	774055.14	2019321.95	583.34	1.81	-0.07	-0.15	1.81	Mowed Grass
266	774056.95	2019321.88	583.19	774057.78	2019323.46	583.34	-0.83	-1.58	-0.15	1.79	Mowed Grass
267	774056.95	2019321.88	583.19	774058.75	2019322.75	583.34	-1.80	-0.87	-0.15	2.00	Mowed Grass
268	774078.85	2019322.75	583.17	774077.66	2019321.16	583.36	1.19	1.59	-0.19	1.99	Mowed Grass
269	774078.85	2019322.75	583.17	774079.95	2019321.07	583.36	-1.10	1.68	-0.19	2.01	Mowed Grass
270	774078.85	2019322.75	583.17	774076.32	2019322.10	583.33	2.53	0.65	-0.16	2.62	Mowed Grass
271	774078.85	2019322.75	583.17	774077.75	2019323.91	583.33	1.10	-1.16	-0.16	1.60	Mowed Grass
272	774078.85	2019322.75	583.17	774080.04	2019323.84	583.37	-1.19	-1.09	-0.20	1.61	Mowed Grass
273	774078.85	2019322.75	583.17	774081.12	2019322.15	583.37	-2.27	0.60	-0.20	2.35	Mowed Grass
274	774094.56	2019323.30	583.22	774094.18	2019320.46	583.41	0.38	2.84	-0.19	2.87	Mowed Grass
275	774094.56	2019323.30	583.22	774092.05	2019322.18	583.40	2.51	1.12	-0.18	2.75	Mowed Grass
276	774094.56	2019323.30	583.22	774092.14	2019324.92	583.41	2.42	-1.62	-0.19	2.91	Mowed Grass
277	774094.56	2019323.30	583.22	774094.35	2019325.98	583.42	0.21	-2.68	-0.20	2.69	Mowed Grass
278	774094.56	2019323.30	583.22	774094.26	2019323.23	583.41	0.30	0.07	-0.19	0.31	Mowed Grass
279	774094.56	2019323.30	583.22	774095.77	2019323.15	583.40	-1.21	0.15	-0.18	1.22	Mowed Grass

280	774094.56	2019323.30	583.22	774095.86	2019325.90	583.41	-1.30	-2.60	-0.19	2.90	Mowed Grass
281	774066.30	2019323.60	583.15	774066.58	2019321.31	583.31	-0.28	2.29	-0.16	2.31	Mowed Grass
282	774066.30	2019323.60	583.15	774065.28	2019324.55	583.33	1.02	-0.95	-0.18	1.40	Mowed Grass
283	774066.30	2019323.60	583.15	774065.20	2019321.77	583.28	1.10	1.83	-0.13	2.13	Mowed Grass
284	774066.30	2019323.60	583.15	774066.67	2019324.06	583.30	-0.37	-0.46	-0.15	0.59	Mowed Grass
285	774066.30	2019323.60	583.15	774068.85	2019323.77	583.34	-2.55	-0.17	-0.19	2.56	Mowed Grass
286	774089.38	2019323.75	583.22	774090.66	2019321.51	583.42	-1.28	2.24	-0.20	2.58	Mowed Grass
287	774089.38	2019323.75	583.22	774087.30	2019325.01	583.43	2.08	-1.26	-0.21	2.44	Mowed Grass
288	774089.38	2019323.75	583.22	774087.21	2019322.25	583.42	2.17	1.50	-0.20	2.64	Mowed Grass
289	774089.38	2019323.75	583.22	774088.23	2019321.66	583.37	1.15	2.09	-0.15	2.38	Mowed Grass
290	774089.38	2019323.75	583.22	774088.32	2019324.40	583.38	1.06	-0.65	-0.16	1.25	Mowed Grass
291	774089.38	2019323.75	583.22	774090.75	2019324.27	583.41	-1.37	-0.52	-0.19	1.47	Mowed Grass
292	774089.38	2019323.75	583.22	774092.14	2019324.92	583.41	-2.76	-1.17	-0.19	3.00	Mowed Grass
293	774099.69	2019324.16	583.23	774099.50	2019321.27	583.38	0.19	2.89	-0.15	2.90	Mowed Grass
294	774099.69	2019324.16	583.23	774098.16	2019325.54	583.39	1.53	-1.38	-0.16	2.06	Mowed Grass
295	774099.69	2019324.16	583.23	774098.08	2019322.78	583.39	1.61	1.38	-0.16	2.12	Mowed Grass
296	774099.69	2019324.16	583.23	774099.59	2019324.02	583.42	0.10	0.14	-0.19	0.17	Mowed Grass
297	774099.69	2019324.16	583.23	774101.93	2019324.76	583.44	-2.24	-0.60	-0.21	2.32	Mowed Grass
298	774099.69	2019324.16	583.23	774099.68	2019326.76	583.41	0.01	-2.60	-0.18	2.60	Mowed Grass
299	774113.85	2019325.02	583.14	774112.97	2019324.22	583.36	0.88	0.80	-0.22	1.19	Mowed Grass
300	774113.85	2019325.02	583.14	774114.07	2019323.87	583.27	-0.22	1.15	-0.13	1.17	Mowed Grass
301	774113.85	2019325.02	583.14	774116.55	2019325.83	583.26	-2.70	-0.81	-0.12	2.82	Mowed Grass
302	774113.85	2019325.02	583.14	774113.06	2019326.99	583.38	0.79	-1.97	-0.24	2.13	Mowed Grass
303	774113.85	2019325.02	583.14	774114.16	2019326.66	583.34	-0.31	-1.64	-0.20	1.67	Mowed Grass
304	774049.39	2019325.69	583.13	774047.70	2019325.76	583.30	1.69	-0.07	-0.17	1.69	Mowed Grass
305	774049.39	2019325.69	583.13	774050.10	2019325.07	583.30	-0.71	0.62	-0.17	0.95	Mowed Grass
306	774049.39	2019325.69	583.13	774051.50	2019323.93	583.28	-2.11	1.76	-0.15	2.75	Mowed Grass
307	774049.39	2019325.69	583.13	774050.18	2019327.83	583.32	-0.80	-2.14	-0.19	2.28	Mowed Grass
308	774049.39	2019325.69	583.13	774051.59	2019326.67	583.30	-2.20	-0.98	-0.17	2.41	Mowed Grass
309	774079.39	2019326.51	583.18	774080.12	2019326.58	583.36	-0.73	-0.07	-0.18	0.73	Mowed Grass
310	774079.39	2019326.51	583.18	774080.04	2019323.84	583.37	-0.65	2.67	-0.19	2.75	Mowed Grass
311	774079.39	2019326.51	583.18	774081.21	2019324.88	583.34	-1.82	1.63	-0.16	2.44	Mowed Grass

312	774079.39	2019326.51	583.18	774077.83	2019326.66	583.35	1.56	-0.15	-0.17	1.57	Mowed Grass
313	774079.39	2019326.51	583.18	774080.20	2019329.34	583.39	-0.81	-2.83	-0.21	2.94	Mowed Grass
314	774079.39	2019326.51	583.18	774081.30	2019327.63	583.37	-1.91	-1.12	-0.19	2.21	Mowed Grass
315	774054.96	2019326.84	583.18	774054.02	2019324.79	583.36	0.94	2.05	-0.18	2.25	Mowed Grass
316	774054.96	2019326.84	583.18	774055.22	2019324.71	583.34	-0.26	2.13	-0.16	2.14	Mowed Grass
317	774054.96	2019326.84	583.18	774057.87	2019326.22	583.33	-2.91	0.62	-0.15	2.97	Mowed Grass
318	774054.96	2019326.84	583.18	774054.10	2019327.54	583.36	0.86	-0.70	-0.18	1.11	Mowed Grass
319	774054.96	2019326.84	583.18	774055.31	2019327.47	583.33	-0.35	-0.63	-0.15	0.72	Mowed Grass
320	774072.12	2019327.14	583.15	774070.48	2019325.12	583.35	1.64	2.02	-0.20	2.60	Mowed Grass
321	774072.12	2019327.14	583.15	774072.65	2019325.72	583.34	-0.53	1.42	-0.19	1.51	Mowed Grass
322	774072.12	2019327.14	583.15	774074.21	2019326.10	583.38	-2.09	1.04	-0.23	2.33	Mowed Grass
323	774072.12	2019327.14	583.15	774070.57	2019327.87	583.34	1.55	-0.73	-0.19	1.72	Mowed Grass
324	774072.12	2019327.14	583.15	774072.73	2019328.50	583.33	-0.61	-1.36	-0.18	1.49	Mowed Grass
325	774072.12	2019327.14	583.15	774074.30	2019328.86	583.35	-2.18	-1.72	-0.20	2.78	Mowed Grass
326	774099.65	2019327.53	583.21	774098.16	2019325.54	583.39	1.49	1.99	-0.18	2.49	Mowed Grass
327	774099.65	2019327.53	583.21	774098.25	2019328.31	583.42	1.40	-0.78	-0.21	1.60	Mowed Grass
328	774099.65	2019327.53	583.21	774099.68	2019326.76	583.41	-0.03	0.77	-0.20	0.78	Mowed Grass
329	774099.65	2019327.53	583.21	774099.76	2019329.49	583.39	-0.11	-1.96	-0.18	1.96	Mowed Grass
330	774099.65	2019327.53	583.21	774102.02	2019327.53	583.45	-2.37	0.00	-0.24	2.37	Mowed Grass
331	774093.90	2019328.13	583.22	774094.35	2019325.98	583.42	-0.45	2.15	-0.20	2.20	Mowed Grass
332	774093.90	2019328.13	583.22	774095.86	2019325.90	583.41	-1.96	2.23	-0.19	2.97	Mowed Grass
333	774093.90	2019328.13	583.22	774092.22	2019327.66	583.40	1.68	0.47	-0.18	1.74	Mowed Grass
334	774093.90	2019328.13	583.22	774092.31	2019330.42	583.38	1.59	-2.29	-0.16	2.78	Mowed Grass
335	774093.90	2019328.13	583.22	774094.43	2019328.74	583.41	-0.53	-0.61	-0.19	0.81	Mowed Grass
336	774093.90	2019328.13	583.22	774095.95	2019328.65	583.40	-2.05	-0.52	-0.18	2.12	Mowed Grass
337	774082.14	2019328.20	583.16	774080.12	2019326.58	583.36	2.02	1.61	-0.20	2.59	Mowed Grass
338	774082.14	2019328.20	583.16	774080.20	2019329.34	583.39	1.94	-1.15	-0.23	2.25	Mowed Grass
339	774082.14	2019328.20	583.16	774081.30	2019327.63	583.37	0.84	0.57	-0.21	1.01	Mowed Grass
340	774082.14	2019328.20	583.16	774081.38	2019330.37	583.34	0.76	-2.18	-0.18	2.30	Mowed Grass
341	774082.14	2019328.20	583.16	774083.86	2019328.41	583.38	-1.72	-0.21	-0.22	1.73	Mowed Grass
342	774082.14	2019328.20	583.16	774084.79	2019327.96	583.31	-2.65	0.24	-0.15	2.66	Mowed Grass
343	774104.98	2019328.49	583.22	774105.66	2019325.87	583.42	-0.68	2.62	-0.20	2.71	Mowed Grass

344	774104.98	2019328.49	583.22	774103.33	2019326.99	583.45	1.65	1.50	-0.23	2.23	Mowed Grass
345	774104.98	2019328.49	583.22	774103.42	2019329.74	583.40	1.56	-1.25	-0.18	2.00	Mowed Grass
346	774104.98	2019328.49	583.22	774105.75	2019328.63	583.43	-0.77	-0.14	-0.21	0.78	Mowed Grass
347	774104.98	2019328.49	583.22	774106.87	2019327.93	583.41	-1.89	0.56	-0.19	1.97	Mowed Grass
348	774104.98	2019328.49	583.22	774106.96	2019330.68	583.39	-1.98	-2.19	-0.17	2.95	Mowed Grass
349	774119.41	2019328.77	583.06	774116.63	2019328.60	583.31	2.78	0.17	-0.25	2.79	Mowed Grass
350	774119.41	2019328.77	583.06	774118.09	2019327.60	583.30	1.32	1.17	-0.24	1.77	Mowed Grass
351	774119.41	2019328.77	583.06	774118.18	2019330.36	583.31	1.23	-1.59	-0.25	2.01	Mowed Grass
352	774119.41	2019328.77	583.06	774120.47	2019330.98	583.25	-1.06	-2.21	-0.19	2.44	Mowed Grass
353	774119.41	2019328.77	583.06	774120.38	2019328.23	583.21	-0.97	0.54	-0.15	1.11	Mowed Grass
354	774119.41	2019328.77	583.06	774121.97	2019328.50	583.19	-2.56	0.27	-0.13	2.57	Mowed Grass
355	774066.08	2019330.45	583.15	774065.45	2019330.08	583.34	0.63	0.37	-0.19	0.73	Mowed Grass
356	774066.08	2019330.45	583.15	774066.85	2019329.57	583.31	-0.77	0.88	-0.16	1.17	Mowed Grass
357	774066.08	2019330.45	583.15	774065.54	2019332.85	583.36	0.54	-2.40	-0.21	2.46	Mowed Grass
358	774066.08	2019330.45	583.15	774066.94	2019332.32	583.32	-0.86	-1.87	-0.17	2.06	Mowed Grass
359	774104.87	2019331.43	583.18	774102.10	2019330.29	583.37	2.77	1.14	-0.19	3.00	Mowed Grass
360	774104.87	2019331.43	583.18	774103.42	2019329.74	583.40	1.45	1.69	-0.22	2.23	Mowed Grass
361	774104.87	2019331.43	583.18	774105.84	2019331.40	583.40	-0.97	0.03	-0.22	0.97	Mowed Grass
362	774104.87	2019331.43	583.18	774105.75	2019328.63	583.43	-0.88	2.80	-0.25	2.93	Mowed Grass
363	774104.87	2019331.43	583.18	774106.96	2019330.68	583.39	-2.09	0.75	-0.21	2.22	Mowed Grass
364	774104.87	2019331.43	583.18	774103.51	2019332.50	583.41	1.36	-1.07	-0.23	1.73	Mowed Grass
365	774104.87	2019331.43	583.18	774105.92	2019334.16	583.36	-1.05	-2.73	-0.18	2.92	Mowed Grass
366	774104.87	2019331.43	583.18	774107.04	2019333.42	583.35	-2.17	-1.99	-0.17	2.94	Mowed Grass
367	774110.35	2019332.35	583.17	774109.56	2019330.62	583.40	0.79	1.73	-0.23	1.90	Mowed Grass
368	774110.35	2019332.35	583.17	774110.56	2019331.09	583.39	-0.21	1.26	-0.22	1.28	Mowed Grass
369	774110.35	2019332.35	583.17	774109.65	2019333.36	583.36	0.70	-1.01	-0.19	1.23	Mowed Grass
370	774110.35	2019332.35	583.17	774110.65	2019333.84	583.35	-0.30	-1.49	-0.18	1.52	Mowed Grass
371	774110.35	2019332.35	583.17	774113.24	2019332.53	583.36	-2.89	-0.18	-0.19	2.89	Mowed Grass
372	774081.91	2019332.40	583.17	774081.38	2019330.37	583.34	0.53	2.03	-0.17	2.10	Mowed Grass
373	774081.91	2019332.40	583.17	774083.94	2019331.16	583.36	-2.03	1.24	-0.19	2.38	Mowed Grass
374	774081.91	2019332.40	583.17	774080.37	2019334.88	583.37	1.54	-2.48	-0.20	2.92	Mowed Grass
375	774081.91	2019332.40	583.17	774080.29	2019332.10	583.37	1.62	0.30	-0.20	1.64	Mowed Grass

376	774081.91	2019332.40	583.17	774081.47	2019333.13	583.37	0.44	-0.73	-0.20	0.85	Mowed Grass
377	774081.91	2019332.40	583.17	774084.03	2019333.94	583.34	-2.12	-1.54	-0.17	2.62	Mowed Grass
378	774048.68	2019332.41	583.09	774047.88	2019331.25	583.29	0.80	1.16	-0.20	1.41	Mowed Grass
379	774048.68	2019332.41	583.09	774050.27	2019330.59	583.31	-1.59	1.82	-0.22	2.42	Mowed Grass
380	774048.68	2019332.41	583.09	774046.27	2019332.40	583.22	2.41	0.01	-0.13	2.41	Mowed Grass
381	774048.68	2019332.41	583.09	774047.97	2019334.00	583.29	0.71	-1.59	-0.20	1.74	Mowed Grass
382	774048.68	2019332.41	583.09	774050.35	2019333.37	583.32	-1.67	-0.96	-0.23	1.92	Mowed Grass
383	774098.76	2019332.45	583.19	774096.04	2019331.40	583.39	2.72	1.05	-0.20	2.92	Mowed Grass
384	774098.76	2019332.45	583.19	774098.33	2019331.08	583.38	0.43	1.37	-0.19	1.43	Mowed Grass
385	774098.76	2019332.45	583.19	774098.42	2019333.84	583.36	0.34	-1.39	-0.17	1.44	Mowed Grass
386	774098.76	2019332.45	583.19	774099.85	2019332.24	583.39	-1.09	0.21	-0.20	1.10	Mowed Grass
387	774098.76	2019332.45	583.19	774099.94	2019335.02	583.41	-1.18	-2.57	-0.22	2.83	Mowed Grass
388	774125.14	2019332.75	583.08	774124.35	2019329.95	583.18	0.79	2.80	-0.10	2.90	Mowed Grass
389	774125.14	2019332.75	583.08	774124.53	2019335.53	583.26	0.61	-2.78	-0.18	2.85	Mowed Grass
390	774125.14	2019332.75	583.08	774124.44	2019332.75	583.24	0.70	0.00	-0.16	0.70	Mowed Grass
391	774125.14	2019332.75	583.08	774125.93	2019331.93	583.23	-0.79	0.82	-0.15	1.13	Mowed Grass
392	774125.14	2019332.75	583.08	774126.02	2019334.68	583.25	-0.88	-1.93	-0.17	2.13	Mowed Grass
393	774054.10	2019333.33	583.11	774051.77	2019332.18	583.29	2.33	1.15	-0.18	2.60	Mowed Grass
394	774054.10	2019333.33	583.11	774051.86	2019334.93	583.28	2.24	-1.60	-0.17	2.75	Mowed Grass
395	774054.10	2019333.33	583.11	774054.36	2019335.84	583.29	-0.26	-2.51	-0.18	2.52	Mowed Grass
396	774054.10	2019333.33	583.11	774054.27	2019333.07	583.32	-0.17	0.26	-0.21	0.31	Mowed Grass
397	774054.10	2019333.33	583.11	774055.49	2019332.96	583.30	-1.39	0.37	-0.19	1.44	Mowed Grass
398	774054.10	2019333.33	583.11	774055.58	2019335.71	583.28	-1.48	-2.38	-0.17	2.80	Mowed Grass
399	774085.62	2019333.65	583.19	774084.03	2019333.94	583.34	1.59	-0.29	-0.15	1.61	Mowed Grass
400	774085.62	2019333.65	583.19	774084.96	2019333.46	583.30	0.66	0.19	-0.11	0.68	Mowed Grass
401	774085.62	2019333.65	583.19	774085.05	2019336.22	583.33	0.57	-2.57	-0.14	2.63	Mowed Grass
402	774085.62	2019333.65	583.19	774087.55	2019333.33	583.40	-1.93	0.32	-0.21	1.96	Mowed Grass
403	774071.63	2019333.69	583.14	774072.82	2019331.27	583.33	-1.19	2.42	-0.19	2.70	Mowed Grass
404	774071.63	2019333.69	583.14	774069.19	2019334.80	583.32	2.44	-1.11	-0.18	2.68	Mowed Grass
405	774071.63	2019333.69	583.14	774070.75	2019333.37	583.36	0.88	0.32	-0.22	0.93	Mowed Grass
406	774071.63	2019333.69	583.14	774070.84	2019336.12	583.35	0.79	-2.43	-0.21	2.55	Mowed Grass
407	774071.63	2019333.69	583.14	774072.90	2019334.01	583.32	-1.27	-0.32	-0.18	1.31	Mowed Grass

408	774071.63	2019333.69	583.14	774074.48	2019334.35	583.33	-2.85	-0.66	-0.19	2.93	Mowed Grass
409	774110.44	2019334.81	583.15	774109.73	2019336.13	583.39	0.71	-1.32	-0.24	1.50	Mowed Grass
410	774110.44	2019334.81	583.15	774109.65	2019333.36	583.36	0.79	1.45	-0.21	1.65	Mowed Grass
411	774110.44	2019334.81	583.15	774110.65	2019333.84	583.35	-0.21	0.97	-0.20	0.99	Mowed Grass
412	774110.44	2019334.81	583.15	774113.32	2019335.31	583.36	-2.88	-0.50	-0.21	2.93	Mowed Grass
413	774110.44	2019334.81	583.15	774110.74	2019336.61	583.33	-0.30	-1.80	-0.18	1.83	Mowed Grass
414	774116.00	2019336.00	583.13	774113.32	2019335.31	583.36	2.68	0.69	-0.23	2.77	Mowed Grass
415	774116.00	2019336.00	583.13	774114.43	2019334.91	583.29	1.57	1.09	-0.16	1.91	Mowed Grass
416	774116.00	2019336.00	583.13	774116.81	2019334.16	583.35	-0.81	1.84	-0.22	2.02	Mowed Grass
417	774116.00	2019336.00	583.13	774118.36	2019335.88	583.31	-2.36	0.12	-0.18	2.36	Mowed Grass
418	774116.00	2019336.00	583.13	774114.53	2019337.69	583.27	1.47	-1.69	-0.14	2.24	Mowed Grass
419	774116.00	2019336.00	583.13	774116.90	2019336.92	583.32	-0.90	-0.92	-0.19	1.28	Mowed Grass
420	774104.11	2019336.87	583.19	774102.27	2019335.84	583.40	1.84	1.03	-0.21	2.11	Mowed Grass
421	774104.11	2019336.87	583.19	774103.59	2019335.26	583.41	0.52	1.61	-0.22	1.69	Mowed Grass
422	774104.11	2019336.87	583.19	774102.36	2019338.62	583.42	1.75	-1.75	-0.23	2.47	Mowed Grass
423	774104.11	2019336.87	583.19	774103.68	2019338.01	583.38	0.43	-1.14	-0.19	1.22	Mowed Grass
424	774104.11	2019336.87	583.19	774106.01	2019336.94	583.37	-1.90	-0.07	-0.18	1.90	Mowed Grass
425	774130.59	2019337.09	583.03	774129.76	2019335.89	583.23	0.83	1.20	-0.20	1.46	Mowed Grass
426	774130.59	2019337.09	583.03	774132.24	2019336.21	583.23	-1.65	0.88	-0.20	1.87	Mowed Grass
427	774130.59	2019337.09	583.03	774133.39	2019336.36	583.21	-2.80	0.73	-0.18	2.90	Mowed Grass
428	774130.59	2019337.09	583.03	774128.43	2019337.23	583.23	2.16	-0.14	-0.20	2.16	Mowed Grass
429	774130.59	2019337.09	583.03	774129.86	2019338.66	583.24	0.73	-1.57	-0.21	1.73	Mowed Grass
430	774130.59	2019337.09	583.03	774132.33	2019338.99	583.24	-1.74	-1.90	-0.21	2.58	Mowed Grass
431	774065.71	2019337.15	583.12	774065.62	2019335.61	583.28	0.09	1.54	-0.16	1.54	Mowed Grass
432	774065.71	2019337.15	583.12	774067.03	2019335.07	583.33	-1.32	2.08	-0.22	2.47	Mowed Grass
433	774065.71	2019337.15	583.12	774063.08	2019336.75	583.25	2.63	0.40	-0.13	2.66	Mowed Grass
434	774065.71	2019337.15	583.12	774065.71	2019338.39	583.31	0.00	-1.24	-0.19	1.24	Mowed Grass
435	774065.71	2019337.15	583.12	774067.12	2019337.82	583.29	-1.41	-0.67	-0.17	1.57	Mowed Grass
436	774116.05	2019338.25	583.11	774113.41	2019338.10	583.33	2.64	0.15	-0.22	2.64	Mowed Grass
437	774116.05	2019338.25	583.11	774114.53	2019337.69	583.27	1.52	0.56	-0.16	1.62	Mowed Grass
438	774116.05	2019338.25	583.11	774114.62	2019340.46	583.31	1.43	-2.21	-0.20	2.63	Mowed Grass
439	774116.05	2019338.25	583.11	774116.99	2019339.70	583.33	-0.94	-1.45	-0.22	1.73	Mowed Grass

440	774116.05	2019338.25	583.11	774116.90	2019336.92	583.32	-0.85	1.33	-0.21	1.58	Mowed Grass
441	774116.05	2019338.25	583.11	774118.46	2019338.64	583.31	-2.41	-0.39	-0.20	2.44	Mowed Grass
442	774084.25	2019338.27	583.17	774085.05	2019336.22	583.33	-0.80	2.05	-0.16	2.20	Mowed Grass
443	774084.25	2019338.27	583.17	774081.64	2019338.63	583.36	2.61	-0.35	-0.19	2.64	Mowed Grass
444	774084.25	2019338.27	583.17	774084.19	2019339.50	583.37	0.06	-1.23	-0.20	1.23	Mowed Grass
445	774084.25	2019338.27	583.17	774084.11	2019336.73	583.37	0.14	1.54	-0.20	1.55	Mowed Grass
446	774084.25	2019338.27	583.17	774085.13	2019339.00	583.32	-0.88	-0.73	-0.15	1.14	Mowed Grass
447	774047.70	2019339.04	583.07	774046.53	2019340.73	583.21	1.17	-1.69	-0.14	2.06	Mowed Grass
448	774047.70	2019339.04	583.07	774046.44	2019337.95	583.22	1.26	1.09	-0.15	1.67	Mowed Grass
449	774047.70	2019339.04	583.07	774048.07	2019336.75	583.26	-0.37	2.29	-0.19	2.32	Mowed Grass
450	774047.70	2019339.04	583.07	774048.16	2019339.51	583.28	-0.46	-0.47	-0.21	0.66	Mowed Grass
451	774047.70	2019339.04	583.07	774050.52	2019338.92	583.26	-2.82	0.12	-0.19	2.82	Mowed Grass
452	774089.19	2019339.38	583.16	774087.72	2019338.86	583.34	1.47	0.52	-0.18	1.56	Mowed Grass
453	774089.19	2019339.38	583.16	774088.76	2019338.18	583.35	0.43	1.20	-0.19	1.28	Mowed Grass
454	774089.19	2019339.38	583.16	774088.85	2019340.94	583.34	0.34	-1.56	-0.18	1.59	Mowed Grass
455	774089.19	2019339.38	583.16	774091.25	2019340.87	583.38	-2.06	-1.49	-0.22	2.54	Mowed Grass
456	774089.19	2019339.38	583.16	774091.17	2019338.10	583.41	-1.98	1.28	-0.25	2.36	Mowed Grass
457	774089.19	2019339.38	583.16	774087.80	2019341.64	583.37	1.39	-2.26	-0.21	2.65	Mowed Grass
458	774121.13	2019339.70	583.11	774118.46	2019338.64	583.31	2.67	1.06	-0.20	2.88	Mowed Grass
459	774121.13	2019339.70	583.11	774120.73	2019339.29	583.32	0.40	0.41	-0.21	0.58	Mowed Grass
460	774121.13	2019339.70	583.11	774122.34	2019339.54	583.28	-1.21	0.16	-0.17	1.22	Mowed Grass
461	774121.13	2019339.70	583.11	774120.82	2019342.07	583.31	0.31	-2.37	-0.20	2.39	Mowed Grass
462	774121.13	2019339.70	583.11	774122.43	2019342.30	583.30	-1.30	-2.60	-0.19	2.90	Mowed Grass
463	774052.65	2019339.94	583.07	774050.52	2019338.92	583.26	2.13	1.02	-0.19	2.36	Mowed Grass
464	774052.65	2019339.94	583.07	774051.95	2019337.68	583.24	0.70	2.26	-0.17	2.37	Mowed Grass
465	774052.65	2019339.94	583.07	774052.04	2019340.43	583.24	0.61	-0.49	-0.17	0.78	Mowed Grass
466	774052.65	2019339.94	583.07	774054.53	2019341.39	583.22	-1.88	-1.45	-0.15	2.37	Mowed Grass
467	774052.65	2019339.94	583.07	774054.45	2019338.61	583.27	-1.80	1.33	-0.20	2.24	Mowed Grass
468	774052.65	2019339.94	583.07	774050.61	2019341.68	583.27	2.04	-1.74	-0.20	2.68	Mowed Grass
469	774109.44	2019340.89	583.20	774107.22	2019338.91	583.39	2.22	1.98	-0.19	2.97	Mowed Grass
470	774109.44	2019340.89	583.20	774109.82	2019338.90	583.38	-0.38	1.99	-0.18	2.02	Mowed Grass
471	774109.44	2019340.89	583.20	774110.83	2019339.37	583.37	-1.39	1.52	-0.17	2.06	Mowed Grass

472	774109.44	2019340.89	583.20	774107.31	2019341.68	583.37	2.13	-0.79	-0.17	2.27	Mowed Grass
473	774109.44	2019340.89	583.20	774109.91	2019341.69	583.40	-0.47	-0.80	-0.20	0.93	Mowed Grass
474	774109.44	2019340.89	583.20	774110.92	2019342.13	583.36	-1.48	-1.24	-0.16	1.94	Mowed Grass
475	774071.22	2019341.27	583.12	774069.36	2019340.35	583.31	1.86	0.92	-0.19	2.08	Mowed Grass
476	774071.22	2019341.27	583.12	774070.93	2019338.87	583.35	0.29	2.40	-0.23	2.42	Mowed Grass
477	774071.22	2019341.27	583.12	774073.07	2019339.56	583.31	-1.85	1.71	-0.19	2.52	Mowed Grass
478	774071.22	2019341.27	583.12	774069.44	2019343.12	583.29	1.78	-1.85	-0.17	2.57	Mowed Grass
479	774071.22	2019341.27	583.12	774071.01	2019341.63	583.32	0.21	-0.36	-0.20	0.42	Mowed Grass
480	774071.22	2019341.27	583.12	774073.15	2019342.35	583.34	-1.93	-1.08	-0.22	2.21	Mowed Grass
481	774122.14	2019341.49	583.11	774120.73	2019339.29	583.32	1.41	2.20	-0.21	2.61	Mowed Grass
482	774122.14	2019341.49	583.11	774122.34	2019339.54	583.28	-0.20	1.95	-0.17	1.96	Mowed Grass
483	774122.14	2019341.49	583.11	774124.70	2019341.07	583.27	-2.56	0.42	-0.16	2.59	Mowed Grass
484	774122.14	2019341.49	583.11	774120.82	2019342.07	583.31	1.32	-0.58	-0.20	1.44	Mowed Grass
485	774122.14	2019341.49	583.11	774122.43	2019342.30	583.30	-0.29	-0.81	-0.19	0.86	Mowed Grass
486	774127.07	2019343.57	583.10	774124.79	2019343.86	583.31	2.28	-0.29	-0.21	2.30	Mowed Grass
487	774127.07	2019343.57	583.10	774126.30	2019342.98	583.33	0.77	0.59	-0.23	0.97	Mowed Grass
488	774127.07	2019343.57	583.10	774126.39	2019345.75	583.35	0.68	-2.18	-0.25	2.29	Mowed Grass
489	774127.07	2019343.57	583.10	774128.70	2019345.61	583.28	-1.63	-2.04	-0.18	2.61	Mowed Grass
490	774127.07	2019343.57	583.10	774128.61	2019342.80	583.26	-1.54	0.77	-0.16	1.72	Mowed Grass
491	774064.77	2019343.94	583.05	774065.80	2019341.19	583.29	-1.03	2.75	-0.24	2.94	Mowed Grass
492	774064.77	2019343.94	583.05	774062.24	2019345.50	583.22	2.53	-1.56	-0.17	2.97	Mowed Grass
493	774064.77	2019343.94	583.05	774062.16	2019342.71	583.25	2.61	1.23	-0.20	2.89	Mowed Grass
494	774064.77	2019343.94	583.05	774063.26	2019342.27	583.19	1.51	1.67	-0.14	2.25	Mowed Grass
495	774064.77	2019343.94	583.05	774063.35	2019345.05	583.17	1.42	-1.11	-0.12	1.80	Mowed Grass
496	774064.77	2019343.94	583.05	774065.88	2019343.96	583.26	-1.11	-0.02	-0.21	1.11	Mowed Grass
497	774064.77	2019343.94	583.05	774067.29	2019343.35	583.23	-2.52	0.59	-0.18	2.59	Mowed Grass
498	774086.91	2019344.23	583.19	774084.36	2019345.08	583.40	2.55	-0.85	-0.21	2.68	Mowed Grass
499	774086.91	2019344.23	583.19	774085.22	2019341.76	583.35	1.69	2.47	-0.16	2.99	Mowed Grass
500	774086.91	2019344.23	583.19	774085.31	2019344.54	583.35	1.60	-0.31	-0.16	1.63	Mowed Grass
501	774086.91	2019344.23	583.19	774087.89	2019344.43	583.40	-0.98	-0.20	-0.21	1.00	Mowed Grass
502	774086.91	2019344.23	583.19	774087.80	2019341.64	583.37	-0.89	2.59	-0.18	2.74	Mowed Grass
503	774086.91	2019344.23	583.19	774088.94	2019343.70	583.35	-2.03	0.53	-0.16	2.10	Mowed Grass

504	774127.81	2019344.74	583.11	774126.30	2019342.98	583.33	1.51	1.76	-0.22	2.32	Mowed Grass
505	774127.81	2019344.74	583.11	774126.39	2019345.75	583.35	1.42	-1.01	-0.24	1.74	Mowed Grass
506	774127.81	2019344.74	583.11	774128.70	2019345.61	583.28	-0.89	-0.87	-0.17	1.25	Mowed Grass
507	774127.81	2019344.74	583.11	774128.61	2019342.80	583.26	-0.80	1.94	-0.15	2.10	Mowed Grass
508	774127.81	2019344.74	583.11	774130.04	2019344.17	583.24	-2.23	0.57	-0.13	2.30	Mowed Grass
509	774114.67	2019344.82	583.20	774113.68	2019346.46	583.44	0.99	-1.64	-0.25	1.92	Mowed Grass
510	774114.67	2019344.82	583.20	774113.59	2019343.66	583.42	1.08	1.16	-0.22	1.59	Mowed Grass
511	774114.67	2019344.82	583.20	774114.71	2019343.23	583.37	-0.04	1.59	-0.17	1.59	Mowed Grass
512	774114.67	2019344.82	583.20	774114.80	2019346.00	583.35	-0.13	-1.18	-0.15	1.19	Mowed Grass
513	774114.67	2019344.82	583.20	774117.17	2019345.29	583.41	-2.50	-0.47	-0.21	2.54	Mowed Grass
514	774092.37	2019345.51	583.20	774091.43	2019346.46	583.39	0.94	-0.95	-0.19	1.34	Mowed Grass
515	774092.37	2019345.51	583.20	774091.34	2019343.67	583.37	1.03	1.84	-0.17	2.11	Mowed Grass
516	774092.37	2019345.51	583.20	774092.75	2019344.21	583.40	-0.38	1.30	-0.20	1.35	Mowed Grass
517	774092.37	2019345.51	583.20	774094.94	2019345.38	583.42	-2.57	0.13	-0.22	2.57	Mowed Grass
518	774092.37	2019345.51	583.20	774092.84	2019346.97	583.42	-0.47	-1.46	-0.22	1.53	Mowed Grass
519	774046.83	2019345.75	583.04	774044.36	2019344.53	583.19	2.47	1.22	-0.15	2.76	Mowed Grass
520	774046.83	2019345.75	583.04	774046.70	2019346.29	583.21	0.13	-0.54	-0.17	0.55	Mowed Grass
521	774046.83	2019345.75	583.04	774046.61	2019343.50	583.21	0.22	2.25	-0.17	2.27	Mowed Grass
522	774046.83	2019345.75	583.04	774048.34	2019345.06	583.20	-1.51	0.69	-0.16	1.66	Mowed Grass
523	774046.83	2019345.75	583.04	774044.45	2019347.29	583.23	2.38	-1.54	-0.19	2.83	Mowed Grass
524	774046.83	2019345.75	583.04	774048.43	2019347.82	583.21	-1.60	-2.07	-0.17	2.61	Mowed Grass
525	774051.67	2019346.87	583.03	774050.69	2019344.47	583.26	0.98	2.40	-0.23	2.59	Mowed Grass
526	774051.67	2019346.87	583.03	774052.22	2019345.97	583.22	-0.55	0.90	-0.19	1.06	Mowed Grass
527	774051.67	2019346.87	583.03	774050.78	2019347.26	583.23	0.89	-0.39	-0.20	0.97	Mowed Grass
528	774051.67	2019346.87	583.03	774052.31	2019348.72	583.21	-0.64	-1.85	-0.18	1.95	Mowed Grass
529	774070.71	2019348.22	583.10	774069.52	2019345.90	583.30	1.19	2.32	-0.20	2.61	Mowed Grass
530	774070.71	2019348.22	583.10	774069.61	2019348.68	583.26	1.10	-0.46	-0.16	1.20	Mowed Grass
531	774070.71	2019348.22	583.10	774071.19	2019347.17	583.30	-0.48	1.05	-0.20	1.15	Mowed Grass
532	774070.71	2019348.22	583.10	774071.28	2019349.94	583.30	-0.57	-1.72	-0.20	1.81	Mowed Grass
533	774070.71	2019348.22	583.10	774073.32	2019347.90	583.31	-2.61	0.32	-0.21	2.63	Mowed Grass
534	774119.80	2019348.79	583.19	774117.26	2019348.08	583.42	2.54	0.71	-0.23	2.64	Mowed Grass
535	774119.80	2019348.79	583.19	774118.73	2019346.96	583.42	1.07	1.83	-0.23	2.12	Mowed Grass

536	774119.80	2019348.79	583.19	774118.83	2019349.76	583.41	0.97	-0.97	-0.22	1.37	Mowed Grass
537	774119.80	2019348.79	583.19	774121.08	2019350.41	583.35	-1.28	-1.62	-0.16	2.06	Mowed Grass
538	774119.80	2019348.79	583.19	774120.99	2019347.64	583.35	-1.19	1.15	-0.16	1.66	Mowed Grass
539	774119.80	2019348.79	583.19	774122.62	2019347.87	583.36	-2.82	0.92	-0.17	2.97	Mowed Grass
540	774089.04	2019350.25	583.17	774088.06	2019350.00	583.42	0.98	0.25	-0.25	1.01	Mowed Grass
541	774089.04	2019350.25	583.17	774089.11	2019349.26	583.38	-0.07	0.99	-0.21	0.99	Mowed Grass
542	774089.04	2019350.25	583.17	774091.51	2019349.23	583.44	-2.47	1.02	-0.27	2.67	Mowed Grass
543	774089.04	2019350.25	583.17	774088.14	2019352.79	583.41	0.90	-2.54	-0.24	2.70	Mowed Grass
544	774089.04	2019350.25	583.17	774089.20	2019352.02	583.35	-0.16	-1.77	-0.18	1.78	Mowed Grass
545	774063.64	2019351.24	583.04	774062.41	2019351.07	583.23	1.23	0.17	-0.19	1.24	Mowed Grass
546	774063.64	2019351.24	583.04	774063.52	2019350.59	583.20	0.12	0.65	-0.16	0.66	Mowed Grass
547	774063.64	2019351.24	583.04	774066.05	2019349.54	583.30	-2.41	1.70	-0.26	2.95	Mowed Grass
548	774063.64	2019351.24	583.04	774062.50	2019353.88	583.25	1.14	-2.64	-0.21	2.87	Mowed Grass
549	774063.64	2019351.24	583.04	774063.61	2019353.38	583.19	0.03	-2.14	-0.15	2.14	Mowed Grass
550	774063.64	2019351.24	583.04	774066.14	2019352.33	583.28	-2.50	-1.09	-0.24	2.73	Mowed Grass
551	774095.45	2019351.38	583.20	774095.11	2019350.97	583.40	0.34	0.41	-0.20	0.53	Mowed Grass
552	774095.45	2019351.38	583.20	774096.66	2019350.77	583.41	-1.21	0.61	-0.21	1.35	Mowed Grass
553	774095.45	2019351.38	583.20	774093.02	2019352.52	583.40	2.43	-1.14	-0.20	2.69	Mowed Grass
554	774095.45	2019351.38	583.20	774095.19	2019353.77	583.40	0.26	-2.39	-0.20	2.41	Mowed Grass
555	774095.45	2019351.38	583.20	774096.75	2019353.54	583.41	-1.30	-2.16	-0.21	2.52	Mowed Grass
556	774125.14	2019351.76	583.18	774122.71	2019350.64	583.38	2.43	1.12	-0.20	2.68	Mowed Grass
557	774125.14	2019351.76	583.18	774124.97	2019349.45	583.38	0.17	2.31	-0.20	2.32	Mowed Grass
558	774125.14	2019351.76	583.18	774126.58	2019351.30	583.35	-1.44	0.46	-0.17	1.51	Mowed Grass
559	774125.14	2019351.76	583.18	774122.81	2019353.41	583.37	2.33	-1.65	-0.19	2.86	Mowed Grass
560	774125.14	2019351.76	583.18	774125.06	2019352.24	583.35	0.08	-0.48	-0.17	0.48	Mowed Grass
561	774125.14	2019351.76	583.18	774126.67	2019354.05	583.34	-1.53	-2.29	-0.16	2.75	Mowed Grass
562	774045.77	2019352.08	583.01	774044.54	2019350.05	583.19	1.23	2.03	-0.18	2.37	Mowed Grass
563	774045.77	2019352.08	583.01	774042.96	2019352.48	583.21	2.81	-0.40	-0.20	2.83	Mowed Grass
564	774045.77	2019352.08	583.01	774044.64	2019352.85	583.20	1.13	-0.77	-0.19	1.36	Mowed Grass
565	774045.77	2019352.08	583.01	774046.96	2019354.66	583.17	-1.19	-2.58	-0.16	2.84	Mowed Grass
566	774045.77	2019352.08	583.01	774046.87	2019351.87	583.20	-1.10	0.21	-0.19	1.12	Mowed Grass
567	774050.89	2019353.39	583.03	774052.40	2019351.50	583.20	-1.51	1.89	-0.17	2.42	Mowed Grass

568	774050.89	2019353.39	583.03	774048.61	2019353.37	583.21	2.28	0.02	-0.18	2.28	Mowed Grass
569	774050.89	2019353.39	583.03	774051.04	2019355.65	583.19	-0.15	-2.26	-0.16	2.26	Mowed Grass
570	774050.89	2019353.39	583.03	774050.95	2019352.84	583.22	-0.06	0.55	-0.19	0.55	Mowed Grass
571	774050.89	2019353.39	583.03	774052.49	2019354.28	583.22	-1.60	-0.89	-0.19	1.83	Mowed Grass
572	774070.50	2019354.63	583.09	774067.65	2019354.43	583.24	2.85	0.20	-0.15	2.86	Mowed Grass
573	774070.50	2019354.63	583.09	774069.78	2019354.27	583.28	0.72	0.36	-0.19	0.81	Mowed Grass
574	774070.50	2019354.63	583.09	774071.37	2019352.72	583.31	-0.87	1.91	-0.22	2.10	Mowed Grass
575	774070.50	2019354.63	583.09	774071.46	2019355.49	583.30	-0.96	-0.86	-0.21	1.29	Mowed Grass
576	774070.50	2019354.63	583.09	774069.86	2019357.05	583.26	0.64	-2.42	-0.17	2.50	Mowed Grass
577	774091.48	2019356.99	583.15	774091.68	2019354.82	583.38	-0.20	2.17	-0.23	2.18	Mowed Grass
578	774091.48	2019356.99	583.15	774093.11	2019355.31	583.37	-1.63	1.68	-0.22	2.34	Mowed Grass
579	774091.48	2019356.99	583.15	774089.38	2019357.56	583.33	2.10	-0.57	-0.18	2.17	Mowed Grass
580	774091.48	2019356.99	583.15	774091.77	2019357.60	583.33	-0.29	-0.61	-0.18	0.68	Mowed Grass
581	774091.48	2019356.99	583.15	774093.20	2019358.10	583.35	-1.72	-1.11	-0.20	2.05	Mowed Grass
582	774098.22	2019357.05	583.20	774095.28	2019356.58	583.41	2.94	0.47	-0.21	2.97	Mowed Grass
583	774098.22	2019357.05	583.20	774096.83	2019356.32	583.45	1.39	0.73	-0.25	1.57	Mowed Grass
584	774098.22	2019357.05	583.20	774099.09	2019356.10	583.41	-0.87	0.95	-0.21	1.29	Mowed Grass
585	774098.22	2019357.05	583.20	774096.92	2019359.10	583.39	1.30	-2.05	-0.19	2.42	Mowed Grass
586	774098.22	2019357.05	583.20	774099.17	2019358.90	583.41	-0.95	-1.85	-0.21	2.08	Mowed Grass
587	774098.22	2019357.05	583.20	774100.65	2019357.20	583.45	-2.43	-0.15	-0.25	2.44	Mowed Grass
588	774062.82	2019357.66	583.02	774063.70	2019356.17	583.20	-0.88	1.49	-0.18	1.73	Mowed Grass
589	774062.82	2019357.66	583.02	774062.67	2019359.47	583.19	0.15	-1.81	-0.17	1.81	Mowed Grass
590	774062.82	2019357.66	583.02	774062.59	2019356.68	583.25	0.23	0.98	-0.23	1.01	Mowed Grass
591	774062.82	2019357.66	583.02	774063.79	2019358.95	583.17	-0.97	-1.29	-0.15	1.61	Mowed Grass
592	774044.84	2019358.63	583.02	774043.23	2019360.86	583.19	1.61	-2.23	-0.17	2.75	Mowed Grass
593	774044.84	2019358.63	583.02	774043.14	2019358.07	583.21	1.70	0.56	-0.19	1.79	Mowed Grass
594	774044.84	2019358.63	583.02	774044.82	2019358.40	583.24	0.02	0.23	-0.22	0.23	Mowed Grass
595	774044.84	2019358.63	583.02	774044.91	2019361.19	583.24	-0.07	-2.56	-0.22	2.56	Mowed Grass
596	774044.84	2019358.63	583.02	774047.13	2019360.27	583.17	-2.29	-1.64	-0.15	2.82	Mowed Grass
597	774044.84	2019358.63	583.02	774047.05	2019357.48	583.23	-2.21	1.15	-0.21	2.49	Mowed Grass
598	774049.83	2019360.16	583.03	774047.13	2019360.27	583.17	2.70	-0.11	-0.14	2.70	Mowed Grass
599	774049.83	2019360.16	583.03	774048.79	2019358.95	583.23	1.04	1.21	-0.20	1.60	Mowed Grass

600	774049.83	2019360.16	583.03	774051.21	2019361.25	583.20	-1.38	-1.09	-0.17	1.76	Mowed Grass
601	774049.83	2019360.16	583.03	774051.12	2019358.46	583.23	-1.29	1.70	-0.20	2.13	Mowed Grass
602	774049.83	2019360.16	583.03	774052.67	2019359.82	583.20	-2.84	0.34	-0.17	2.86	Mowed Grass
603	774049.83	2019360.16	583.03	774048.89	2019361.74	583.23	0.94	-1.58	-0.20	1.84	Mowed Grass
604	774070.10	2019361.13	583.06	774067.83	2019360.00	583.25	2.27	1.13	-0.19	2.54	Mowed Grass
605	774070.10	2019361.13	583.06	774069.95	2019359.86	583.30	0.15	1.27	-0.24	1.28	Mowed Grass
606	774070.10	2019361.13	583.06	774071.64	2019361.07	583.28	-1.54	0.06	-0.22	1.54	Mowed Grass
607	774070.10	2019361.13	583.06	774067.92	2019362.80	583.23	2.18	-1.67	-0.17	2.75	Mowed Grass
608	774070.10	2019361.13	583.06	774070.04	2019362.66	583.25	0.06	-1.53	-0.19	1.53	Mowed Grass
609	774093.56	2019362.98	583.18	774093.29	2019360.90	583.38	0.27	2.08	-0.20	2.09	Mowed Grass
610	774093.56	2019362.98	583.18	774091.94	2019363.20	583.36	1.62	-0.22	-0.18	1.63	Mowed Grass
611	774093.56	2019362.98	583.18	774093.38	2019363.68	583.40	0.18	-0.70	-0.22	0.73	Mowed Grass
612	774093.56	2019362.98	583.18	774095.54	2019364.98	583.36	-1.98	-2.00	-0.18	2.82	Mowed Grass
613	774093.56	2019362.98	583.18	774095.45	2019362.17	583.38	-1.89	0.81	-0.20	2.06	Mowed Grass
614	774101.10	2019363.53	583.18	774099.35	2019364.53	583.38	1.75	-1.00	-0.20	2.02	Mowed Grass
615	774101.10	2019363.53	583.18	774099.26	2019361.71	583.39	1.84	1.82	-0.21	2.59	Mowed Grass
616	774101.10	2019363.53	583.18	774100.83	2019362.74	583.43	0.27	0.79	-0.25	0.84	Mowed Grass
617	774101.10	2019363.53	583.18	774100.92	2019365.52	583.36	0.18	-1.99	-0.18	2.00	Mowed Grass
618	774101.10	2019363.53	583.18	774103.13	2019363.76	583.43	-2.03	-0.23	-0.25	2.04	Mowed Grass
619	774043.73	2019365.01	583.01	774041.10	2019365.85	583.13	2.64	-0.84	-0.12	2.77	Mowed Grass
620	774043.73	2019365.01	583.01	774043.41	2019366.49	583.21	0.32	-1.48	-0.20	1.52	Mowed Grass
621	774043.73	2019365.01	583.01	774043.32	2019363.67	583.21	0.42	1.34	-0.20	1.40	Mowed Grass
622	774043.73	2019365.01	583.01	774045.00	2019363.98	583.21	-1.27	1.03	-0.20	1.63	Mowed Grass
623	774043.73	2019365.01	583.01	774045.10	2019366.76	583.18	-1.36	-1.75	-0.17	2.22	Mowed Grass
624	774048.79	2019366.76	582.99	774047.31	2019365.87	583.18	1.48	0.89	-0.19	1.73	Mowed Grass
625	774048.79	2019366.76	582.99	774048.98	2019364.53	583.18	-0.19	2.23	-0.19	2.24	Mowed Grass
626	774048.79	2019366.76	582.99	774047.40	2019368.68	583.14	1.39	-1.92	-0.15	2.37	Mowed Grass
627	774048.79	2019366.76	582.99	774049.07	2019367.33	583.21	-0.28	-0.57	-0.22	0.63	Mowed Grass
628	774048.79	2019366.76	582.99	774051.38	2019366.90	583.22	-2.59	-0.14	-0.23	2.59	Mowed Grass
629	774069.46	2019367.73	583.03	774068.01	2019365.59	583.19	1.45	2.14	-0.16	2.59	Mowed Grass
630	774069.46	2019367.73	583.03	774070.12	2019365.46	583.24	-0.66	2.27	-0.21	2.36	Mowed Grass
631	774069.46	2019367.73	583.03	774068.10	2019368.37	583.20	1.36	-0.64	-0.17	1.51	Mowed Grass

632	774069.46	2019367.73	583.03	774070.21	2019368.28	583.24	-0.75	-0.55	-0.21	0.93	Mowed Grass
633	774069.46	2019367.73	583.03	774071.82	2019366.63	583.27	-2.36	1.10	-0.24	2.60	Mowed Grass
634	774069.46	2019367.73	583.03	774071.91	2019369.44	583.29	-2.45	-1.71	-0.26	2.99	Mowed Grass
635	774061.35	2019367.75	583.02	774059.15	2019368.03	583.23	2.20	-0.28	-0.21	2.22	Mowed Grass
636	774061.35	2019367.75	583.02	774060.18	2019367.08	583.24	1.17	0.67	-0.22	1.35	Mowed Grass
637	774061.35	2019367.75	583.02	774060.27	2019369.88	583.22	1.08	-2.13	-0.20	2.39	Mowed Grass
638	774061.35	2019367.75	583.02	774062.94	2019367.92	583.21	-1.59	-0.17	-0.19	1.60	Mowed Grass
639	774061.35	2019367.75	583.02	774064.07	2019367.33	583.19	-2.72	0.42	-0.17	2.75	Mowed Grass
640	774095.71	2019368.87	583.21	774093.56	2019369.27	583.38	2.15	-0.40	-0.17	2.19	Mowed Grass
641	774095.71	2019368.87	583.21	774095.71	2019370.62	583.38	0.00	-1.75	-0.17	1.75	Mowed Grass
642	774095.71	2019368.87	583.21	774095.62	2019367.81	583.37	0.09	1.06	-0.16	1.07	Mowed Grass
643	774095.71	2019368.87	583.21	774097.19	2019367.46	583.43	-1.48	1.41	-0.22	2.04	Mowed Grass
644	774095.71	2019368.87	583.21	774097.28	2019370.25	583.41	-1.57	-1.38	-0.20	2.08	Mowed Grass
645	774103.95	2019369.56	583.23	774103.30	2019369.37	583.41	0.65	0.19	-0.18	0.67	Mowed Grass
646	774103.95	2019369.56	583.23	774104.67	2019368.63	583.40	-0.72	0.94	-0.17	1.18	Mowed Grass
647	774103.95	2019369.56	583.23	774104.76	2019371.44	583.40	-0.81	-1.88	-0.17	2.04	Mowed Grass
648	774103.95	2019369.56	583.23	774103.38	2019372.20	583.44	0.57	-2.64	-0.21	2.70	Mowed Grass
649	774042.49	2019370.86	582.95	774039.76	2019370.41	583.11	2.73	0.45	-0.16	2.76	Mowed Grass
650	774042.49	2019370.86	582.95	774041.19	2019368.63	583.12	1.30	2.23	-0.17	2.58	Mowed Grass
651	774042.49	2019370.86	582.95	774041.28	2019371.42	583.13	1.21	-0.56	-0.18	1.33	Mowed Grass
652	774042.49	2019370.86	582.95	774043.49	2019369.29	583.19	-1.00	1.57	-0.24	1.86	Mowed Grass
653	774042.49	2019370.86	582.95	774043.58	2019372.11	583.18	-1.09	-1.25	-0.23	1.66	Mowed Grass
654	774048.42	2019372.83	582.94	774047.48	2019371.48	583.16	0.94	1.35	-0.22	1.64	Mowed Grass
655	774048.42	2019372.83	582.94	774049.16	2019370.11	583.20	-0.74	2.72	-0.26	2.82	Mowed Grass
656	774048.42	2019372.83	582.94	774047.57	2019374.29	583.09	0.85	-1.46	-0.15	1.69	Mowed Grass
657	774048.42	2019372.83	582.94	774049.25	2019372.92	583.13	-0.83	-0.09	-0.19	0.84	Mowed Grass
658	774068.60	2019375.29	583.10	774066.83	2019374.83	583.27	1.77	0.46	-0.17	1.83	Mowed Grass
659	774068.60	2019375.29	583.10	774068.28	2019373.98	583.26	0.32	1.31	-0.16	1.35	Mowed Grass
660	774068.60	2019375.29	583.10	774070.38	2019373.92	583.28	-1.78	1.37	-0.18	2.25	Mowed Grass
661	774068.60	2019375.29	583.10	774066.92	2019377.64	583.25	1.68	-2.35	-0.15	2.89	Mowed Grass
662	774068.60	2019375.29	583.10	774068.37	2019376.79	583.28	0.23	-1.50	-0.18	1.52	Mowed Grass
663	774068.60	2019375.29	583.10	774070.46	2019376.75	583.29	-1.86	-1.46	-0.19	2.37	Mowed Grass

664	774061.71	2019375.47	583.03	774059.42	2019376.48	583.18	2.29	-1.01	-0.15	2.51	Mowed Grass
665	774061.71	2019375.47	583.03	774059.33	2019373.66	583.20	2.38	1.81	-0.17	2.99	Mowed Grass
666	774061.71	2019375.47	583.03	774060.45	2019375.48	583.18	1.26	-0.01	-0.15	1.26	Mowed Grass
667	774061.71	2019375.47	583.03	774063.20	2019376.37	583.25	-1.49	-0.91	-0.22	1.74	Mowed Grass
668	774061.71	2019375.47	583.03	774063.11	2019373.56	583.25	-1.40	1.91	-0.22	2.36	Mowed Grass
669	774061.71	2019375.47	583.03	774064.34	2019375.75	583.22	-2.63	-0.28	-0.19	2.64	Mowed Grass
670	845573.48	2016403.21	16.17	845573.13	2016403.83	16.51	0.35	-0.62	-0.34	0.72	Mowed Grass
671	845573.48	2016403.21	16.17	845575.32	2016402.54	16.49	-1.84	0.67	-0.32	1.96	Mowed Grass
672	845581.58	2016404.78	16.16	845581.00	2016403.88	16.53	0.58	0.91	-0.37	1.07	Mowed Grass
673	845581.58	2016404.78	16.16	845581.14	2016406.71	16.49	0.44	-1.93	-0.32	1.97	Mowed Grass
674	845581.58	2016404.78	16.16	845583.05	2016405.82	16.50	-1.47	-1.04	-0.34	1.80	Mowed Grass
675	845568.97	2016408.11	16.18	845567.56	2016408.19	16.52	1.41	-0.08	-0.34	1.42	Mowed Grass
676	845568.97	2016408.11	16.18	845569.45	2016407.85	16.52	-0.48	0.26	-0.34	0.54	Mowed Grass
677	845576.52	2016409.74	16.16	845575.60	2016408.15	16.48	0.92	1.59	-0.32	1.83	Mowed Grass
678	845576.52	2016409.74	16.16	845575.74	2016410.96	16.46	0.78	-1.22	-0.30	1.45	Mowed Grass
679	845576.52	2016409.74	16.16	845577.28	2016410.23	16.50	-0.76	-0.49	-0.34	0.90	Mowed Grass
680	845586.46	2016409.74	16.17	845585.35	2016410.89	16.50	1.11	-1.15	-0.33	1.60	Mowed Grass
681	845586.46	2016409.74	16.17	845587.11	2016410.17	16.50	-0.65	-0.43	-0.33	0.79	Mowed Grass
682	845640.10	2016409.88	16.14	845638.88	2016410.43	16.48	1.22	-0.55	-0.34	1.34	Mowed Grass
683	845640.10	2016409.88	16.14	845640.49	2016410.27	16.45	-0.39	-0.39	-0.31	0.55	Mowed Grass
684	845564.64	2016413.76	16.15	845563.64	2016412.28	16.50	1.00	1.48	-0.35	1.79	Mowed Grass
685	845564.64	2016413.76	16.15	845565.71	2016412.09	16.46	-1.07	1.67	-0.31	1.98	Mowed Grass
686	845564.64	2016413.76	16.15	845563.78	2016415.09	16.46	0.86	-1.33	-0.31	1.59	Mowed Grass
687	845564.64	2016413.76	16.15	845565.85	2016414.90	16.48	-1.21	-1.14	-0.33	1.66	Mowed Grass
688	845645.35	2016414.73	16.13	845644.56	2016414.21	16.45	0.79	0.52	-0.32	0.95	Mowed Grass
689	845634.75	2016414.78	16.14	845633.19	2016415.72	16.47	1.56	-0.94	-0.32	1.82	Mowed Grass
690	845634.75	2016414.78	16.14	845635.09	2016415.07	16.46	-0.34	-0.29	-0.32	0.45	Mowed Grass
691	845582.28	2016414.86	16.18	845583.47	2016414.25	16.51	-1.19	0.61	-0.33	1.34	Mowed Grass
692	845582.28	2016414.86	16.18	845581.56	2016415.19	16.50	0.72	-0.33	-0.32	0.79	Mowed Grass
693	845571.90	2016415.05	16.14	845571.97	2016415.40	16.44	-0.07	-0.35	-0.30	0.36	Mowed Grass
694	845571.90	2016415.05	16.14	845573.68	2016415.12	16.49	-1.78	-0.07	-0.35	1.78	Mowed Grass
695	845600.26	2016415.31	16.20	845600.84	2016415.92	16.53	-0.58	-0.61	-0.33	0.84	Mowed Grass

696	845600.26	2016415.31	16.20	845602.08	2016415.37	16.54	-1.82	-0.06	-0.34	1.82	Mowed Grass
697	845617.79	2016415.63	16.18	845615.96	2016415.96	16.54	1.83	-0.33	-0.36	1.86	Mowed Grass
698	845617.79	2016415.63	16.18	845617.86	2016415.56	16.52	-0.07	0.07	-0.34	0.10	Mowed Grass
699	845590.62	2016416.39	16.19	845590.99	2016414.51	16.48	-0.37	1.88	-0.29	1.92	Mowed Grass
700	845590.62	2016416.39	16.19	845589.62	2016418.12	16.50	1.00	-1.73	-0.31	1.99	Mowed Grass
701	845590.62	2016416.39	16.19	845589.48	2016415.27	16.50	1.14	1.12	-0.31	1.60	Mowed Grass
702	845590.62	2016416.39	16.19	845591.14	2016417.32	16.50	-0.52	-0.93	-0.31	1.07	Mowed Grass
703	845560.21	2016418.93	16.19	845559.79	2016416.97	16.49	0.42	1.96	-0.30	2.00	Mowed Grass
704	845560.21	2016418.93	16.19	845562.17	2016419.15	16.47	-1.96	-0.22	-0.28	1.98	Mowed Grass
705	845560.21	2016418.93	16.19	845559.93	2016419.79	16.51	0.28	-0.86	-0.32	0.91	Mowed Grass
706	845640.16	2016419.32	16.12	845639.31	2016418.90	16.42	0.85	0.42	-0.30	0.95	Mowed Grass
707	845640.16	2016419.32	16.12	845640.94	2016418.70	16.43	-0.78	0.62	-0.31	1.00	Mowed Grass
708	845629.01	2016419.39	16.16	845627.53	2016420.33	16.51	1.48	-0.94	-0.36	1.75	Mowed Grass
709	845629.01	2016419.39	16.16	845629.64	2016420.01	16.48	-0.63	-0.62	-0.32	0.89	Mowed Grass
710	845611.73	2016419.83	16.17	845612.39	2016420.36	16.46	-0.66	-0.53	-0.29	0.85	Mowed Grass
711	845567.46	2016420.22	16.13	845568.12	2016419.42	16.44	-0.66	0.80	-0.31	1.04	Mowed Grass
712	845567.46	2016420.22	16.13	845566.13	2016420.57	16.45	1.33	-0.35	-0.32	1.38	Mowed Grass
713	845577.36	2016420.34	16.16	845576.17	2016419.38	16.48	1.19	0.96	-0.32	1.53	Mowed Grass
714	845577.36	2016420.34	16.16	845577.70	2016418.71	16.51	-0.34	1.63	-0.35	1.66	Mowed Grass
715	845577.36	2016420.34	16.16	845577.84	2016421.55	16.49	-0.48	-1.21	-0.33	1.30	Mowed Grass
716	845595.43	2016420.61	16.18	845594.97	2016421.46	16.52	0.46	-0.85	-0.34	0.97	Mowed Grass
717	845595.43	2016420.61	16.18	845597.42	2016420.68	16.51	-1.99	-0.07	-0.33	1.99	Mowed Grass
718	845585.55	2016421.82	16.17	845583.90	2016422.70	16.47	1.65	-0.88	-0.30	1.87	Mowed Grass
719	845585.55	2016421.82	16.17	845585.90	2016422.21	16.48	-0.35	-0.39	-0.31	0.52	Mowed Grass
720	845622.33	2016422.10	16.16	845622.12	2016422.29	16.49	0.21	-0.19	-0.33	0.28	Mowed Grass
721	845622.33	2016422.10	16.16	845623.78	2016421.94	16.51	-1.45	0.16	-0.35	1.46	Mowed Grass
722	845634.41	2016423.34	16.12	845633.64	2016424.15	16.46	0.77	-0.81	-0.34	1.12	Mowed Grass
723	845634.41	2016423.34	16.12	845635.52	2016423.56	16.45	-1.11	-0.22	-0.33	1.13	Mowed Grass
724	845605.86	2016423.36	16.15	845605.00	2016423.05	16.52	0.86	0.31	-0.37	0.92	Mowed Grass
725	845605.86	2016423.36	16.15	845606.25	2016422.56	16.50	-0.39	0.80	-0.35	0.89	Mowed Grass
726	845623.50	2016424.00	16.18	845622.27	2016425.13	16.49	1.23	-1.13	-0.31	1.67	Mowed Grass
727	845623.50	2016424.00	16.18	845623.93	2016424.78	16.49	-0.43	-0.78	-0.31	0.89	Mowed Grass

728	845555.31	2016424.22	16.12	845556.02	2016423.99	16.47	-0.71	0.23	-0.35	0.74	Mowed Grass
729	845555.31	2016424.22	16.12	845554.55	2016424.89	16.44	0.76	-0.67	-0.32	1.01	Mowed Grass
730	845589.82	2016425.10	16.18	845589.90	2016423.75	16.51	-0.08	1.35	-0.33	1.35	Mowed Grass
731	845589.82	2016425.10	16.18	845590.04	2016426.58	16.51	-0.22	-1.48	-0.33	1.50	Mowed Grass
732	845589.82	2016425.10	16.18	845591.56	2016425.75	16.50	-1.74	-0.65	-0.32	1.86	Mowed Grass
733	845563.00	2016425.40	16.11	845562.44	2016424.82	16.43	0.56	0.58	-0.32	0.80	Mowed Grass
734	845563.00	2016425.40	16.11	845564.34	2016426.33	16.43	-1.34	-0.93	-0.32	1.63	Mowed Grass
735	845572.47	2016425.56	16.14	845572.39	2016423.82	16.48	0.08	1.74	-0.34	1.74	Mowed Grass
736	845572.47	2016425.56	16.14	845572.53	2016426.64	16.45	-0.06	-1.08	-0.31	1.08	Mowed Grass
737	845572.47	2016425.56	16.14	845574.23	2016426.42	16.46	-1.76	-0.86	-0.32	1.96	Mowed Grass
738	845616.44	2016425.93	16.15	845616.39	2016424.45	16.51	0.05	1.48	-0.36	1.48	Mowed Grass
739	845616.44	2016425.93	16.15	845616.53	2016427.28	16.49	-0.09	-1.35	-0.34	1.35	Mowed Grass
740	845580.61	2016426.66	16.15	845580.38	2016426.52	16.45	0.23	0.14	-0.30	0.27	Mowed Grass
741	845580.61	2016426.66	16.15	845582.11	2016426.52	16.50	-1.50	0.14	-0.35	1.51	Mowed Grass
742	845628.19	2016427.19	16.15	845627.96	2016428.82	16.46	0.23	-1.63	-0.31	1.65	Mowed Grass
743	845628.19	2016427.19	16.15	845627.82	2016425.98	16.49	0.37	1.21	-0.34	1.26	Mowed Grass
744	845599.55	2016427.95	16.14	845598.96	2016427.77	16.46	0.59	0.18	-0.32	0.61	Mowed Grass
745	845599.55	2016427.95	16.14	845601.41	2016427.24	16.49	-1.86	0.71	-0.35	1.99	Mowed Grass
746	845617.86	2016428.81	16.14	845618.61	2016429.63	16.47	-0.75	-0.82	-0.33	1.11	Mowed Grass
747	845617.86	2016428.81	16.14	845616.68	2016430.12	16.49	1.18	-1.31	-0.35	1.76	Mowed Grass
748	845610.42	2016429.31	16.17	845609.01	2016428.47	16.51	1.41	0.84	-0.34	1.64	Mowed Grass
749	845550.12	2016429.46	16.13	845548.23	2016429.41	16.51	1.89	0.05	-0.38	1.89	Mowed Grass
750	845550.12	2016429.46	16.13	845550.91	2016429.01	16.46	-0.79	0.45	-0.33	0.91	Mowed Grass
751	845584.36	2016429.56	16.19	845584.18	2016428.33	16.50	0.18	1.23	-0.31	1.24	Mowed Grass
752	845584.36	2016429.56	16.19	845584.33	2016431.14	16.51	0.03	-1.58	-0.32	1.58	Mowed Grass
753	845567.79	2016429.95	16.13	845566.54	2016429.03	16.44	1.25	0.92	-0.31	1.55	Mowed Grass
754	845567.79	2016429.95	16.13	845568.69	2016430.69	16.43	-0.90	-0.74	-0.30	1.16	Mowed Grass
755	845558.79	2016430.25	16.10	845558.73	2016429.42	16.45	0.06	0.83	-0.35	0.83	Mowed Grass
756	845558.79	2016430.25	16.10	845560.50	2016431.03	16.43	-1.71	-0.78	-0.33	1.88	Mowed Grass
757	845622.25	2016431.60	16.16	845620.51	2016431.54	16.47	1.74	0.06	-0.31	1.74	Mowed Grass
758	845622.25	2016431.60	16.16	845622.56	2016430.76	16.46	-0.31	0.84	-0.30	0.89	Mowed Grass
759	845576.11	2016431.65	16.17	845574.50	2016432.09	16.46	1.61	-0.44	-0.29	1.67	Mowed Grass

760	845576.11	2016431.65	16.17	845576.73	2016430.63	16.51	-0.62	1.02	-0.34	1.20	Mowed Grass
761	845576.11	2016431.65	16.17	845576.88	2016433.45	16.49	-0.77	-1.80	-0.32	1.96	Mowed Grass
762	845593.41	2016432.26	16.18	845591.85	2016431.37	16.50	1.56	0.89	-0.32	1.80	Mowed Grass
763	845593.41	2016432.26	16.18	845594.23	2016433.45	16.52	-0.82	-1.19	-0.34	1.44	Mowed Grass
764	845593.41	2016432.26	16.18	845594.09	2016430.60	16.50	-0.68	1.66	-0.32	1.79	Mowed Grass
765	845604.17	2016433.04	16.17	845602.95	2016432.28	16.52	1.22	0.76	-0.35	1.44	Mowed Grass
766	845604.17	2016433.04	16.17	845605.57	2016434.38	16.47	-1.40	-1.34	-0.30	1.93	Mowed Grass
767	845604.17	2016433.04	16.17	845605.43	2016431.54	16.52	-1.26	1.50	-0.35	1.96	Mowed Grass
768	845612.38	2016433.70	16.18	845613.11	2016434.53	16.49	-0.73	-0.83	-0.31	1.11	Mowed Grass
769	845578.98	2016434.06	16.17	845578.39	2016432.88	16.46	0.59	1.18	-0.29	1.32	Mowed Grass
770	845578.98	2016434.06	16.17	845578.53	2016435.71	16.49	0.45	-1.65	-0.32	1.71	Mowed Grass
771	845562.58	2016434.56	16.11	845562.85	2016433.29	16.41	-0.27	1.27	-0.30	1.30	Mowed Grass
772	845562.58	2016434.56	16.11	845562.99	2016436.15	16.42	-0.41	-1.59	-0.31	1.64	Mowed Grass
773	845553.68	2016435.14	16.11	845552.54	2016436.38	16.41	1.14	-1.24	-0.30	1.69	Mowed Grass
774	845553.68	2016435.14	16.11	845555.10	2016436.24	16.41	-1.42	-1.10	-0.30	1.79	Mowed Grass
775	845615.94	2016436.08	16.18	845614.98	2016436.16	16.48	0.96	-0.07	-0.30	0.97	Mowed Grass
776	845615.94	2016436.08	16.18	845616.97	2016435.78	16.51	-1.03	0.30	-0.33	1.07	Mowed Grass
777	845571.09	2016436.30	16.12	845570.83	2016436.13	16.45	0.26	0.17	-0.33	0.31	Mowed Grass
778	845598.16	2016437.27	16.15	845598.27	2016437.70	16.50	-0.11	-0.43	-0.35	0.44	Mowed Grass
779	845598.16	2016437.27	16.15	845599.39	2016436.22	16.50	-1.23	1.05	-0.35	1.62	Mowed Grass
780	845588.10	2016437.85	16.17	845586.73	2016439.18	16.50	1.37	-1.33	-0.33	1.91	Mowed Grass
781	845588.10	2016437.85	16.17	845588.53	2016438.30	16.50	-0.43	-0.45	-0.33	0.62	Mowed Grass
782	845606.74	2016438.12	16.17	845605.71	2016437.22	16.50	1.03	0.90	-0.33	1.36	Mowed Grass
783	845606.74	2016438.12	16.17	845606.98	2016436.65	16.53	-0.24	1.47	-0.36	1.49	Mowed Grass
784	845606.74	2016438.12	16.17	845607.13	2016439.46	16.52	-0.39	-1.34	-0.35	1.40	Mowed Grass
785	845573.61	2016438.55	16.11	845573.10	2016437.90	16.41	0.51	0.65	-0.30	0.83	Mowed Grass
786	845573.61	2016438.55	16.11	845574.78	2016437.75	16.44	-1.17	0.80	-0.33	1.42	Mowed Grass
787	845557.03	2016439.43	16.10	845555.24	2016439.07	16.39	1.79	0.36	-0.29	1.82	Mowed Grass
788	845557.03	2016439.43	16.10	845556.72	2016438.07	16.40	0.31	1.36	-0.30	1.40	Mowed Grass
789	845557.03	2016439.43	16.10	845556.86	2016440.90	16.41	0.17	-1.47	-0.31	1.48	Mowed Grass
790	845609.54	2016440.43	16.17	845609.58	2016439.81	16.50	-0.04	0.62	-0.33	0.62	Mowed Grass
791	845565.84	2016441.10	16.09	845565.05	2016440.42	16.40	0.79	0.68	-0.31	1.04	Mowed Grass

792	845565.84	2016441.10	16.09	845567.09	2016440.35	16.40	-1.25	0.75	-0.31	1.46	Mowed Grass
793	845591.88	2016441.18	16.15	845590.73	2016440.77	16.48	1.15	0.41	-0.33	1.22	Mowed Grass
794	845591.88	2016441.18	16.15	845592.28	2016439.84	16.47	-0.40	1.33	-0.32	1.39	Mowed Grass
795	845591.88	2016441.18	16.15	845592.42	2016442.64	16.48	-0.54	-1.46	-0.33	1.56	Mowed Grass
796	845582.07	2016442.06	16.12	845581.08	2016440.58	16.45	0.99	1.48	-0.32	1.78	Mowed Grass
797	845582.07	2016442.06	16.12	845581.22	2016443.39	16.42	0.85	-1.33	-0.30	1.58	Mowed Grass
798	845582.07	2016442.06	16.12	845582.94	2016443.56	16.44	-0.87	-1.50	-0.32	1.74	Mowed Grass
799	845582.07	2016442.06	16.12	845582.80	2016440.73	16.45	-0.73	1.33	-0.32	1.52	Mowed Grass
800	845600.73	2016442.72	16.16	845599.68	2016441.83	16.49	1.05	0.89	-0.33	1.38	Mowed Grass
801	845600.73	2016442.72	16.16	845602.12	2016441.40	16.51	-1.39	1.32	-0.35	1.91	Mowed Grass
802	845567.84	2016443.09	16.09	845567.23	2016443.21	16.39	0.61	-0.12	-0.30	0.62	Mowed Grass
803	845567.84	2016443.09	16.09	845569.26	2016441.97	16.42	-1.42	1.12	-0.33	1.81	Mowed Grass
804	845560.64	2016445.21	16.08	845559.56	2016446.43	16.40	1.08	-1.22	-0.32	1.63	Mowed Grass
805	845560.64	2016445.21	16.08	845561.20	2016445.13	16.40	-0.56	0.08	-0.32	0.57	Mowed Grass
806	845586.18	2016445.26	16.12	845585.04	2016445.27	16.45	1.14	-0.01	-0.32	1.14	Mowed Grass
807	845586.18	2016445.26	16.12	845587.01	2016444.87	16.45	-0.83	0.39	-0.32	0.92	Mowed Grass
808	845604.50	2016445.56	16.14	845603.68	2016446.37	16.46	0.82	-0.81	-0.32	1.16	Mowed Grass
809	845604.50	2016445.56	16.14	845606.14	2016445.72	16.49	-1.64	-0.16	-0.35	1.64	Mowed Grass
810	845576.07	2016446.29	16.10	845575.20	2016446.26	16.43	0.87	0.03	-0.33	0.88	Mowed Grass
811	845576.07	2016446.29	16.10	845577.58	2016447.52	16.41	-1.51	-1.23	-0.31	1.94	Mowed Grass
812	845594.85	2016446.93	16.17	845594.93	2016447.61	16.48	-0.08	-0.68	-0.31	0.68	Mowed Grass
813	845594.85	2016446.93	16.17	845596.26	2016446.77	16.47	-1.41	0.16	-0.30	1.42	Mowed Grass
814	845562.04	2016447.35	16.07	845561.35	2016447.95	16.38	0.69	-0.60	-0.31	0.91	Mowed Grass
815	845562.04	2016447.35	16.07	845563.54	2016447.50	16.38	-1.50	-0.15	-0.31	1.51	Mowed Grass
816	845580.08	2016449.25	16.09	845581.51	2016449.03	16.43	-1.43	0.22	-0.34	1.44	Mowed Grass
817	845580.08	2016449.25	16.09	845579.22	2016449.90	16.45	0.86	-0.65	-0.36	1.08	Mowed Grass
818	845598.46	2016450.26	16.13	845598.83	2016449.04	16.45	-0.37	1.22	-0.32	1.28	Mowed Grass
819	845598.46	2016450.26	16.13	845598.97	2016451.87	16.46	-0.51	-1.61	-0.33	1.69	Mowed Grass
820	845598.46	2016450.26	16.13	845600.11	2016450.31	16.45	-1.65	-0.05	-0.32	1.65	Mowed Grass
821	845570.63	2016450.51	16.08	845569.68	2016450.41	16.41	0.95	0.10	-0.33	0.95	Mowed Grass
822	845570.63	2016450.51	16.08	845571.52	2016450.28	16.43	-0.89	0.23	-0.35	0.92	Mowed Grass
823	845589.18	2016451.14	16.15	845589.10	2016449.58	16.50	0.08	1.55	-0.35	1.56	Mowed Grass

824	845589.18	2016451.14	16.15	845587.29	2016450.53	16.45	1.89	0.60	-0.30	1.99	Mowed Grass
825	845589.18	2016451.14	16.15	845589.25	2016452.40	16.43	-0.07	-1.26	-0.28	1.27	Mowed Grass
826	845574.04	2016453.10	16.10	845573.81	2016451.98	16.40	0.23	1.12	-0.30	1.14	Mowed Grass
827	845574.04	2016453.10	16.10	845575.47	2016451.96	16.45	-1.43	1.14	-0.35	1.83	Mowed Grass
828	845574.04	2016453.10	16.10	845573.95	2016454.81	16.42	0.09	-1.71	-0.32	1.71	Mowed Grass
829	845582.96	2016454.95	16.14	845581.79	2016454.67	16.46	1.17	0.28	-0.32	1.20	Mowed Grass
830	845582.96	2016454.95	16.14	845583.49	2016454.94	16.46	-0.53	0.01	-0.32	0.53	Mowed Grass
831	845592.05	2016455.42	16.14	845593.00	2016453.94	16.45	-0.95	1.48	-0.31	1.76	Mowed Grass
832	845592.05	2016455.42	16.14	845591.43	2016454.95	16.46	0.62	0.47	-0.32	0.78	Mowed Grass
833	845592.05	2016455.42	16.14	845593.14	2016456.78	16.46	-1.09	-1.36	-0.32	1.74	Mowed Grass
834	845576.85	2016459.13	16.10	845575.75	2016457.61	16.42	1.10	1.52	-0.32	1.88	Mowed Grass
835	845576.85	2016459.13	16.10	845578.15	2016458.82	16.45	-1.30	0.31	-0.35	1.34	Mowed Grass
836	845576.85	2016459.13	16.10	845575.89	2016460.45	16.39	0.96	-1.32	-0.29	1.63	Mowed Grass
837	845585.83	2016460.12	16.15	845585.75	2016459.43	16.46	0.08	0.69	-0.31	0.70	Mowed Grass
838	845578.12	2016463.59	16.14	845578.29	2016461.64	16.42	-0.17	1.95	-0.29	1.96	Mowed Grass
839	845578.12	2016463.59	16.14	845578.44	2016464.49	16.45	-0.32	-0.90	-0.31	0.95	Mowed Grass
840	845578.12	2016463.59	16.14	845579.92	2016464.13	16.45	-1.80	-0.54	-0.31	1.88	Mowed Grass
841	834505.51	2034679.27	9.24	834504.45	2034679.18	9.39	1.06	0.09	-0.15	1.07	Mowed Grass
842	834505.51	2034679.27	9.24	834504.59	2034676.85	9.35	0.92	2.42	-0.11	2.59	Mowed Grass
843	834505.51	2034679.27	9.24	834505.36	2034676.30	9.31	0.15	2.97	-0.07	2.98	Mowed Grass
844	834505.51	2034679.27	9.24	834505.22	2034678.65	9.36	0.29	0.62	-0.12	0.69	Mowed Grass
845	834505.51	2034679.27	9.24	834504.31	2034681.52	9.38	1.20	-2.25	-0.14	2.55	Mowed Grass
846	834505.51	2034679.27	9.24	834505.08	2034680.99	9.35	0.43	-1.72	-0.11	1.77	Mowed Grass
847	834505.51	2034679.27	9.24	834508.13	2034680.27	9.32	-2.62	-1.00	-0.08	2.80	Mowed Grass
848	834497.84	2034680.35	9.29	834496.89	2034679.18	9.43	0.95	1.18	-0.14	1.51	Mowed Grass
849	834497.84	2034680.35	9.29	834497.84	2034678.37	9.40	0.00	1.98	-0.12	1.99	Mowed Grass
850	834497.84	2034680.35	9.29	834496.74	2034681.50	9.44	1.10	-1.15	-0.15	1.59	Mowed Grass
851	834497.84	2034680.35	9.29	834497.70	2034680.71	9.41	0.14	-0.35	-0.12	0.38	Mowed Grass
852	834497.84	2034680.35	9.29	834497.56	2034683.05	9.40	0.28	-2.70	-0.12	2.71	Mowed Grass
853	834497.84	2034680.35	9.29	834500.64	2034680.60	9.44	-2.80	-0.25	-0.15	2.81	Mowed Grass
854	834511.45	2034680.69	9.18	834508.88	2034679.54	9.34	2.57	1.15	-0.16	2.81	Mowed Grass
855	834511.45	2034680.69	9.18	834512.83	2034679.05	9.31	-1.38	1.64	-0.13	2.15	Mowed Grass

856	834511.45	2034680.69	9.18	834508.74	2034681.89	9.36	2.71	-1.20	-0.18	2.96	Mowed Grass
857	834511.45	2034680.69	9.18	834511.74	2034682.21	9.29	-0.29	-1.52	-0.11	1.55	Mowed Grass
858	834511.45	2034680.69	9.18	834511.88	2034679.89	9.30	-0.43	0.80	-0.12	0.91	Mowed Grass
859	834511.45	2034680.69	9.18	834512.69	2034681.39	9.29	-1.24	-0.70	-0.11	1.43	Mowed Grass
860	834415.14	2034681.13	9.48	834415.86	2034679.02	9.61	-0.72	2.11	-0.12	2.23	Mowed Grass
861	834415.14	2034681.13	9.48	834414.93	2034682.29	9.63	0.21	-1.16	-0.15	1.18	Mowed Grass
862	834415.14	2034681.13	9.48	834415.07	2034679.95	9.66	0.07	1.18	-0.18	1.18	Mowed Grass
863	834415.14	2034681.13	9.48	834415.72	2034681.35	9.59	-0.58	-0.22	-0.11	0.62	Mowed Grass
864	834415.14	2034681.13	9.48	834415.58	2034683.71	9.59	-0.44	-2.58	-0.11	2.62	Mowed Grass
865	834491.74	2034681.14	9.27	834490.28	2034678.74	9.40	1.46	2.40	-0.13	2.81	Mowed Grass
866	834491.74	2034681.14	9.27	834489.01	2034681.51	9.37	2.73	-0.37	-0.10	2.76	Mowed Grass
867	834491.74	2034681.14	9.27	834490.14	2034681.06	9.38	1.60	0.08	-0.11	1.61	Mowed Grass
868	834491.74	2034681.14	9.27	834490.00	2034683.43	9.39	1.74	-2.29	-0.12	2.88	Mowed Grass
869	834491.74	2034681.14	9.27	834492.85	2034683.04	9.40	-1.11	-1.90	-0.13	2.20	Mowed Grass
870	834491.74	2034681.14	9.27	834492.99	2034680.70	9.42	-1.25	0.44	-0.15	1.32	Mowed Grass
871	834491.74	2034681.14	9.27	834494.02	2034679.71	9.44	-2.28	1.43	-0.17	2.69	Mowed Grass
872	834491.74	2034681.14	9.27	834493.88	2034682.07	9.44	-2.14	-0.93	-0.17	2.33	Mowed Grass
873	834517.35	2034682.32	9.16	834515.20	2034683.79	9.29	2.15	-1.47	-0.13	2.60	Mowed Grass
874	834517.35	2034682.32	9.16	834515.34	2034681.46	9.32	2.01	0.86	-0.16	2.19	Mowed Grass
875	834517.35	2034682.32	9.16	834516.70	2034679.98	9.32	0.65	2.34	-0.16	2.43	Mowed Grass
876	834517.35	2034682.32	9.16	834516.56	2034682.31	9.28	0.79	0.01	-0.12	0.79	Mowed Grass
877	834517.35	2034682.32	9.16	834518.90	2034682.38	9.34	-1.55	-0.06	-0.18	1.55	Mowed Grass
878	834517.35	2034682.32	9.16	834519.04	2034680.07	9.36	-1.69	2.25	-0.20	2.82	Mowed Grass
879	834517.35	2034682.32	9.16	834516.42	2034684.67	9.27	0.93	-2.35	-0.11	2.52	Mowed Grass
880	834517.35	2034682.32	9.16	834518.76	2034684.73	9.29	-1.41	-2.41	-0.13	2.79	Mowed Grass
881	834486.57	2034682.69	9.24	834484.89	2034683.00	9.40	1.68	-0.31	-0.16	1.71	Mowed Grass
882	834486.57	2034682.69	9.24	834485.04	2034680.68	9.39	1.53	2.01	-0.15	2.53	Mowed Grass
883	834486.57	2034682.69	9.24	834486.08	2034684.58	9.40	0.49	-1.89	-0.16	1.95	Mowed Grass
884	834486.57	2034682.69	9.24	834486.35	2034679.89	9.41	0.22	2.80	-0.17	2.81	Mowed Grass
885	834486.57	2034682.69	9.24	834486.22	2034682.22	9.40	0.35	0.47	-0.16	0.59	Mowed Grass
886	834486.57	2034682.69	9.24	834488.86	2034683.86	9.38	-2.29	-1.17	-0.14	2.57	Mowed Grass
887	834486.57	2034682.69	9.24	834489.01	2034681.51	9.37	-2.44	1.18	-0.13	2.71	Mowed Grass

888	834523.65	2034684.15	9.13	834522.57	2034683.64	9.28	1.08	0.51	-0.15	1.19	Mowed Grass
889	834523.65	2034684.15	9.13	834522.71	2034681.33	9.31	0.94	2.82	-0.18	2.97	Mowed Grass
890	834523.65	2034684.15	9.13	834524.23	2034682.60	9.24	-0.58	1.55	-0.11	1.65	Mowed Grass
891	834523.65	2034684.15	9.13	834526.45	2034684.27	9.23	-2.80	-0.12	-0.10	2.80	Mowed Grass
892	834523.65	2034684.15	9.13	834522.43	2034686.01	9.30	1.22	-1.86	-0.17	2.23	Mowed Grass
893	834523.65	2034684.15	9.13	834524.09	2034684.96	9.24	-0.44	-0.81	-0.11	0.93	Mowed Grass
894	834419.44	2034685.51	9.42	834418.62	2034683.70	9.56	0.82	1.81	-0.14	1.99	Mowed Grass
895	834419.44	2034685.51	9.42	834418.48	2034686.05	9.58	0.96	-0.54	-0.16	1.10	Mowed Grass
896	834419.44	2034685.51	9.42	834419.66	2034684.77	9.54	-0.22	0.74	-0.12	0.77	Mowed Grass
897	834419.44	2034685.51	9.42	834419.52	2034687.13	9.56	-0.08	-1.62	-0.14	1.62	Mowed Grass
898	834481.66	2034685.75	9.27	834480.79	2034683.70	9.42	0.87	2.05	-0.15	2.23	Mowed Grass
899	834481.66	2034685.75	9.27	834482.25	2034683.88	9.39	-0.59	1.87	-0.12	1.97	Mowed Grass
900	834481.66	2034685.75	9.27	834480.51	2034688.38	9.37	1.15	-2.63	-0.10	2.87	Mowed Grass
901	834481.66	2034685.75	9.27	834480.65	2034686.04	9.40	1.01	-0.29	-0.13	1.05	Mowed Grass
902	834481.66	2034685.75	9.27	834482.12	2034686.21	9.39	-0.46	-0.46	-0.12	0.65	Mowed Grass
903	834481.66	2034685.75	9.27	834481.98	2034688.55	9.37	-0.32	-2.80	-0.10	2.82	Mowed Grass
904	834410.55	2034686.30	9.52	834407.68	2034686.74	9.63	2.87	-0.44	-0.11	2.90	Mowed Grass
905	834410.55	2034686.30	9.52	834410.76	2034687.15	9.67	-0.21	-0.85	-0.15	0.87	Mowed Grass
906	834410.55	2034686.30	9.52	834410.90	2034684.78	9.66	-0.35	1.52	-0.14	1.56	Mowed Grass
907	834410.55	2034686.30	9.52	834411.56	2034685.50	9.67	-1.01	0.80	-0.15	1.29	Mowed Grass
908	834410.55	2034686.30	9.52	834411.42	2034687.87	9.66	-0.87	-1.57	-0.14	1.79	Mowed Grass
909	834476.28	2034689.05	9.27	834474.04	2034688.52	9.40	2.24	0.53	-0.13	2.30	Mowed Grass
910	834476.28	2034689.05	9.27	834476.52	2034688.15	9.43	-0.24	0.90	-0.16	0.93	Mowed Grass
911	834476.28	2034689.05	9.27	834478.15	2034687.42	9.43	-1.87	1.63	-0.16	2.48	Mowed Grass
912	834476.28	2034689.05	9.27	834476.38	2034690.52	9.44	-0.10	-1.47	-0.17	1.47	Mowed Grass
913	834476.28	2034689.05	9.27	834478.01	2034689.77	9.40	-1.73	-0.72	-0.13	1.87	Mowed Grass
914	834422.86	2034689.62	9.44	834422.08	2034689.50	9.61	0.78	0.12	-0.17	0.79	Mowed Grass
915	834422.86	2034689.62	9.44	834422.23	2034687.14	9.59	0.63	2.48	-0.15	2.56	Mowed Grass
916	834422.86	2034689.62	9.44	834423.43	2034688.69	9.53	-0.57	0.93	-0.09	1.09	Mowed Grass
917	834422.86	2034689.62	9.44	834421.94	2034691.88	9.59	0.92	-2.26	-0.15	2.44	Mowed Grass
918	834422.86	2034689.62	9.44	834423.30	2034691.06	9.55	-0.44	-1.44	-0.11	1.50	Mowed Grass
919	834414.68	2034691.07	9.47	834414.50	2034689.32	9.61	0.18	1.75	-0.14	1.76	Mowed Grass

920	834414.68	2034691.07	9.47	834415.31	2034688.41	9.62	-0.63	2.66	-0.15	2.74	Mowed Grass
921	834414.68	2034691.07	9.47	834414.36	2034691.71	9.62	0.32	-0.64	-0.15	0.71	Mowed Grass
922	834414.68	2034691.07	9.47	834415.17	2034690.77	9.61	-0.49	0.30	-0.14	0.58	Mowed Grass
923	834414.68	2034691.07	9.47	834415.03	2034693.13	9.62	-0.35	-2.06	-0.15	2.09	Mowed Grass
924	834471.15	2034692.50	9.34	834468.52	2034693.17	9.53	2.63	-0.67	-0.19	2.71	Mowed Grass
925	834471.15	2034692.50	9.34	834469.88	2034691.91	9.45	1.27	0.59	-0.11	1.40	Mowed Grass
926	834471.15	2034692.50	9.34	834469.74	2034694.27	9.47	1.41	-1.77	-0.13	2.26	Mowed Grass
927	834471.15	2034692.50	9.34	834472.26	2034694.12	9.50	-1.11	-1.62	-0.16	1.96	Mowed Grass
928	834471.15	2034692.50	9.34	834472.40	2034691.76	9.47	-1.25	0.74	-0.13	1.46	Mowed Grass
929	834471.15	2034692.50	9.34	834473.76	2034693.29	9.44	-2.61	-0.79	-0.10	2.73	Mowed Grass
930	834427.18	2034694.06	9.42	834425.63	2034693.71	9.58	1.55	0.35	-0.16	1.59	Mowed Grass
931	834427.18	2034694.06	9.42	834427.27	2034692.78	9.56	-0.09	1.28	-0.14	1.28	Mowed Grass
932	834427.18	2034694.06	9.42	834429.61	2034694.06	9.58	-2.43	0.00	-0.16	2.43	Mowed Grass
933	834427.18	2034694.06	9.42	834425.49	2034696.09	9.56	1.69	-2.03	-0.14	2.64	Mowed Grass
934	834427.18	2034694.06	9.42	834427.13	2034695.14	9.57	0.05	-1.08	-0.15	1.08	Mowed Grass
935	834465.63	2034695.70	9.38	834464.65	2034693.72	9.53	0.98	1.98	-0.15	2.20	Mowed Grass
936	834465.63	2034695.70	9.38	834465.74	2034692.83	9.51	-0.11	2.86	-0.13	2.87	Mowed Grass
937	834465.63	2034695.70	9.38	834464.51	2034696.07	9.53	1.12	-0.38	-0.15	1.18	Mowed Grass
938	834465.63	2034695.70	9.38	834465.60	2034695.23	9.52	0.03	0.47	-0.14	0.47	Mowed Grass
939	834465.63	2034695.70	9.38	834465.47	2034697.59	9.52	0.16	-1.90	-0.14	1.90	Mowed Grass
940	834465.63	2034695.70	9.38	834468.37	2034695.54	9.50	-2.74	0.16	-0.12	2.75	Mowed Grass
941	834419.05	2034695.72	9.47	834418.05	2034693.13	9.61	1.00	2.59	-0.14	2.78	Mowed Grass
942	834419.05	2034695.72	9.47	834419.11	2034694.23	9.60	-0.06	1.49	-0.13	1.49	Mowed Grass
943	834419.05	2034695.72	9.47	834417.77	2034697.89	9.55	1.28	-2.17	-0.08	2.52	Mowed Grass
944	834419.05	2034695.72	9.47	834417.91	2034695.51	9.60	1.14	0.21	-0.13	1.16	Mowed Grass
945	834419.05	2034695.72	9.47	834418.97	2034696.59	9.59	0.08	-0.87	-0.12	0.87	Mowed Grass
946	834419.05	2034695.72	9.47	834421.66	2034696.60	9.63	-2.61	-0.88	-0.16	2.76	Mowed Grass
947	834504.37	2034696.18	9.19	834503.59	2034693.29	9.34	0.78	2.89	-0.15	2.99	Mowed Grass
948	834504.37	2034696.18	9.19	834503.30	2034698.02	9.34	1.07	-1.84	-0.15	2.13	Mowed Grass
949	834504.37	2034696.18	9.19	834503.44	2034695.67	9.33	0.93	0.51	-0.14	1.06	Mowed Grass
950	834504.37	2034696.18	9.19	834504.24	2034695.14	9.37	0.13	1.04	-0.18	1.04	Mowed Grass
951	834504.37	2034696.18	9.19	834504.10	2034697.51	9.34	0.27	-1.33	-0.15	1.36	Mowed Grass

952	834504.37	2034696.18	9.19	834507.13	2034696.76	9.34	-2.76	-0.58	-0.15	2.82	Mowed Grass
953	834497.02	2034697.76	9.21	834495.74	2034698.01	9.37	1.28	-0.25	-0.16	1.31	Mowed Grass
954	834497.02	2034697.76	9.21	834495.88	2034695.65	9.39	1.14	2.11	-0.18	2.40	Mowed Grass
955	834497.02	2034697.76	9.21	834496.86	2034694.84	9.36	0.16	2.92	-0.15	2.93	Mowed Grass
956	834497.02	2034697.76	9.21	834496.71	2034697.20	9.35	0.31	0.56	-0.14	0.64	Mowed Grass
957	834497.02	2034697.76	9.21	834496.57	2034699.59	9.32	0.45	-1.83	-0.11	1.88	Mowed Grass
958	834497.02	2034697.76	9.21	834499.49	2034699.46	9.37	-2.47	-1.70	-0.16	2.99	Mowed Grass
959	834497.02	2034697.76	9.21	834499.63	2034697.06	9.36	-2.61	0.70	-0.15	2.70	Mowed Grass
960	834431.87	2034697.87	9.46	834429.32	2034698.82	9.63	2.55	-0.95	-0.17	2.72	Mowed Grass
961	834431.87	2034697.87	9.46	834429.46	2034696.45	9.60	2.41	1.42	-0.14	2.80	Mowed Grass
962	834431.87	2034697.87	9.46	834431.07	2034695.58	9.55	0.80	2.29	-0.09	2.42	Mowed Grass
963	834431.87	2034697.87	9.46	834430.93	2034697.94	9.56	0.94	-0.07	-0.10	0.95	Mowed Grass
964	834431.87	2034697.87	9.46	834433.40	2034698.04	9.57	-1.53	-0.17	-0.11	1.54	Mowed Grass
965	834431.87	2034697.87	9.46	834433.55	2034695.67	9.57	-1.68	2.20	-0.11	2.76	Mowed Grass
966	834431.87	2034697.87	9.46	834430.79	2034700.36	9.59	1.08	-2.49	-0.13	2.72	Mowed Grass
967	834431.87	2034697.87	9.46	834433.26	2034700.42	9.59	-1.39	-2.55	-0.13	2.91	Mowed Grass
968	834460.89	2034699.52	9.38	834460.51	2034699.63	9.50	0.38	-0.10	-0.12	0.39	Mowed Grass
969	834460.89	2034699.52	9.38	834460.65	2034697.27	9.52	0.24	2.25	-0.14	2.27	Mowed Grass
970	834460.89	2034699.52	9.38	834461.38	2034697.97	9.51	-0.49	1.55	-0.13	1.63	Mowed Grass
971	834460.89	2034699.52	9.38	834460.36	2034702.02	9.52	0.53	-2.50	-0.14	2.55	Mowed Grass
972	834460.89	2034699.52	9.38	834461.24	2034700.36	9.51	-0.35	-0.84	-0.13	0.91	Mowed Grass
973	834423.30	2034700.24	9.47	834421.51	2034699.00	9.61	1.79	1.24	-0.14	2.18	Mowed Grass
974	834423.30	2034700.24	9.47	834422.88	2034698.19	9.57	0.42	2.05	-0.10	2.09	Mowed Grass
975	834423.30	2034700.24	9.47	834425.35	2034698.47	9.61	-2.05	1.77	-0.14	2.70	Mowed Grass
976	834423.30	2034700.24	9.47	834421.37	2034701.38	9.55	1.93	-1.14	-0.08	2.25	Mowed Grass
977	834423.30	2034700.24	9.47	834422.74	2034700.57	9.57	0.56	-0.33	-0.10	0.65	Mowed Grass
978	834423.30	2034700.24	9.47	834425.20	2034700.86	9.59	-1.90	-0.62	-0.12	2.00	Mowed Grass
979	834436.42	2034701.99	9.46	834437.32	2034699.26	9.56	-0.90	2.73	-0.10	2.88	Mowed Grass
980	834436.42	2034701.99	9.46	834434.63	2034701.84	9.61	1.79	0.15	-0.14	1.79	Mowed Grass
981	834436.42	2034701.99	9.46	834434.49	2034704.21	9.61	1.93	-2.22	-0.14	2.94	Mowed Grass
982	834436.42	2034701.99	9.46	834437.03	2034704.01	9.60	-0.61	-2.02	-0.13	2.11	Mowed Grass
983	834436.42	2034701.99	9.46	834437.18	2034701.63	9.58	-0.76	0.36	-0.12	0.85	Mowed Grass

984	834436.42	2034701.99	9.46	834438.55	2034700.45	9.58	-2.13	1.54	-0.12	2.63	Mowed Grass
985	834436.42	2034701.99	9.46	834438.41	2034702.82	9.55	-1.99	-0.83	-0.09	2.16	Mowed Grass
986	834471.52	2034702.74	9.35	834469.33	2034701.43	9.50	2.19	1.31	-0.15	2.55	Mowed Grass
987	834471.52	2034702.74	9.35	834469.19	2034703.84	9.54	2.33	-1.10	-0.19	2.58	Mowed Grass
988	834471.52	2034702.74	9.35	834471.69	2034703.66	9.49	-0.17	-0.92	-0.14	0.94	Mowed Grass
989	834471.52	2034702.74	9.35	834471.83	2034701.28	9.50	-0.31	1.46	-0.15	1.49	Mowed Grass
990	834471.52	2034702.74	9.35	834473.35	2034700.41	9.47	-1.83	2.33	-0.12	2.96	Mowed Grass
991	834471.52	2034702.74	9.35	834473.21	2034702.82	9.48	-1.69	-0.08	-0.13	1.69	Mowed Grass
992	834471.52	2034702.74	9.35	834473.07	2034705.21	9.47	-1.55	-2.47	-0.12	2.92	Mowed Grass
993	834456.04	2034703.37	9.41	834453.46	2034703.93	9.56	2.58	-0.56	-0.15	2.64	Mowed Grass
994	834456.04	2034703.37	9.41	834456.56	2034703.08	9.56	-0.52	0.29	-0.15	0.59	Mowed Grass
995	834456.04	2034703.37	9.41	834456.71	2034700.68	9.58	-0.67	2.69	-0.17	2.77	Mowed Grass
996	834456.04	2034703.37	9.41	834457.32	2034701.78	9.52	-1.28	1.59	-0.11	2.04	Mowed Grass
997	834456.04	2034703.37	9.41	834457.18	2034704.15	9.53	-1.14	-0.78	-0.12	1.38	Mowed Grass
998	834456.04	2034703.37	9.41	834456.42	2034705.47	9.58	-0.38	-2.10	-0.17	2.14	Mowed Grass
999	834466.04	2034703.48	9.42	834464.08	2034703.23	9.54	1.96	0.25	-0.12	1.98	Mowed Grass
1000	834466.04	2034703.48	9.42	834465.19	2034702.36	9.51	0.85	1.12	-0.09	1.41	Mowed Grass
1001	834466.04	2034703.48	9.42	834467.94	2034702.69	9.55	-1.90	0.79	-0.13	2.06	Mowed Grass
1002	834466.04	2034703.48	9.42	834465.05	2034704.75	9.56	0.99	-1.27	-0.14	1.61	Mowed Grass
1003	834466.04	2034703.48	9.42	834467.80	2034705.09	9.55	-1.76	-1.61	-0.13	2.38	Mowed Grass
1004	834477.20	2034703.54	9.31	834475.65	2034702.41	9.50	1.55	1.13	-0.19	1.92	Mowed Grass
1005	834477.20	2034703.54	9.31	834477.31	2034701.65	9.44	-0.11	1.89	-0.13	1.90	Mowed Grass
1006	834477.20	2034703.54	9.31	834477.17	2034704.02	9.45	0.03	-0.48	-0.14	0.48	Mowed Grass
1007	834477.20	2034703.54	9.31	834479.63	2034702.65	9.43	-2.43	0.89	-0.12	2.59	Mowed Grass
1008	834477.20	2034703.54	9.31	834475.50	2034704.83	9.50	1.70	-1.29	-0.19	2.13	Mowed Grass
1009	834477.20	2034703.54	9.31	834477.03	2034706.44	9.45	0.17	-2.90	-0.14	2.90	Mowed Grass
1010	834477.20	2034703.54	9.31	834479.49	2034705.04	9.43	-2.29	-1.50	-0.12	2.73	Mowed Grass
1011	834427.40	2034704.57	9.47	834425.06	2034703.23	9.60	2.34	1.34	-0.13	2.70	Mowed Grass
1012	834427.40	2034704.57	9.47	834426.71	2034702.29	9.60	0.69	2.28	-0.13	2.39	Mowed Grass
1013	834427.40	2034704.57	9.47	834429.03	2034703.60	9.65	-1.63	0.97	-0.18	1.90	Mowed Grass
1014	834427.40	2034704.57	9.47	834424.91	2034705.63	9.59	2.49	-1.06	-0.12	2.71	Mowed Grass
1015	834427.40	2034704.57	9.47	834426.57	2034704.70	9.60	0.83	-0.13	-0.13	0.84	Mowed Grass

1016	834427.40	2034704.57	9.47	834426.43	2034707.07	9.53	0.97	-2.50	-0.06	2.68	Mowed Grass
1017	834427.40	2034704.57	9.47	834428.88	2034706.01	9.64	-1.48	-1.44	-0.17	2.06	Mowed Grass
1018	834460.47	2034704.74	9.45	834460.22	2034704.42	9.54	0.25	0.32	-0.09	0.41	Mowed Grass
1019	834460.47	2034704.74	9.45	834460.36	2034702.02	9.52	0.11	2.72	-0.07	2.73	Mowed Grass
1020	834460.47	2034704.74	9.45	834461.10	2034702.76	9.52	-0.63	1.98	-0.07	2.08	Mowed Grass
1021	834460.47	2034704.74	9.45	834460.08	2034706.82	9.53	0.39	-2.08	-0.08	2.11	Mowed Grass
1022	834460.47	2034704.74	9.45	834460.96	2034705.17	9.57	-0.49	-0.43	-0.12	0.65	Mowed Grass
1023	834460.47	2034704.74	9.45	834460.82	2034707.55	9.52	-0.35	-2.81	-0.07	2.83	Mowed Grass
1024	834482.74	2034705.64	9.29	834483.58	2034704.35	9.37	-0.84	1.29	-0.08	1.54	Mowed Grass
1025	834482.74	2034705.64	9.29	834481.00	2034705.14	9.40	1.74	0.50	-0.11	1.81	Mowed Grass
1026	834482.74	2034705.64	9.29	834480.86	2034707.54	9.41	1.88	-1.90	-0.12	2.67	Mowed Grass
1027	834482.74	2034705.64	9.29	834483.44	2034706.74	9.45	-0.70	-1.10	-0.16	1.31	Mowed Grass
1028	834482.74	2034705.64	9.29	834484.81	2034705.90	9.39	-2.07	-0.26	-0.10	2.09	Mowed Grass
1029	834440.97	2034706.33	9.48	834442.18	2034704.08	9.59	-1.21	2.25	-0.11	2.55	Mowed Grass
1030	834440.97	2034706.33	9.48	834438.27	2034705.23	9.58	2.70	1.10	-0.10	2.92	Mowed Grass
1031	834440.97	2034706.33	9.48	834440.80	2034707.74	9.60	0.17	-1.41	-0.12	1.42	Mowed Grass
1032	834440.97	2034706.33	9.48	834440.95	2034705.34	9.60	0.02	0.99	-0.12	0.99	Mowed Grass
1033	834440.97	2034706.33	9.48	834442.03	2034706.48	9.60	-1.06	-0.15	-0.12	1.07	Mowed Grass
1034	834440.97	2034706.33	9.48	834441.89	2034708.88	9.62	-0.92	-2.55	-0.14	2.71	Mowed Grass
1035	834455.62	2034706.94	9.43	834453.32	2034706.31	9.57	2.30	0.63	-0.14	2.38	Mowed Grass
1036	834455.62	2034706.94	9.43	834456.28	2034707.88	9.62	-0.66	-0.94	-0.19	1.15	Mowed Grass
1037	834455.62	2034706.94	9.43	834456.42	2034705.47	9.58	-0.80	1.47	-0.15	1.67	Mowed Grass
1038	834455.62	2034706.94	9.43	834457.04	2034706.56	9.57	-1.42	0.38	-0.14	1.47	Mowed Grass
1039	834455.62	2034706.94	9.43	834456.89	2034708.95	9.54	-1.27	-2.01	-0.11	2.38	Mowed Grass
1040	834451.16	2034707.18	9.45	834448.66	2034707.62	9.62	2.50	-0.45	-0.17	2.54	Mowed Grass
1041	834451.16	2034707.18	9.45	834449.57	2034706.66	9.59	1.59	0.52	-0.14	1.67	Mowed Grass
1042	834451.16	2034707.18	9.45	834449.43	2034709.07	9.59	1.73	-1.90	-0.14	2.57	Mowed Grass
1043	834451.16	2034707.18	9.45	834452.39	2034708.84	9.54	-1.23	-1.67	-0.09	2.07	Mowed Grass
1044	834451.16	2034707.18	9.45	834452.53	2034706.46	9.58	-1.37	0.72	-0.13	1.54	Mowed Grass
1045	834451.16	2034707.18	9.45	834453.32	2034706.31	9.57	-2.16	0.86	-0.12	2.32	Mowed Grass
1046	834451.16	2034707.18	9.45	834453.17	2034708.70	9.54	-2.01	-1.52	-0.09	2.52	Mowed Grass
1047	834431.63	2034708.76	9.47	834428.74	2034708.41	9.60	2.89	0.35	-0.12	2.91	Mowed Grass

1048	834431.63	2034708.76	9.47	834430.37	2034707.52	9.61	1.26	1.24	-0.13	1.76	Mowed Grass
1049	834431.63	2034708.76	9.47	834432.82	2034707.61	9.63	-1.19	1.15	-0.16	1.65	Mowed Grass
1050	834431.63	2034708.76	9.47	834434.20	2034709.02	9.63	-2.57	-0.26	-0.16	2.59	Mowed Grass
1051	834431.63	2034708.76	9.47	834430.22	2034709.92	9.52	1.41	-1.16	-0.04	1.83	Mowed Grass
1052	834431.63	2034708.76	9.47	834432.67	2034709.99	9.62	-1.04	-1.23	-0.14	1.61	Mowed Grass
1053	834487.62	2034708.84	9.29	834484.67	2034708.32	9.45	2.95	0.52	-0.16	3.00	Mowed Grass
1054	834487.62	2034708.84	9.29	834487.41	2034707.64	9.38	0.21	1.20	-0.09	1.22	Mowed Grass
1055	834487.62	2034708.84	9.29	834488.60	2034707.11	9.38	-0.98	1.73	-0.09	1.99	Mowed Grass
1056	834487.62	2034708.84	9.29	834488.46	2034709.49	9.40	-0.84	-0.65	-0.11	1.06	Mowed Grass
1057	834487.62	2034708.84	9.29	834487.26	2034710.05	9.45	0.36	-1.21	-0.16	1.26	Mowed Grass
1058	834450.90	2034710.70	9.45	834449.43	2034709.07	9.59	1.47	1.63	-0.14	2.20	Mowed Grass
1059	834450.90	2034710.70	9.45	834452.39	2034708.84	9.54	-1.49	1.86	-0.09	2.38	Mowed Grass
1060	834450.90	2034710.70	9.45	834448.51	2034710.04	9.57	2.39	0.66	-0.12	2.48	Mowed Grass
1061	834450.90	2034710.70	9.45	834449.29	2034711.44	9.55	1.61	-0.74	-0.10	1.77	Mowed Grass
1062	834450.90	2034710.70	9.45	834452.24	2034711.25	9.60	-1.34	-0.55	-0.15	1.44	Mowed Grass
1063	834450.90	2034710.70	9.45	834453.03	2034711.08	9.53	-2.13	-0.38	-0.08	2.16	Mowed Grass
1064	834445.99	2034711.21	9.47	834444.70	2034708.65	9.62	1.29	2.56	-0.15	2.86	Mowed Grass
1065	834445.99	2034711.21	9.47	834445.76	2034708.24	9.62	0.23	2.97	-0.15	2.97	Mowed Grass
1066	834445.99	2034711.21	9.47	834444.40	2034713.47	9.60	1.59	-2.26	-0.13	2.77	Mowed Grass
1067	834445.99	2034711.21	9.47	834444.55	2034711.05	9.64	1.44	0.16	-0.17	1.45	Mowed Grass
1068	834445.99	2034711.21	9.47	834445.62	2034710.66	9.58	0.37	0.55	-0.11	0.66	Mowed Grass
1069	834445.99	2034711.21	9.47	834445.47	2034713.06	9.56	0.52	-1.85	-0.09	1.93	Mowed Grass
1070	834445.99	2034711.21	9.47	834448.36	2034712.45	9.59	-2.37	-1.24	-0.12	2.68	Mowed Grass
1071	834445.99	2034711.21	9.47	834448.51	2034710.04	9.57	-2.52	1.17	-0.10	2.78	Mowed Grass
1072	834435.74	2034712.86	9.47	834434.06	2034711.41	9.62	1.68	1.45	-0.15	2.21	Mowed Grass
1073	834435.74	2034712.86	9.47	834433.92	2034713.80	9.59	1.82	-0.94	-0.12	2.05	Mowed Grass
1074	834435.74	2034712.86	9.47	834436.45	2034713.59	9.55	-0.71	-0.73	-0.08	1.02	Mowed Grass
1075	834435.74	2034712.86	9.47	834436.59	2034711.21	9.59	-0.85	1.65	-0.12	1.85	Mowed Grass
1076	834435.74	2034712.86	9.47	834437.84	2034712.43	9.61	-2.10	0.43	-0.14	2.15	Mowed Grass
1077	834435.74	2034712.86	9.47	834437.70	2034714.85	9.59	-1.96	-1.99	-0.12	2.80	Mowed Grass
1078	834491.58	2034713.50	9.30	834490.96	2034713.99	9.45	0.62	-0.49	-0.15	0.79	Mowed Grass
1079	834491.58	2034713.50	9.30	834491.11	2034711.59	9.37	0.47	1.91	-0.07	1.97	Mowed Grass

1080	834491.58	2034713.50	9.30	834492.18	2034710.62	9.36	-0.60	2.88	-0.06	2.95	Mowed Grass
1081	834491.58	2034713.50	9.30	834492.04	2034713.03	9.35	-0.46	0.47	-0.05	0.66	Mowed Grass
1082	834491.58	2034713.50	9.30	834491.89	2034715.47	9.43	-0.31	-1.97	-0.13	1.99	Mowed Grass
1083	834439.67	2034717.16	9.45	834437.56	2034717.23	9.55	2.11	-0.07	-0.10	2.12	Mowed Grass
1084	834439.67	2034717.16	9.45	834440.22	2034717.37	9.58	-0.55	-0.21	-0.13	0.59	Mowed Grass
1085	834439.67	2034717.16	9.45	834440.36	2034714.96	9.59	-0.69	2.20	-0.14	2.30	Mowed Grass
1086	834439.67	2034717.16	9.45	834441.47	2034716.11	9.61	-1.80	1.05	-0.16	2.08	Mowed Grass
1087	834439.67	2034717.16	9.45	834441.32	2034718.52	9.56	-1.65	-1.36	-0.11	2.14	Mowed Grass
1088	834439.67	2034717.16	9.45	834440.07	2034719.79	9.56	-0.40	-2.63	-0.11	2.66	Mowed Grass
1089	834494.66	2034718.51	9.29	834491.75	2034717.86	9.41	2.91	0.65	-0.12	2.98	Mowed Grass
1090	834494.66	2034718.51	9.29	834494.57	2034717.23	9.41	0.09	1.28	-0.12	1.28	Mowed Grass
1091	834494.66	2034718.51	9.29	834495.57	2034716.37	9.36	-0.91	2.14	-0.06	2.33	Mowed Grass
1092	834494.66	2034718.51	9.29	834495.43	2034718.78	9.40	-0.77	-0.27	-0.11	0.82	Mowed Grass
1093	834494.66	2034718.51	9.29	834494.42	2034719.66	9.48	0.24	-1.15	-0.19	1.17	Mowed Grass
1094	834494.66	2034718.51	9.29	834495.28	2034721.22	9.45	-0.62	-2.71	-0.15	2.78	Mowed Grass
1095	834474.39	2034718.78	9.43	834472.37	2034717.23	9.49	2.02	1.55	-0.06	2.55	Mowed Grass
1096	834474.39	2034718.78	9.43	834474.63	2034719.28	9.57	-0.24	-0.50	-0.14	0.55	Mowed Grass
1097	834474.39	2034718.78	9.43	834474.77	2034716.84	9.53	-0.38	1.94	-0.10	1.97	Mowed Grass
1098	834474.39	2034718.78	9.43	834476.32	2034718.47	9.50	-1.93	0.31	-0.07	1.95	Mowed Grass
1099	834474.39	2034718.78	9.43	834472.22	2034719.68	9.53	2.17	-0.90	-0.10	2.35	Mowed Grass
1100	834474.39	2034718.78	9.43	834474.48	2034721.69	9.55	-0.09	-2.91	-0.12	2.91	Mowed Grass
1101	834474.39	2034718.78	9.43	834476.18	2034720.90	9.56	-1.79	-2.12	-0.13	2.77	Mowed Grass
1102	834443.29	2034721.21	9.49	834441.18	2034720.91	9.56	2.11	0.30	-0.07	2.13	Mowed Grass
1103	834443.29	2034721.21	9.49	834443.82	2034723.14	9.58	-0.53	-1.93	-0.09	2.00	Mowed Grass
1104	834443.29	2034721.21	9.49	834443.96	2034720.71	9.63	-0.67	0.50	-0.14	0.84	Mowed Grass
1105	834443.29	2034721.21	9.49	834445.05	2034720.31	9.55	-1.76	0.90	-0.06	1.98	Mowed Grass
1106	834443.29	2034721.21	9.49	834444.90	2034722.73	9.52	-1.61	-1.52	-0.03	2.21	Mowed Grass
1107	834469.31	2034722.18	9.40	834466.78	2034721.96	9.56	2.53	0.22	-0.16	2.54	Mowed Grass
1108	834469.31	2034722.18	9.40	834468.20	2034720.69	9.52	1.11	1.49	-0.12	1.86	Mowed Grass
1109	834469.31	2034722.18	9.40	834468.06	2034723.13	9.50	1.25	-0.95	-0.10	1.57	Mowed Grass
1110	834469.31	2034722.18	9.40	834470.52	2034722.96	9.54	-1.21	-0.78	-0.14	1.44	Mowed Grass
1111	834469.31	2034722.18	9.40	834470.66	2034720.55	9.54	-1.35	1.63	-0.14	2.12	Mowed Grass

1112	834469.31	2034722.18	9.40	834472.08	2034722.09	9.50	-2.77	0.09	-0.10	2.77	Mowed Grass
1113	834478.07	2034722.83	9.41	834476.18	2034720.90	9.56	1.89	1.93	-0.15	2.70	Mowed Grass
1114	834478.07	2034722.83	9.41	834476.03	2034723.32	9.55	2.04	-0.49	-0.14	2.10	Mowed Grass
1115	834478.07	2034722.83	9.41	834478.31	2034724.36	9.54	-0.24	-1.53	-0.13	1.55	Mowed Grass
1116	834478.07	2034722.83	9.41	834478.45	2034721.94	9.52	-0.38	0.89	-0.11	0.96	Mowed Grass
1117	834478.07	2034722.83	9.41	834480.00	2034721.98	9.50	-1.93	0.85	-0.09	2.10	Mowed Grass
1118	834478.07	2034722.83	9.41	834479.86	2034724.38	9.53	-1.79	-1.55	-0.12	2.37	Mowed Grass
1119	834497.71	2034723.63	9.30	834495.14	2034723.63	9.39	2.57	0.00	-0.09	2.57	Mowed Grass
1120	834497.71	2034723.63	9.30	834498.03	2034723.50	9.46	-0.32	0.13	-0.16	0.35	Mowed Grass
1121	834497.71	2034723.63	9.30	834498.17	2034721.08	9.42	-0.46	2.55	-0.12	2.59	Mowed Grass
1122	834497.71	2034723.63	9.30	834498.88	2034722.56	9.40	-1.17	1.07	-0.10	1.59	Mowed Grass
1123	834497.71	2034723.63	9.30	834497.88	2034725.92	9.45	-0.17	-2.29	-0.14	2.30	Mowed Grass
1124	834497.71	2034723.63	9.30	834498.74	2034724.96	9.43	-1.03	-1.33	-0.12	1.68	Mowed Grass
1125	834464.28	2034726.12	9.41	834463.92	2034724.04	9.53	0.36	2.08	-0.12	2.11	Mowed Grass
1126	834464.28	2034726.12	9.41	834466.63	2034724.41	9.53	-2.35	1.71	-0.12	2.91	Mowed Grass
1127	834464.28	2034726.12	9.41	834462.63	2034727.33	9.56	1.65	-1.21	-0.15	2.04	Mowed Grass
1128	834464.28	2034726.12	9.41	834462.77	2034724.91	9.55	1.51	1.21	-0.14	1.94	Mowed Grass
1129	834464.28	2034726.12	9.41	834463.78	2034726.48	9.51	0.50	-0.36	-0.10	0.61	Mowed Grass
1130	834464.28	2034726.12	9.41	834463.64	2034728.91	9.52	0.64	-2.79	-0.11	2.86	Mowed Grass
1131	834464.28	2034726.12	9.41	834466.49	2034726.81	9.52	-2.21	-0.69	-0.11	2.31	Mowed Grass
1132	834473.51	2034726.67	9.39	834471.94	2034724.53	9.50	1.57	2.14	-0.11	2.65	Mowed Grass
1133	834473.51	2034726.67	9.39	834474.33	2034724.14	9.55	-0.82	2.53	-0.16	2.66	Mowed Grass
1134	834473.51	2034726.67	9.39	834471.80	2034726.94	9.50	1.71	-0.27	-0.11	1.73	Mowed Grass
1135	834473.51	2034726.67	9.39	834474.04	2034728.99	9.53	-0.53	-2.32	-0.14	2.38	Mowed Grass
1136	834473.51	2034726.67	9.39	834474.18	2034726.55	9.53	-0.67	0.12	-0.14	0.68	Mowed Grass
1137	834473.51	2034726.67	9.39	834475.89	2034725.76	9.52	-2.38	0.91	-0.13	2.55	Mowed Grass
1138	834473.51	2034726.67	9.39	834475.75	2034728.19	9.51	-2.24	-1.52	-0.12	2.71	Mowed Grass
1139	834500.07	2034729.31	9.31	834497.73	2034728.37	9.45	2.34	0.94	-0.14	2.52	Mowed Grass
1140	834500.07	2034729.31	9.31	834498.59	2034727.42	9.44	1.48	1.89	-0.13	2.40	Mowed Grass
1141	834500.07	2034729.31	9.31	834501.40	2034729.39	9.42	-1.33	-0.08	-0.11	1.33	Mowed Grass
1142	834500.07	2034729.31	9.31	834501.55	2034726.95	9.43	-1.48	2.36	-0.12	2.78	Mowed Grass
1143	834500.07	2034729.31	9.31	834502.24	2034728.82	9.43	-2.17	0.49	-0.12	2.22	Mowed Grass

1144	834500.07	2034729.31	9.31	834497.58	2034730.81	9.45	2.49	-1.50	-0.14	2.91	Mowed Grass
1145	834500.07	2034729.31	9.31	834498.45	2034729.86	9.44	1.62	-0.55	-0.13	1.71	Mowed Grass
1146	834500.07	2034729.31	9.31	834501.25	2034731.83	9.45	-1.18	-2.52	-0.14	2.78	Mowed Grass
1147	834500.07	2034729.31	9.31	834502.09	2034731.26	9.41	-2.02	-1.95	-0.10	2.81	Mowed Grass
1148	834484.86	2034729.91	9.39	834483.53	2034727.67	9.51	1.33	2.24	-0.12	2.61	Mowed Grass
1149	834484.86	2034729.91	9.39	834486.07	2034729.44	9.40	-1.21	0.47	-0.01	1.30	Mowed Grass
1150	834484.86	2034729.91	9.39	834487.31	2034728.83	9.45	-2.45	1.08	-0.05	2.68	Mowed Grass
1151	834484.86	2034729.91	9.39	834483.38	2034730.10	9.55	1.48	-0.19	-0.16	1.49	Mowed Grass
1152	834484.86	2034729.91	9.39	834485.93	2034731.90	9.49	-1.07	-1.99	-0.10	2.26	Mowed Grass
1153	834484.86	2034729.91	9.39	834487.17	2034731.28	9.41	-2.31	-1.37	-0.02	2.69	Mowed Grass
1154	834459.42	2034730.45	9.44	834458.77	2034728.59	9.58	0.65	1.85	-0.14	1.97	Mowed Grass
1155	834459.42	2034730.45	9.44	834459.54	2034729.37	9.58	-0.12	1.07	-0.14	1.08	Mowed Grass
1156	834459.42	2034730.45	9.44	834458.62	2034731.03	9.60	0.80	-0.58	-0.16	0.99	Mowed Grass
1157	834459.42	2034730.45	9.44	834459.39	2034731.84	9.57	0.03	-1.40	-0.13	1.40	Mowed Grass
1158	834468.63	2034730.53	9.41	834466.34	2034729.27	9.54	2.29	1.26	-0.12	2.61	Mowed Grass
1159	834468.63	2034730.53	9.41	834467.77	2034727.99	9.50	0.86	2.54	-0.09	2.68	Mowed Grass
1160	834468.63	2034730.53	9.41	834466.19	2034731.70	9.55	2.44	-1.17	-0.14	2.71	Mowed Grass
1161	834468.63	2034730.53	9.41	834467.63	2034730.41	9.52	1.00	0.12	-0.11	1.01	Mowed Grass
1162	834468.63	2034730.53	9.41	834467.49	2034732.89	9.56	1.14	-2.36	-0.15	2.62	Mowed Grass
1163	834468.63	2034730.53	9.41	834469.93	2034732.72	9.57	-1.30	-2.19	-0.16	2.55	Mowed Grass
1164	834468.63	2034730.53	9.41	834470.08	2034730.27	9.58	-1.45	0.26	-0.17	1.47	Mowed Grass
1165	834480.71	2034733.04	9.39	834479.43	2034731.68	9.54	1.28	1.36	-0.15	1.87	Mowed Grass
1166	834480.71	2034733.04	9.39	834479.29	2034734.10	9.53	1.42	-1.06	-0.14	1.77	Mowed Grass
1167	834480.71	2034733.04	9.39	834481.80	2034733.42	9.52	-1.09	-0.38	-0.13	1.16	Mowed Grass
1168	834480.71	2034733.04	9.39	834481.95	2034730.97	9.54	-1.24	2.07	-0.15	2.41	Mowed Grass
1169	834480.71	2034733.04	9.39	834483.24	2034732.52	9.51	-2.53	0.52	-0.12	2.59	Mowed Grass
1170	834480.71	2034733.04	9.39	834481.65	2034735.87	9.52	-0.94	-2.83	-0.13	2.98	Mowed Grass
1171	834455.06	2034734.58	9.48	834454.81	2034732.20	9.62	0.25	2.39	-0.14	2.40	Mowed Grass
1172	834455.06	2034734.58	9.48	834455.47	2034733.17	9.58	-0.41	1.42	-0.10	1.47	Mowed Grass
1173	834455.06	2034734.58	9.48	834454.51	2034737.11	9.57	0.55	-2.53	-0.09	2.58	Mowed Grass
1174	834455.06	2034734.58	9.48	834454.66	2034734.66	9.62	0.40	-0.07	-0.14	0.40	Mowed Grass
1175	834455.06	2034734.58	9.48	834455.32	2034735.65	9.60	-0.26	-1.06	-0.12	1.10	Mowed Grass

1176	834485.91	2034734.67	9.36	834485.78	2034734.36	9.49	0.13	0.31	-0.13	0.33	Mowed Grass
1177	834485.91	2034734.67	9.36	834485.93	2034731.90	9.49	-0.02	2.77	-0.13	2.77	Mowed Grass
1178	834485.91	2034734.67	9.36	834487.02	2034733.72	9.43	-1.11	0.95	-0.07	1.46	Mowed Grass
1179	834485.91	2034734.67	9.36	834483.09	2034734.98	9.51	2.82	-0.31	-0.15	2.83	Mowed Grass
1180	834485.91	2034734.67	9.36	834485.62	2034736.84	9.50	0.29	-2.17	-0.14	2.19	Mowed Grass
1181	834485.91	2034734.67	9.36	834486.88	2034736.17	9.45	-0.97	-1.50	-0.09	1.79	Mowed Grass
1182	834464.30	2034735.04	9.38	834463.35	2034733.81	9.54	0.95	1.23	-0.16	1.55	Mowed Grass
1183	834464.30	2034735.04	9.38	834466.04	2034734.19	9.56	-1.74	0.85	-0.18	1.94	Mowed Grass
1184	834464.30	2034735.04	9.38	834462.19	2034734.66	9.56	2.11	0.38	-0.18	2.14	Mowed Grass
1185	834464.30	2034735.04	9.38	834463.21	2034736.27	9.50	1.09	-1.23	-0.12	1.64	Mowed Grass
1186	834464.30	2034735.04	9.38	834465.90	2034736.61	9.56	-1.60	-1.57	-0.18	2.25	Mowed Grass
1187	834475.92	2034737.15	9.42	834473.44	2034738.82	9.60	2.48	-1.67	-0.18	2.99	Mowed Grass
1188	834475.92	2034737.15	9.42	834473.59	2034736.35	9.58	2.33	0.80	-0.16	2.47	Mowed Grass
1189	834475.92	2034737.15	9.42	834475.32	2034735.52	9.54	0.60	1.63	-0.12	1.74	Mowed Grass
1190	834475.92	2034737.15	9.42	834475.17	2034737.97	9.57	0.75	-0.82	-0.15	1.11	Mowed Grass
1191	834475.92	2034737.15	9.42	834477.41	2034739.05	9.55	-1.49	-1.90	-0.13	2.41	Mowed Grass
1192	834475.92	2034737.15	9.42	834477.56	2034736.61	9.53	-1.64	0.54	-0.11	1.72	Mowed Grass
1193	834481.70	2034738.83	9.38	834479.00	2034738.99	9.56	2.70	-0.16	-0.18	2.71	Mowed Grass
1194	834481.70	2034738.83	9.38	834481.50	2034738.33	9.53	0.20	0.50	-0.15	0.54	Mowed Grass
1195	834481.70	2034738.83	9.38	834481.65	2034735.87	9.52	0.05	2.96	-0.14	2.96	Mowed Grass
1196	834481.70	2034738.83	9.38	834482.95	2034737.43	9.51	-1.25	1.40	-0.13	1.87	Mowed Grass
1197	834481.70	2034738.83	9.38	834481.35	2034740.82	9.54	0.35	-1.99	-0.16	2.02	Mowed Grass
1198	834481.70	2034738.83	9.38	834482.80	2034739.89	9.54	-1.10	-1.06	-0.16	1.53	Mowed Grass
1199	834460.00	2034739.00	9.42	834458.18	2034738.39	9.56	1.82	0.61	-0.14	1.92	Mowed Grass
1200	834460.00	2034739.00	9.42	834459.11	2034736.73	9.56	0.89	2.27	-0.14	2.44	Mowed Grass
1201	834460.00	2034739.00	9.42	834458.96	2034739.19	9.57	1.04	-0.19	-0.15	1.06	Mowed Grass
1202	834460.00	2034739.00	9.42	834461.89	2034739.57	9.56	-1.89	-0.57	-0.14	1.98	Mowed Grass
1203	834460.00	2034739.00	9.42	834462.04	2034737.10	9.53	-2.04	1.90	-0.11	2.79	Mowed Grass
1204	834460.00	2034739.00	9.42	834458.03	2034740.85	9.55	1.97	-1.85	-0.13	2.70	Mowed Grass
1205	834460.00	2034739.00	9.42	834458.82	2034741.66	9.55	1.18	-2.66	-0.13	2.91	Mowed Grass
1206	834471.15	2034741.43	9.43	834471.08	2034739.20	9.57	0.07	2.23	-0.14	2.23	Mowed Grass
1207	834471.15	2034741.43	9.43	834469.33	2034742.57	9.57	1.82	-1.14	-0.14	2.14	Mowed Grass

1208	834471.15	2034741.43	9.43	834469.48	2034740.09	9.54	1.67	1.34	-0.11	2.14	Mowed Grass
1209	834471.15	2034741.43	9.43	834470.94	2034741.67	9.54	0.21	-0.24	-0.11	0.32	Mowed Grass
1210	834471.15	2034741.43	9.43	834470.79	2034744.13	9.55	0.36	-2.70	-0.12	2.72	Mowed Grass
1211	834471.15	2034741.43	9.43	834473.29	2034741.29	9.58	-2.14	0.14	-0.15	2.15	Mowed Grass
1212	834477.31	2034743.10	9.39	834474.88	2034742.86	9.54	2.43	0.24	-0.15	2.45	Mowed Grass
1213	834477.31	2034743.10	9.39	834477.10	2034743.98	9.52	0.21	-0.88	-0.13	0.90	Mowed Grass
1214	834477.31	2034743.10	9.39	834477.26	2034741.52	9.55	0.05	1.58	-0.16	1.58	Mowed Grass
1215	834477.31	2034743.10	9.39	834478.85	2034741.44	9.56	-1.54	1.66	-0.17	2.26	Mowed Grass
1216	834477.31	2034743.10	9.39	834478.71	2034743.89	9.58	-1.40	-0.79	-0.19	1.60	Mowed Grass
1217	834465.94	2034745.36	9.40	834465.45	2034744.03	9.55	0.49	1.33	-0.15	1.42	Mowed Grass
1218	834465.94	2034745.36	9.40	834466.91	2034742.71	9.48	-0.97	2.65	-0.08	2.82	Mowed Grass
1219	834465.94	2034745.36	9.40	834465.30	2034746.49	9.57	0.64	-1.13	-0.17	1.30	Mowed Grass
1220	834465.94	2034745.36	9.40	834466.77	2034745.18	9.49	-0.83	0.18	-0.09	0.85	Mowed Grass
1221	834465.94	2034745.36	9.40	834466.62	2034747.66	9.53	-0.68	-2.30	-0.13	2.40	Mowed Grass
1222	834472.89	2034747.16	9.42	834470.65	2034746.59	9.54	2.24	0.57	-0.12	2.31	Mowed Grass
1223	834472.89	2034747.16	9.42	834472.84	2034748.71	9.61	0.05	-1.55	-0.19	1.55	Mowed Grass
1224	834472.89	2034747.16	9.42	834472.99	2034746.23	9.56	-0.10	0.93	-0.14	0.93	Mowed Grass
1225	834472.89	2034747.16	9.42	834474.74	2034745.36	9.54	-1.85	1.80	-0.12	2.58	Mowed Grass
1226	834472.89	2034747.16	9.42	834474.59	2034747.82	9.61	-1.70	-0.66	-0.19	1.83	Mowed Grass

CONTROL MARK DATA SHEETS

1 National Geodetic Survey, Retrieval Date = JANUARY 20, 2004
TV1515 *****
TV1515 PACS - This is a Primary Airport Control Station.
TV1515 DESIGNATION - BQN B
TV1515 PID - TV1515
TV1515 COUNTRY - PUERTO RICO
TV1515 USGS QUAD -
TV1515
TV1515 *CURRENT SURVEY CONTROL
TV1515

TV1515* NAD 83(1997)- 18 29 31.29419(N) 067 08 01.03648(W) ADJUSTED
TV1515* PRVD02 - 68.676 (meters) 225.31 (feet) ADJUSTED
TV1515

TV1515 X - 2,351,271.249 (meters) COMP
TV1515 Y - -5,575,363.385 (meters) COMP
TV1515 Z - 2,010,112.824 (meters) COMP
TV1515 LAPLACE CORR- 2.59 (seconds) DEFLEC99
TV1515 ELLIP HEIGHT- 24.03 (meters) (05/12/97) GPS OBS
TV1515 GEOID HEIGHT- -46.97 (meters) GEOID99
TV1515
TV1515 HORZ ORDER - B
TV1515 VERT ORDER - FIRST CLASS II
TV1515 ELLP ORDER - FOURTH CLASS II
TV1515
TV1515.This mark is at Rafael Hernandez Airport (BQN)
TV1515
TV1515.The horizontal coordinates were established by GPS observations
TV1515.and adjusted by the National Geodetic Survey in May 1997.
TV1515
TV1515.The orthometric height was determined by differential leveling
TV1515.and adjusted by the National Geodetic Survey in April 2003.
TV1515.No vertical observational check was made to the station.
TV1515
TV1515.Photographs are available for this station.
TV1515
TV1515.The X, Y, and Z were computed from the position and the ellipsoidal ht.
TV1515
TV1515.The Laplace correction was computed from DEFLEC99 derived deflections.
TV1515
TV1515.The ellipsoidal height was determined by GPS observations
TV1515.and is referenced to NAD 83.
TV1515
TV1515.The geoid height was determined by GEOID99.
TV1515
TV1515;
TV1515; North East Units Scale Converg.
TV1515;SPC PRVI - 273,047.037 126,044.302 MT 1.00000408 -0 13 08.8
TV1515;UTM 19 - 2,045,640.999 697,052.571 MT 1.00008005 +0 35 31.8
TV1515
TV1515 SUPERSEDED SURVEY CONTROL
TV1515
TV1515 NAD 83(1993)- 18 29 31.29166(N) 067 08 01.04593(W) AD() B
TV1515 ELLIP H (01/13/94) 24.08 (m) GP() 4 1
TV1515
TV1515.Superseded values are not recommended for survey control.
TV1515.NGS no longer adjusts projects to the PR datum.
TV1515.See file dsdata.txt to determine how the superseded data were derived.
TV1515
TV1515_U.S. NATIONAL GRID SPATIAL ADDRESS: 19QFA9705345641(NAD 83)
TV1515_MARKER: DD = SURVEY DISK
TV1515_SETTING: 34 = ABANDONED FOOTING
TV1515_STAMPING: BQN B 1993
TV1515_MARK LOGO: NOS

TV1515_MAGNETIC: N = NO MAGNETIC MATERIAL

TV1515_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

TV1515+STABILITY: SURFACE MOTION

TV1515_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR

TV1515+SATELLITE: SATELLITE OBSERVATIONS - March 08, 2002

TV1515

TV1515 HISTORY	- Date	Condition	Report By
TV1515 HISTORY	- 1993	MONUMENTED	NOS

TV1515 HISTORY	- 19930420	GOOD	NGS
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TV1515 HISTORY	- 19960329	GOOD	NGS
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TV1515 HISTORY	- 20000222	GOOD	NGS
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TV1515 HISTORY	- 20020308	GOOD	NGS
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TV1515

TV1515 STATION DESCRIPTION

TV1515

TV1515'DESCRIBED BY NATIONAL OCEAN SERVICE 1993

TV1515'THE STATION IS LOCATED AT THE RAFAEL HERNANDEZ AIRPORT NEAR MID-FIELD.

TV1515'TO OBTAIN ACCESS TO THE AIRFIELD, CONTACT MR GONZALO GONZALY AIRPORT

TV1515'MANAGER (AT THIS TIME). P.O. BOX 446, RAMEY PUERTO RICO 00604. PHONE

TV1515'809-891-0006 OR 891-2286.

TV1515'THE STATION IS LOCATED NEAR THE CENTER OF THE AIRPORT, SOUTHEAST OF

TV1515'THE TERMINAL BLDG AND NORTHEAST OF A SMALL RED AND WHITE CONTROL

TV1515'TOWER (UNICOM TOWER), SOUTH OF RUNWAY 8-26 ON A GRASSY KNOLL.

TV1515'STATION IS LOCATED 164.89 M (540.98 FT) SOUTH OF THE CENTER LINE OF

TV1515'RUNWAY 8-26, 95.4 M (313.0 FT) EAST OF THE CENTERLINE OF A

TV1515'NORTH/SOUTH SERVICE ROAD, 46.85 M (153.71 FT) NORTHWEST OF THE CENTER

TV1515'OF A 4X6 FOOT CONCRETE VAULT. DISK IS CEMENTED IN THE NORTHWEST

TV1515'CORNER OF A 6X6 FOOT CONCRETE MANHOLE WHICH PROJECTS 0.46 M (1.51 FT).

TV1515

TV1515 STATION RECOVERY (1993)

TV1515

TV1515'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1993

TV1515'THE STATION IS LOCATED NEAR THE CENTER OF THE AIRPORT IN THE GRASS

TV1515'AREA SOUTH OF RWY 8-26 AND OPPOSITE THE TERMINAL BUILDING. IT IS 541

TV1515'FT (164.9 M) SOUTH OF THE CENTERLINE OF THE RUNWAY, 313 FT (95.4 M)

TV1515'EAST OF THE CENTERLINE OF A N/S SERVICE ROAD, 331.8 FT (101.1 M)

TV1515'NORTHEAST OF THE NORTHEAST CORNER OF THE UNICOM TOWER (A SMALL CONTROL

TV1515'TOWER PAINTED RED AND WHITE), AND 153.7 FT (46.8 M) NORTHWEST OF THE

TV1515'CENTER OF A 4 FT (1.2 M) X 6 FT (1.8 M) CONCRETE VAULT. IT IS AN NOS

TV1515'DISK STAMPED BQN B 1993 AND CEMENTED IN A DRILL HOLE IN THE NORTHWEST

TV1515'CORNER OF A 6 FT (1.8 M) X 6 FT (1.8 M) CONCRETE MANHOLE THAT PROJECTS

TV1515'1.5 FT (0.5 M) ABOVE THE GROUND.

TV1515

TV1515 STATION RECOVERY (1996)

TV1515

TV1515'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1996 (AJL)

TV1515'THE STATION IS LOCATED NEAR THE NORTHWEST CORNER OF THE ISLAND OF

TV1515'PUERTO RICO, NORTH-NORTHEAST OF AGUADILLA, AT THE RAFAEL HERNANDEZ

TV1515'AIRPORT. NEAR THE CENTER OF THE AIRPORT, SOUTH OF AND ACROSS THE

TV1515'RUNWAY FROM THE FEDEX HANGAR (CENTER 1 OF 3 HANGARS), ON A GRASS

TV1515'KNOLL NORTHEAST OF THE UNICOM TOWER, SET IN TOP OF AND 0.2 M (0.7 FT)

TV1515'EAST OF THE WEST CORNER OF A 6 X 6 X 12-FOOT DEEP CONCRETE MANHOLE

TV1515'JUNCTION BOX PROJECTING ABOUT 0.4 M. (1.3 FT) OWNERSHIP--PUERTO RICO

TV1515'PORT AUTHORITY, RAFAEL HERNANDEZ AIRPORT, P.O. BOX 250466, AGUADILLA,

TV1515'PUERTO RICO. 00604-0466. AIRPORT MANAGER GONZALO GONZALEZ, PHONE

TV1515'787-891-0006 OR 891-2286. NOTE--CONTACT AIRPORT MANAGER ON ARRIVAL,

TV1515'(ESCORT REQUIRED. NOTE--THIS STATION WAS SELECTED AS A (PACS) .

TV1515'LOCATED 164.9 M (541.0 FT) SOUTH OF THE RUNWAY CENTERLINE, 101.1 M

TV1515'(331.7 FT) NORTHEAST OF THE UNICOM TOWERS NORTHEAST CORNER, 95.4 M

TV1515'(313.0 FT) EAST OF A NORTH-SOUTH SERVICE ROAD, 46.8 M (153.5 FT)

TV1515'NORTHWEST OF THE CENTER OF A 4 X 6-FOOT CONCRETE VAULT, AND THE

TV1515'STATION IS ABOUT 2.0 M (6.6 FT) ABOVE THE LEVEL OF THE RUNWAY AND

TV1515'PROJECTING ABOUT 0.4 M (1.3 FT) ABOVE THE GROUND SURFACE. BY R.G.
TV1515'HAYES
TV1515
TV1515 STATION RECOVERY (2000)
TV1515
TV1515'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2000 (APF)
TV1515'RECOVERED AS DESCRIBED.
TV1515
TV1515 STATION RECOVERY (2002)
TV1515
TV1515'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2002 (JMW)
TV1515'5.8 KM (3.6 MI) NORTHERLY ALONG STATE HIGHWAY 107 FROM THE JUNCTION OF
TV1515'STATE HIGHWAY 2 IN
TV1515'AGUADILLA, THENCE 1.3 KM (0.8 MI) EASTERLY ALONG ORIANDO ALACON AVENUE
TV1515'TO THE RAFAEL
TV1515'HERMANDAZ AIRPORT MAIN GATE, THENCE 0.7 KM (0.4 MI) SOUTHERLY ALONG
TV1515'A APRON AND THEN
TV1515'ACROSS THE RUNWAY TO THE TOP OF A SMALL KNOLL, NEAR THE NORTHWEST
TV1515'CORNER OF A 6 BY
TV1515'6-FOOT SEWER ACCESS BOX, 165.0 M SOUTH OF THE RUNWAY CENTERLINE, 101.0
TV1515'M NORTHEAST OF
TV1515'THE NORTHEAST CORNER OF THE UNICOM TOWER BUILDING, 46.8 M NORTHWEST OF
TV1515'THE CENTER OF
TV1515'AN ELECTRIC VAULT, 2.0 M ABOVE THE LEVEL OF THE RUNWAY, 0.4 M ABOVE
TV1515'THE GROUND SURFACE,
TV1515'AND 0.3 M SOUTH OF THE NORTH EDGE OF THE BOX. NOTE--THE MARK IS ON
TV1515'PROPERTY OWNED BY
TV1515'THE RAFAEL HERNANDAZ AIRPORT, P.O. BOX 250466, AGUADILLA, PR
TV1515'00604-0466, CONTACT GONZALO
TV1515'GONZALEX, AIRPORT MANAGER, PHONE 787-891-2286. THIS IS A PRIMARY
TV1515'AIRPORT CONTROL
TV1515'STATION.
TV1515'
TV1515'
TV1515'
TV1515'

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AB6971 *****
AB6971 CORS      - This is a GPS Continuously Operating Reference Station.
AB6971 DESIGNATION - ST. CROIX VLBA CORS L1 PHASE CENTER
AB6971 CORS_ID   - CRO1
AB6971 PID       - AB6971
AB6971 COUNTRY   - VIRGIN ISLANDS
AB6971 USGS QUAD  - EAST POINT (1982)
AB6971
AB6971                *CURRENT SURVEY CONTROL
AB6971
AB6971* NAD 83(CORS)- 17 45 24.82074(N)  064 35 03.55891(W)  ADJUSTED
AB6971* LOCAL TIDAL -
AB6971
AB6971 EPOCH DATE - 2002.00
AB6971 X          - 2,607,771.922 (meters)      COMP
AB6971 Y          - -5,488,078.711 (meters)      COMP
AB6971 Z          - 1,932,768.055 (meters)      COMP
AB6971 ELLIP HEIGHT- -29.85 (meters)      (03/??/02) GPS OBS
AB6971 GEOID HEIGHT- -43.78 (meters)      GEOID99
AB6971
AB6971 HORZ ORDER - SPECIAL (CORS)
AB6971 ELLP ORDER - SPECIAL (CORS)
AB6971
AB6971. ITRF positions are available for this station.
AB6971. The coordinates were established by GPS observations
AB6971. and adjusted by the National Geodetic Survey in March 2002.
AB6971. The coordinates are valid at the epoch date displayed above.
AB6971. The epoch date for horizontal control is a decimal equivalence
AB6971. of Year/Month/Day.
AB6971
AB6971
AB6971. The PID for the CORS ARP is AF9484.
AB6971
AB6971. The XYZ, and position/ellipsoidal ht. are equivalent.
AB6971
AB6971. The ellipsoidal height was determined by GPS observations
AB6971. and is referenced to NAD 83.
AB6971
AB6971. The geoid height was determined by GEOID99.
AB6971
AB6971;           North      East      Units Scale  Converg.
AB6971; SPC PRVI   - 192,529.711  396,088.307  MT  1.00002828 +0 34 42.7
AB6971
AB6971                SUPERSEDED SURVEY CONTROL
AB6971
AB6971 NAD 83(CORS)- 17 45 24.82013(N)  064 35 03.56199(W) AD(1997.00) c
AB6971 ELLIP H (07/??/98) -29.86 (m)      GP(1997.00) c c
AB6971 NAD 83(CORS)- 17 45 24.81958(N)  064 35 03.56280(W) AD(1996.00) c
AB6971 ELLIP H (09/??/96) -29.81 (m)      GP(1996.00) c c
AB6971
AB6971. Superseded values are not recommended for survey control.
AB6971. NGS no longer adjusts projects to the PR datum.
AB6971. See file dsdata.txt to determine how the superseded data were derived.
AB6971
AB6971 _U.S. NATIONAL GRID SPATIAL ADDRESS: 20QLE3203463998(NAD 83)
AB6971 _MARKER: STATION IS THE L1 PHASE CENTER OF THE GPS ANTENNA
AB6971
AB6971                STATION DESCRIPTION
AB6971
AB6971'DESCRIBED BY NATIONAL GEODETIC SURVEY
AB6971'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
AB6971'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

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AB6971'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
AB6971' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG
AB6971' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

AB9324 *****

AB9324 DESIGNATION - ST CROIX VLBA RM 1 GROUND MON

AB9324 PID - AB9324

AB9324 COUNTRY - VIRGIN ISLANDS

AB9324 USGS QUAD - EAST POINT (1982)

AB9324

AB9324 *CURRENT SURVEY CONTROL

AB9324

AB9324* NAD 83(CORS)- 17 45 24.82074(N) 064 35 03.55891(W) ADJUSTED

AB9324* LOCAL TIDAL -

AB9324

AB9324 EPOCH DATE - 2002.00

AB9324 X - 2,607,771.845 (meters) COMP

AB9324 Y - -5,488,078.547 (meters) COMP

AB9324 Z - 1,932,767.997 (meters) COMP

AB9324 LAPLACE CORR- -1.56 (seconds) DEFLEC99

AB9324 ELLIP HEIGHT- -30.04 (meters) (03/??/02) GPS OBS

AB9324 GEOID HEIGHT- -43.78 (meters) GEOID99

AB9324

AB9324 HORZ ORDER - A

AB9324 ELLP ORDER - FOURTH CLASS I

AB9324

AB9324. ITRF positions are available for this station.

AB9324. The horizontal coordinates were established by GPS observations

AB9324. and adjusted by the National Geodetic Survey in March 2002.

AB9324. The horizontal coordinates are valid at the epoch date displayed above.

AB9324. The epoch date for horizontal control is a decimal equivalence

AB9324. of Year/Month/Day.

AB9324

AB9324

AB9324. The X, Y, and Z were computed from the position and the ellipsoidal ht.

AB9324

AB9324. The Laplace correction was computed from DEFLEC99 derived deflections.

AB9324

AB9324. The ellipsoidal height was determined by GPS observations

AB9324. and is referenced to NAD 83.

AB9324

AB9324. The geoid height was determined by GEOID99.

AB9324

AB9324; North East Units Scale Converg.

AB9324; SPC PRVI - 192,529.711 396,088.307 MT 1.00002828 +0 34 42.7

AB9324; UTM 20 - 1,963,998.019 332,033.668 MT 0.99994882 -0 28 59.9

AB9324

AB9324 SUPERSEDED SURVEY CONTROL

AB9324

AB9324 NAD 83(CORS)- 17 45 24.82013(N) 064 35 03.56199(W) AD(1997.00) A

AB9324 ELLIP H (07/??/98) -30.05 (m) GP(1997.00) 4 1

AB9324 NAD 83(1996)- 17 45 24.81966(N) 064 35 03.56267(W) AD() A

AB9324 ELLIP H (12/09/96) -30.00 (m) GP() 1 1

AB9324 NAD 83(CORS)- 17 45 24.81958(N) 064 35 03.56280(W) AD(1996.00) A

AB9324 ELLIP H (09/??/96) -30.00 (m) GP(1996.00) 4 1

AB9324

AB9324. Superseded values are not recommended for survey control.

AB9324. NGS no longer adjusts projects to the PR datum.

AB9324. See file dsdata.txt to determine how the superseded data were derived.

AB9324

AB9324 _U.S. NATIONAL GRID SPATIAL ADDRESS: 20QLE3203463998(NAD 83)

AB9324 _MARKER: Z = SEE DESCRIPTION

AB9324 _SETTING: 0 = UNSPECIFIED SETTING

AB9324 _STAMPING: ST CROIX VLBA RM 1

AB9324 _MAGNETIC: N = NO MAGNETIC MATERIAL

AB9324 _STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY

AB9324_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AB9324+SATELLITE: SATELLITE OBSERVATIONS - 1996

AB9324

AB9324	HISTORY	- Date	Condition	Report By
AB9324	HISTORY	- 1996	MONUMENTED	NGS

AB9324

AB9324 STATION DESCRIPTION

AB9324

AB9324'DESCRIBED BY NATIONAL GEODETIC SURVEY 1996

AB9324'THIS MONUMENT IS ASSOCIATED WITH CORS SITE 'CRO1'

AB9324'LATEST INFORMATION INCLUDING POSITIONS AND VELOCITIES

AB9324'ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

AB9324'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.

AB9324' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG

AB9324' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

AB9324'

AB9324'

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AF9484 *****
AF9484 CORS      - This is a GPS Continuously Operating Reference Station.
AF9484 DESIGNATION - ST. CROIX VLBA CORS ARP
AF9484 CORS_ID   - CRO1
AF9484 PID       - AF9484
AF9484 COUNTRY   - VIRGIN ISLANDS
AF9484 USGS QUAD  - EAST POINT (1982)
AF9484
AF9484                *CURRENT SURVEY CONTROL
AF9484
AF9484* NAD 83(CORS)- 17 45 24.82074(N)  064 35 03.55891(W)  ADJUSTED
AF9484* LOCAL TIDAL -
AF9484
AF9484 EPOCH DATE - 2002.00
AF9484 X      - 2,607,771.877 (meters)      COMP
AF9484 Y      - -5,488,078.616 (meters)      COMP
AF9484 Z      - 1,932,768.021 (meters)      COMP
AF9484 ELLIP HEIGHT- -29.96 (meters)      (03/??/02) GPS OBS
AF9484 GEOID HEIGHT- -43.78 (meters)      GEOID99
AF9484
AF9484 HORZ ORDER - SPECIAL (CORS)
AF9484 ELLP ORDER - SPECIAL (CORS)
AF9484
AF9484. ITRF positions are available for this station.
AF9484. The coordinates were established by GPS observations
AF9484. and adjusted by the National Geodetic Survey in March 2002.
AF9484. The coordinates are valid at the epoch date displayed above.
AF9484. The epoch date for horizontal control is a decimal equivalence
AF9484. of Year/Month/Day.
AF9484
AF9484
AF9484. The PID for the CORS L1 Phase Center is AB6971.
AF9484
AF9484. The XYZ, and position/ellipsoidal ht. are equivalent.
AF9484
AF9484. The ellipsoidal height was determined by GPS observations
AF9484. and is referenced to NAD 83.
AF9484
AF9484. The geoid height was determined by GEOID99.
AF9484
AF9484;           North      East      Units Scale  Converg.
AF9484; SPC PRVI - 192,529.711  396,088.307  MT  1.00002828 +0 34 42.7
AF9484
AF9484                SUPERSEDED SURVEY CONTROL
AF9484
AF9484 NAD 83(CORS)- 17 45 24.82013(N)  064 35 03.56199(W) AD(1997.00) c
AF9484 ELLIP H (07/??/98) -29.97 (m)      GP(1997.00) c c
AF9484 NAD 83(CORS)- 17 45 24.81958(N)  064 35 03.56280(W) AD(1996.00) c
AF9484 ELLIP H (09/??/96) -29.92 (m)      GP(1996.00) c c
AF9484
AF9484. Superseded values are not recommended for survey control.
AF9484. NGS no longer adjusts projects to the PR datum.
AF9484. See file dsdata.txt to determine how the superseded data were derived.
AF9484
AF9484 _U.S. NATIONAL GRID SPATIAL ADDRESS: 20QLE3203463998(NAD 83)
AF9484 _MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
AF9484
AF9484                STATION DESCRIPTION
AF9484
AF9484'DESCRIBED BY NATIONAL GEODETIC SURVEY 2002
AF9484'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
AF9484'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE

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AF9484'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
AF9484' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG
AF9484' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

1 National Geodetic Survey, Retrieval Date = JANUARY 23, 2004
TV0019 *****
TV0019 DESIGNATION - DONNA
TV0019 PID - TV0019
TV0019 COUNTRY - PUERTO RICO
TV0019 USGS QUAD -
TV0019
TV0019 *CURRENT SURVEY CONTROL
TV0019
TV0019* NAD 83(1997)- 18 04 24.86810(N) 066 34 38.01132(W) ADJUSTED
TV0019* LOCAL TIDAL - 106.653 (meters) 349.91 (feet) ADJUSTED
TV0019
TV0019 LAPLACE CORR- 0.30 (seconds) DEFLEC99
TV0019 GEOID HEIGHT- -41.34 (meters) GEOID99
TV0019
TV0019 HORZ ORDER - FIRST
TV0019 VERT ORDER - FIRST CLASS II
TV0019
TV0019.The horizontal coordinates were established by classical geodetic methods
TV0019.and adjusted by the National Geodetic Survey in May 1997.
TV0019
TV0019.The orthometric height was determined by differential leveling
TV0019.and adjusted by the National Geodetic Survey.
TV0019
TV0019.The Laplace correction was computed from DEFLEC99 derived deflections.
TV0019
TV0019.The geoid height was determined by GEOID99.
TV0019
TV0019;
TV0019;SPC PRVI - 226,596.014 184,767.484 MT 0.99999781 -0 02 42.1
TV0019;UTM 19 - 2,000,008.318 756,436.830 MT 1.00041308 +0 45 07.4
TV0019
TV0019|-----|
TV0019|PID Reference Object Distance Geod. Az |
TV0019| dddmmss.s |
TV0019|TV0018 DONNA RM 2 15.371 METERS 00455 |
TV0019|TV1238 CENTER 409.759 METERS 0142405.8 |
TV0019|TV1236 PALM 382.395 METERS 04536 |
TV0019|TV0020 C 41 15 USE 55.112 METERS 09205 |
TV0019|TV0022 PAT 193.038 METERS 12116 |
TV0019|TV1237 MONROE 450.690 METERS 1471318.5 |
TV0019|TV1240 GEORGE 374.673 METERS 19912 |
TV0019|TV0017 DONNA RM 1 18.175 METERS 27916 |
TV0019|-----|
TV0019
TV0019 SUPERSEDED SURVEY CONTROL
TV0019
TV0019 NAD 83(1993)- 18 04 24.86615(N) 066 34 38.02051(W) AD() 1
TV0019 NAD 83(1986)- 18 04 24.83317(N) 066 34 37.99992(W) AD() 1
TV0019 PR - 18 04 31.96731(N) 066 34 39.37771(W) AD() 1
TV0019
TV0019.Superseded values are not recommended for survey control.
TV0019.NGS no longer adjusts projects to the PR datum.
TV0019.See file dsdata.txt to determine how the superseded data were derived.
TV0019
TV0019_U.S. NATIONAL GRID SPATIAL ADDRESS: 19QGA5643700008(NAD 83)
TV0019_MARKER: DS = TRIANGULATION STATION DISK
TV0019_SETTING: 0 = UNSPECIFIED SETTING
TV0019_STAMPING: DONNA 1982
TV0019_MARK LOGO: NGS
TV0019_MAGNETIC: N = NO MAGNETIC MATERIAL
TV0019_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO

TV0019+STABILITY: SURFACE MOTION

TV0019

TV0019	HISTORY	- Date	Condition	Report By
TV0019	HISTORY	- 1982	MONUMENTED	NGS
TV0019	HISTORY	- 1982	GOOD	NGS

TV0019

TV0019 STATION DESCRIPTION

TV0019

TV0019'DESCRIBED BY NATIONAL GEODETIC SURVEY 1982 (JCL)

TV0019'THE STATION IS LOCATED ABOUT 9.5 KM (6 MI) NORTHEAST OF PONCE,
TV0019'8 KM (5 MI) WEST-NORTHWEST OF THE SMALL TOWN OF JUANA DIAZ, AND
TV0019'ATOP THE CORPS OF ENGINEERS LABORATORY BUILDING.

TV0019'OWNERSHIP--U.S. ARMY CORPS OF ENGINEERS.

TV0019'

TV0019'TO REACH THE STATION FROM THE JUNCTION OF HIGHWAYS 14 AND 139

TV0019'ABOUT 4 KM (2-1/2 MI) NORTHEAST OF PONCE, GO NORTHERLY ON HIGHWAY

TV0019'139 FOR 0.5 KM (0.3 MI) TO A CROSSROAD. TURN RIGHT AND GO EAST

TV0019'ON A WINDING ROAD (HIGHWAY 139) FOR 3.1 KM (1.95 MI) TO A FORK.

TV0019'TAKE THE RIGHT FORK AND CONTINUE NORTHERLY ON HIGHWAY 139 FOR

TV0019'3.7 KM (2.35 MI) TO THE CORPS OF ENGINEERS LABORATORY

TV0019'BUILDING ON THE LEFT AND A GATE. TURN LEFT AND PASS

TV0019'THROUGH THE GATE AT THE STATION SITE. THE STATION IS LOCATED

TV0019'ON THE ROOF OF THE CORPS OF ENGINEERS LABORATORY BUILDING.

TV0019'

TV0019'THE STATION IS A STANDARD NGS DISK

TV0019'STAMPED---DONNA 1982---,

TV0019'SET INTO A DRILL HOLE IN A CONCRETE ROOF.

TV0019'IT IS LOCATED

TV0019'11.52 METERS (37.8 FT) SOUTHWEST FROM THE NORTHEAST EDGE OF THE

TV0019'ROOF,

TV0019'8.93 METERS (29.30 FT) NORTHWEST FROM THE SOUTHEAST EDGE OF THE

TV0019'ROOF,

TV0019'5.03 METERS (16.5 FT) WEST FROM A ANTENNA TOWER, AND

TV0019'3.75 METERS (12.3 FT) SOUTHEAST FROM THE NORTHWEST EDGE OF THE

TV0019'ROOF.

TV0019'

TV0019'REFERENCE MARK NUMBER 1 IS A STANDARD NGS DISK

TV0019'STAMPED---DONNA NO 1 1982---,

TV0019'CRIMPED TO THE TOP OF A STAINLESS STEEL ROD DRIVEN TO THE DEPTH

TV0019'OF 12 FEET AND SURROUNDED BY A CONCRETE POST 25 CM IN DIAMETER

TV0019'RECESSED 2 CM BELOW THE GROUND.

TV0019'IT IS LOCATED

TV0019'23.28 METERS (76.4 FT) WEST FROM A ANTENNA TOWER,

TV0019'8.80 METERS (28.9 FT) NORTHWEST FROM THE SOUTHWEST CORNER OF THE

TV0019'BUILDING, AND

TV0019'1.22 METERS (4.0 FT) SOUTHEAST FROM A FENCE.

TV0019'MARK IS BELOW STATION 1.2 METERS.

TV0019'

TV0019'REFERENCE MARK NUMBER 2 IS A STANDARD NGS DISK

TV0019'STAMPED---DONNA NO 2 1982---,

TV0019'CRIMPED TO THE TOP OF A STAINLESS STEEL ROD DRIVEN TO A DEPTH

TV0019'OF 12 FEET AND SURROUNDED BY A CONCRETE POST 25 CM IN DIAMETER

TV0019'FLUSH WITH THE GROUND.

TV0019'IT IS LOCATED

TV0019'17.25 METERS (56.6 FT) NORTH FROM A ANTENNA TOWER,

TV0019'8.50 METERS (27.9 FT) NORTHWEST FROM THE NORTH CORNER OF THE

TV0019'BUILDING, AND

TV0019'0.7 METER (2.3 FT) SOUTHEAST FROM A FENCE.

TV0019'MARK IS BELOW STATION 0.9 METERS.

TV0019'

TV0019'HEIGHT OF LIGHT SHOWN ABOVE THE MARK WAS 1.8 METERS.

TV0019'A LEVEL TIE WAS MADE TO THIS STATION AND IS INCLUDED IN LEVEL LINE

TV0019'1A.

TV0019

TV0019

STATION RECOVERY (1982)

TV0019

TV0019'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1982

TV0019'9.5 KM (5.90 MI) NE FROM PONCE.

TV0019'FROM THE JUNCTION OF HIGHWAY 14 AND 139, WHICH IS ABOUT 4.0 KM (2.5

TV0019'MI) NORTHEAST OF PONCE, GO NORTH ON HIGHWAY 139 FOR 0.5 KM (0.3 MI)

TV0019'TO A CROSSROAD, TURN RIGHT AND GO EAST AND NORTHERLY ON HIGHWAY 139

TV0019'FOR 3.2 KM (2.0 MI) TO A FORK LEFT, KEEP RIGHT AND CONTINUE NORTHERLY

TV0019'ON HIGHWAY 139, 3.9 KM (2.4 MI) TO A GATE ON THE LEFT TO THE CORPS

TV0019'OF ENGINEERS LABORATORY AND IN THE CONCRETE ROOF OF THE LABORATORY

TV0019'BUILDING, 1.5 METERS (32.8 FT) SOUTHWEST FROM THE NORTHEAST EDGE OF

TV0019'THE ROOF, 8.95 METERS (29.3 FT) NORTHWEST FROM THE SOUTHEAST EDGE

TV0019'OF THE ROOF, 3.7 METERS (12.3 FT) SOUTHEAST FROM THE NORTHWEST EDGE

TV0019'OF THE ROOF, AND 5.0 METERS (16.5 FT) WEST OF AN ANTENNA TOWER.

1 National Geodetic Survey, Retrieval Date = JANUARY 23, 2004
 AB9841 *****
 AB9841 DESIGNATION - LAJAS 2
 AB9841 PID - AB9841
 AB9841 COUNTRY - PUERTO RICO
 AB9841 USGS QUAD -
 AB9841
 AB9841 *CURRENT SURVEY CONTROL
 AB9841
 AB9841 *NAD 83(1997)- 18 04 19.16543(N) 066 57 33.08621(W) ADJUSTED
 AB9841 *LOCAL TIDAL - 87.8 (meters) 288. (feet) GPS OBS
 AB9841
 AB9841 X - 2,373,951.012 (meters) COMP
 AB9841 Y - -5,581,621.418 (meters) COMP
 AB9841 Z - 1,965,975.961 (meters) COMP
 AB9841 LAPLACE CORR- 1.19 (seconds) DEFLEC99
 AB9841 ELLIP HEIGHT- 48.55 (meters) (05/12/97) GPS OBS
 AB9841 GEOID HEIGHT- -41.77 (meters) GEOID99
 AB9841
 AB9841 HORZ ORDER - B
 AB9841 ELLP ORDER - FOURTH CLASS II
 AB9841
 AB9841.The horizontal coordinates were established by GPS observations
 AB9841.and adjusted by the National Geodetic Survey in May 1997.
 AB9841
 AB9841.The orthometric height was determined by GPS observations and a
 AB9841.high-resolution geoid model.
 AB9841
 AB9841.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 AB9841
 AB9841.The Laplace correction was computed from DEFLEC99 derived deflections.
 AB9841
 AB9841.The ellipsoidal height was determined by GPS observations
 AB9841.and is referenced to NAD 83.
 AB9841
 AB9841.The geoid height was determined by GEOID99.
 AB9841
 AB9841; North East Units Scale Converg.
 AB9841;SPC PRVI - 226,494.632 144,331.930 MT 0.99999789 -0 09 52.3
 AB9841;UTM 19 - 1,999,343.973 715,994.728 MT 1.00017682 +0 37 60.0
 AB9841
 AB9841 SUPERSEDED SURVEY CONTROL
 AB9841
 AB9841 NAD 83(1993)- 18 04 19.16289(N) 066 57 33.09555(W) AD() B
 AB9841 ELLIP H (01/15/97) 48.59 (m) GP() 5 2
 AB9841
 AB9841.Superseded values are not recommended for survey control.
 AB9841.NGS no longer adjusts projects to the PR datum.
 AB9841.See file dsdata.txt to determine how the superseded data were derived.
 AB9841
 AB9841_U.S. NATIONAL GRID SPATIAL ADDRESS: 19QGV1599599344(NAD 83)
 AB9841_MARKER: DD = SURVEY DISK
 AB9841_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+))
 AB9841_STAMPING: PUERTO RICO GPS CONTROL C.R.I.M. LAJAS 2
 AB9841_MARK LOGO: CRIM
 AB9841_PROJECTION: RECESSED 15 CENTIMETERS
 AB9841_MAGNETIC: I = MARKER IS A STEEL ROD
 AB9841_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD
 AB9841+STABILITY: POSITION/ELEVATION WELL
 AB9841_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 AB9841+SATELLITE: SATELLITE OBSERVATIONS - May 01, 2003
 AB9841_ROD/PIPE-DEPTH: 3 meters

AB9841

AB9841 HISTORY - Date Condition Report By
 AB9841 HISTORY - 1995 MONUMENTED ANDREG
 AB9841 HISTORY - 20030501 GOOD JCLS

AB9841

AB9841 STATION DESCRIPTION

AB9841

AB9841'DESCRIBED BY ANDREGG INCORPORATED 1995 (DJR)

AB9841'TO REACH THE STATION FROM THE JUNCTION OF HIGHWAYS PR 121 AND PR 328,
 AB9841'GO NORTH ON HIGHWAY PR 121 0.35 MILES (0.56 KM) TO THE INTERSECTION OF
 AB9841'HIGHWAY PR 121 AND THE HIGHWAY PR 2 ACCESS ROUTE THE STATION IS
 AB9841'LOCATED IN THE SOUTHWEST ISLAND AT THE INTERSECTION OF HIGHWAY PR 121
 AB9841'AND THE HIGHWAY PR 2 ACCESS ROUTE, 20 METERS (65.6 FT) SOUTH OF
 AB9841'KILOMETER POST 0.6 (HIGHWAY PR 121) , 3.7 METERS (12.1 FT) WEST OF THE
 AB9841'WEST EDGE OF PAVEMENT OF HIGHWAY PR 121, 7 METERS (23.0 FT) SOUTH OF
 AB9841'THE SOUTH EDGE OF PAVEMENT OF THE HIGHWAY PR 2 ACCESS ROUTE, AND 5.1
 AB9841'METERS (16.7 FT) NORTHEAST OF THE NORTHEAST EDGE OF PAVEMENT OF THE
 AB9841'RAMP FROM THE EAST-BOUND HIGHWAY PR 2 ACCESS ROUTE TO SOUTH-BOUND
 AB9841'HIGHWAY PR 121 THE STATION IS 1 METER (3.3 FT) WEST OF A CARSONITE
 AB9841'SURVEY MARKER WITNESS POST THE STATION IS A 3-1/4 INCH BRASS CAP
 AB9841'STAMPED CENTRO DE RECAUDACION DE INGRESSOS MUNICIPALES, PUERTO RICO
 AB9841'GPS CONTROL, C.R.I.M., UNLAWFUL TO DISTURB, LAJAS 2, SET ATOP A 9/16
 AB9841'INCH STAINLESS STEEL ROD DRIVEN TO REFUSAL AND COVERED FLUSH WITH THE
 AB9841'GROUND BY AN ALUMINUM COVER EPOXYED ONTO A 6 INCH SCHEDULE 40 PVC PIPE
 AB9841'SET IN CONCRETE INSIDE AND OUT

AB9841

AB9841 STATION RECOVERY (2003)

AB9841

AB9841'RECOVERY NOTE BY JOHN CHANCE LAND SURVEYS INC 2003 (FJO)

AB9841'RECOVERED IN GOOD CONDITION.

1 National Geodetic Survey, Retrieval Date = JANUARY 23, 2004
 AB9831 *****
 AB9831 DESIGNATION - MANATI 2
 AB9831 PID - AB9831
 AB9831 COUNTRY - PUERTO RICO
 AB9831 USGS QUAD -
 AB9831
 AB9831 *CURRENT SURVEY CONTROL
 AB9831
 AB9831 *NAD 83(1997)- 18 26 23.40339(N) 066 30 04.44392(W) ADJUSTED
 AB9831 *PRVD02 - 21.221 (meters) 69.62 (feet) ADJUSTED
 AB9831
 AB9831 X - 2,413,375.709 (meters) COMP
 AB9831 Y - -5,550,711.169 (meters) COMP
 AB9831 Z - 2,004,618.924 (meters) COMP
 AB9831 LAPLACE CORR- 1.58 (seconds) DEFLEC99
 AB9831 ELLIP HEIGHT- -21.56 (meters) (05/12/97) GPS OBS
 AB9831 GEOID HEIGHT- -45.13 (meters) GEOID99
 AB9831
 AB9831 HORZ ORDER - B
 AB9831 VERT ORDER - FIRST CLASS II
 AB9831 ELLP ORDER - FOURTH CLASS II
 AB9831
 AB9831.The horizontal coordinates were established by GPS observations
 AB9831.and adjusted by the National Geodetic Survey in May 1997.
 AB9831
 AB9831.The orthometric height was determined by differential leveling
 AB9831.and adjusted by the National Geodetic Survey in April 2003.
 AB9831.No vertical observational check was made to the station.
 AB9831
 AB9831.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 AB9831
 AB9831.The Laplace correction was computed from DEFLEC99 derived deflections.
 AB9831
 AB9831.The ellipsoidal height was determined by GPS observations
 AB9831.and is referenced to NAD 83.
 AB9831
 AB9831.The geoid height was determined by GEOID99.
 AB9831
 AB9831; North East Units Scale Converg.
 AB9831;SPC PRVI - 267,130.043 192,826.972 MT 1.00000040 -0 01 16.5
 AB9831;UTM 19 - 2,040,669.451 763,929.700 MT 1.00046125 +0 47 27.0
 AB9831
 AB9831 SUPERSEDED SURVEY CONTROL
 AB9831
 AB9831 NAD 83(1993)- 18 26 23.40096(N) 066 30 04.45349(W) AD() B
 AB9831 ELLIP H (01/15/97) -21.48 (m) GP() 5 2
 AB9831
 AB9831.Superseded values are not recommended for survey control.
 AB9831.NGS no longer adjusts projects to the PR datum.
 AB9831.See file dsdata.txt to determine how the superseded data were derived.
 AB9831
 AB9831 _U.S. NATIONAL GRID SPATIAL ADDRESS: 19QGA6393040669(NAD 83)
 AB9831 _MARKER: DD = SURVEY DISK
 AB9831 _SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
 AB9831 _STAMPING: MANATI 2 PUERTO RICO GPS CONTROL C.R.I.M.
 AB9831 _MARK LOGO: CARAS
 AB9831 _PROJECTION: FLUSH
 AB9831 _MAGNETIC: I = MARKER IS A STEEL ROD
 AB9831 _STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
 AB9831 _SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 AB9831+SATELLITE: SATELLITE OBSERVATIONS - June 02, 2002

AB9831 ROD/PIPE-DEPTH: 3.6 meters

AB9831

AB9831 HISTORY	- Date	Condition	Report By
AB9831 HISTORY	- 1995	MONUMENTED	ANDREG
AB9831 HISTORY	- 20020602	GOOD	NGS

AB9831

AB9831 STATION DESCRIPTION

AB9831

AB9831'DESCRIBED BY ANDREGG INCORPORATED 1995 (DJR)

AB9831'TO REACH THE STATION FROM THE JUNCTION OF HIGHWAYS PR 22 AND PR 149,
 AB9831'NEAR THE TOWN OF MANATI, GO WEST ON HIGHWAY PR 22 FOR 1.7 MILES (2.7
 AB9831'KM) TO KILOMETER POST 49.9 TO THE STATION ON THE RIGHT THE STATION IS
 AB9831'6.6 METERS (21.7 FT) WEST OF THE NORTHWEST CORNER OF A CONCRETE BRIDGE
 AB9831'OVER HIGHWAY PR 685, 1.3 METERS (4.3 FT) NORTHEAST OF THE EDGE OF
 AB9831'PAVEMENT OF HIGHWAY PR 22, AND 1 METER (3.3 FT) NORTHEAST OF GUARD
 AB9831'RAIL AND 1.7 METERS (5.6 FT) SOUTHWEST OF TOP OF BANK THE STATION IS
 AB9831'1 METER (3.3 FT) SOUTHWEST OF A CARSONITE SURVEY MARKER WITNESS POST
 AB9831'THE STATION IS A 3-1/4 INCH BRASS CAP STAMPED CENTRO DE RECAUDACION DE
 AB9831'INGRESSOS MUNICIPALES, PUERTO RICO GPS CONTROL, C.R.I.M., UNLAWFUL TO
 AB9831'DISTURB, MANATI 2, SET ATOP A 9/16 INCH STAINLESS STEEL ROD DRIVEN TO
 AB9831'REFUSAL AND COVERED FLUSH WITH THE GROUND BY AN ALUMINUM COVER EPOXYED
 AB9831'ONTO A 6 INCH SCHEDULE 40 PVC PIPE SET IN CONCRETE INSIDE AND OUT

AB9831

AB9831 STATION RECOVERY (2002)

AB9831

AB9831'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2002 (JMW)

AB9831'4.7 KM (2.95 MI) EASTERLY ALONG STATE HIGHWAY 22 FROM THE JUNCTION OF
 AB9831'STATE HIGHWAY 140 IN BARCELONETA, 38.3 M WEST OF THE CENTER OF STATE
 AB9831'HIGHWAY 685, 36.1 M WEST OF KILOMETER POST 50.3, 8.1 M NORTH OF THE
 AB9831'CENTERLINE OF THE WESTBOUND HIGHWAY, 6.6 M WEST OF THE WEST END OF THE
 AB9831'NORTH CONCRETE GUARDRAIL OF THE HIGHWAY OVERPASS OF HIGHWAY 685, 1.0 M
 AB9831'NORTH OF A METAL GUARDRAIL, AND 0.3 M BELOW THE LEVEL OF THE HIGHWAY,
 AB9831'NOTE--ACCESS TO THE DATUM POINT IS THROUGH A 5-INCH LOGO CAP. THE
 AB9831'MARK IS ON THE HIGHWAY RIGHT-OF-WAY.

1 National Geodetic Survey, Retrieval Date = JANUARY 13, 2004
 TV1211 *****
 TV1211 DESIGNATION - PSE ARP
 TV1211 PID - TV1211
 TV1211 COUNTRY - PUERTO RICO
 TV1211 USGS QUAD -
 TV1211
 TV1211 *CURRENT SURVEY CONTROL
 TV1211
 TV1211 *NAD 83(1996)- 18 00 31.46792(N) 066 33 47.64508(W) ADJUSTED
 TV1211 *LOCAL TIDAL - 8.2 (meters) 27. (feet) GPS OBS
 TV1211
 TV1211 X - 2,413,299.189 (meters) COMP
 TV1211 Y - -5,567,001.948 (meters) COMP
 TV1211 Z - 1,959,294.884 (meters) COMP
 TV1211 LAPLACE CORR- 0.73 (seconds) DEFLEC99
 TV1211 ELLIP HEIGHT- -31.32 (meters) (05/12/97) GPS OBS
 TV1211 GEOID HEIGHT- -41.78 (meters) GEOID99
 TV1211
 TV1211 HORZ ORDER - B
 TV1211 ELLP ORDER - FOURTH CLASS II
 TV1211
 TV1211.This mark is at Mercedita Airport (PSE)
 TV1211
 TV1211.The horizontal coordinates were established by GPS observations
 TV1211.and adjusted by the National Geodetic Survey in January 1997.
 TV1211.This is a SPECIAL STATUS position. See SPECIAL STATUS under the
 TV1211.DATUM ITEM on the data sheet items page.
 TV1211
 TV1211.The orthometric height was determined by GPS observations and a
 TV1211.high-resolution geoid model.
 TV1211
 TV1211.The X, Y, and Z were computed from the position and the ellipsoidal ht.
 TV1211
 TV1211.The Laplace correction was computed from DEFLEC99 derived deflections.
 TV1211
 TV1211.The ellipsoidal height was determined by GPS observations
 TV1211.and is referenced to NAD 83.
 TV1211
 TV1211.The geoid height was determined by GEOID99.
 TV1211
 TV1211; North East Units Scale Converg.
 TV1211;SPC PRVI - 219,419.097 186,243.451 MT 1.00000158 -0 02 26.3
 TV1211;UTM 19 - 1,992,849.597 758,012.987 MT 1.00042311 +0 45 13.6
 TV1211
 TV1211: Primary Azimuth Mark Grid Az
 TV1211:SPC PRVI - PSE E 102 03 31.6
 TV1211:UTM 19 - PSE E 101 15 51.7
 TV1211
 TV1211|-----|
 TV1211|PID Reference Object Distance Geod. Az |
 TV1211| dddmmss.s |
 TV1211|AB9318 PSE E 437.127 METERS 1020105.3 |
 TV1211|-----|
 TV1211
 TV1211 SUPERSEDED SURVEY CONTROL
 TV1211
 TV1211 NAD 83(1997)- 18 00 31.46755(N) 066 33 47.64467(W) AD() B
 TV1211 ELLIP H (01/06/97) -31.41 (m) GP() 4 2
 TV1211 NAD 83(1993)- 18 00 31.46544(N) 066 33 47.65416(W) AD() B
 TV1211 ELLIP H (01/13/94) -31.26 (m) GP() 4 1
 TV1211 NAD 83(1986)- 18 00 31.43247(N) 066 33 47.63455(W) AD() 3

TV1211 PR - 18 00 38.55702(N) 066 33 49.01604(W) AD() 3
 TV1211
 TV1211.Superseded values are not recommended for survey control.
 TV1211.NGS no longer adjusts projects to the PR datum.
 TV1211.See file dsdata.txt to determine how the superseded data were derived.
 TV1211
 TV1211_U.S. NATIONAL GRID SPATIAL ADDRESS: 19QGV5801392850(NAD 83)
 TV1211_MARKER: DT = TOPOGRAPHIC STATION DISK
 TV1211_SETTING: 4 = CONCRETE POST
 TV1211_STAMPING: ARP 1966
 TV1211_MARK LOGO: CGS
 TV1211_MAGNETIC: O = OTHER; SEE DESCRIPTION
 TV1211_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
 TV1211_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 TV1211+SATELLITE: SATELLITE OBSERVATIONS - April 03, 1996
 TV1211

TV1211 HISTORY	- Date	Condition	Report By
TV1211 HISTORY	- 1966	MONUMENTED	CGS
TV1211 HISTORY	- 1970	SEE DESCRIPTION	NGS
TV1211 HISTORY	- 1993	GOOD	NOS
TV1211 HISTORY	- 19930429	GOOD	NGS
TV1211 HISTORY	- 19951121	GOOD	ANDREG
TV1211 HISTORY	- 19960403	GOOD	NGS

 TV1211
 TV1211 STATION DESCRIPTION
 TV1211
 TV1211'DESCRIBED BY COAST AND GEODETIC SURVEY 1966 (DCW)
 TV1211'STATION IS LOCATED ON THE PONCE AIRPORT, MIDWAY BETWEEN THE RUNWAY
 TV1211'END AND 50.0 FT. NORTH OF THE NORTH EDGE OF THE RUNWAY. 103.1
 TV1211'FT. NORTH OF THE WEST END OF THE 9TH. CENTERLINE STRIPE WEST OF
 TV1211'RUNWAY END 29. STATION IS A STANDARD TOPO. DISK SET IN THE TOP
 TV1211'OF A CONCRETE POST FLUSH WITH THE GROUND AND STAMPED ARP 1966.
 TV1211
 TV1211 STATION RECOVERY (1970)
 TV1211
 TV1211'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1970 (JKW)
 TV1211'STATION WAS RECOVERED IN GOOD CONDITION. DESCRIPTION BY DCW IN
 TV1211'1966 IS ADEQUATE FOR RECOVERY.
 TV1211
 TV1211 STATION RECOVERY (1993)
 TV1211
 TV1211'RECOVERY NOTE BY NATIONAL OCEAN SERVICE 1993
 TV1211'THE STATION IS LOCATED ON THE MERCEDITA AIRPORT NEAR MIDFIELD AND
 TV1211'SOUTH OF THE TERMINAL BUILDING,IN PONCE.
 TV1211'TO OBTAIN ACCESS TO THE AIRPORT AND THE STATION CONTACT MR MIGUEL
 TV1211'CASILLAS, MERCEDITA AIRPORT, MERCEDITA, PUERTO RICO 00715-1305, PHONE
 TV1211'809-842-6292.
 TV1211'THE STATION IS LOCATED NEAR MIDFIELD NORTH OF RUNWAY 12-30 AND WEST OF
 TV1211'TAXIWAY B. IT IS 44.5 M (146.0 FT) WEST FROM THE CENTER OF AN
 TV1211'ELECTRICAL MANHOLE COVER, 29.2 M (95.8 FT) WEST-NORTHWEST OF THE
 TV1211'SECOND TAXIWAY LIGHT, 23.7 M (77.8 FT) SOUTH-SOUTHWEST OF A STORM
 TV1211'DRAIN AND 14.1 M (46.3 FT) NORTH OF THE FIRST RUNWAY LIGHT AT THE
 TV1211'NORTH EDGE OF RUNWAY 12-30 AND INTERSECTION OF TAXIWAY B.
 TV1211'THE STATION IS A STANDARD TOPOGRAPHIC STATION DISK SET IN A CONCRETE
 TV1211'MONUMENT 0.31 M (1.02 FT) BELOW GROUNDS SURFACE.
 TV1211
 TV1211 STATION RECOVERY (1993)
 TV1211
 TV1211'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1993
 TV1211'THE STATION IS LOCATED ON THE NORTH SIDE OF RUNWAY 12/30, JUST WEST
 TV1211'FROM THE MAIN TAXIWAY LEADING TO THE TERMINAL. THE STATION IS 146.2
 TV1211'FT (44.6 M) SOUTHWEST FROM AN ELECTRICAL MANHOLE COVER, 29.0 FT (8.8

TV1211'M) SOUTHWEST OF THE SOUTHWEST CORNER OF A TAXIWAY A SIGN, 46.3
TV1211'NORTHWEST FROM THE RUNWAY LIGHT AT THE TAXIWAY AND RUNWAY JUNCTION,
TV1211'AND 25.0 FT (7.6 M) NORTHEAST OF THE NORTHEAST EDGE OF THE RUNWAY
TV1211'12-30 SHOULDER. THE STATION IS A STANDARD TOPOGRAPHIC DISK STAMPED
TV1211'ARP 1966 SET INTO THE TOP OF A 10-INCH CONCRETE MONUMENT 8 INCHES
TV1211'BELOW GROUND.

TV1211

TV1211 STATION RECOVERY (1995)

TV1211

TV1211'RECOVERY NOTE BY ANDREGG INCORPORATED 1995 (MJB)

TV1211'RECOVERED AS DESCRIBED.

TV1211

TV1211 STATION RECOVERY (1996)

TV1211

TV1211'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1996 (AJL)

TV1211'THE STATION IS LOCATED NEAR THE SOUTH COAST OF PUERTO RICO, ABOUT 3.0

TV1211'MI (4.8 KM) EAST OF PONCE, AT THE MERCEDITA INTERNATIONAL AIRPORT AND

TV1211'ABOUT 0.1 MI (0.2 KM) SOUTH-SOUTHWEST OF THE FIRE STATION.

TV1211'OWNERSHIP--MERCEDITA INTERNATIONAL AIRPORT, PONCE, PUERTO RICO.

TV1211'AIRPORT MANAGER IS MR. MYGUEL CASILOS, PHONE (787) 842-6292. THIS IS

TV1211'A CONTROLLED AIRPORT AND PERMISSION IS REQUIRED TO ENTER THE AIRPORT

TV1211'COMPOUND. TO REACH THE STATION FROM THE GATE ON THE WEST SIDE OF THE

TV1211'FIRE STATION GO SOUTHERLY ON THE APRON FOR 0.05 MI (0.08 KM) TO A

TV1211'PARALLEL TAXIWAY, A CONNECTOR TAXIWAY (D) AHEAD AND THE STATION JUST

TV1211'AHEAD ON THE RIGHT. THE STATION IS RECESSED 1.0 FT (0.3 M) BELOW

TV1211'GROUND LEVEL, 75.5 FT (23.0 M) SOUTH-SOUTHEAST OF A STORM SEWER DRAIN,

TV1211'29.1 FT (8.9 M) WEST-SOUTHWEST OF A TAXIWAY IDENTIFIER SIGN (D) AND

TV1211'25.0 FT (7.6 M) NORTHEAST OF THE NORTHEAST EDGE OF THE RUNWAY

TV1211'PAVEMENT. NOTE--THE HOLE ABOVE THE STATION IS FILLED WITH ROCKS.

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AF9624 *****
AF9624 CORS      - This is a GPS Continuously Operating Reference Station.
AF9624 DESIGNATION - PUERTO RICO 3 CORS ARP
AF9624 CORS_ID   - PUR3
AF9624 PID       - AF9624
AF9624 COUNTRY   - PUERTO RICO
AF9624 USGS QUAD  -
AF9624
AF9624                *CURRENT SURVEY CONTROL
AF9624
AF9624* NAD 83(CORS)- 18 27 46.70253(N) 067 04 01.05080(W) ADJUSTED
AF9624* LOCAL TIDAL -
AF9624
AF9624 EPOCH DATE - 2002.00
AF9624 X      - 2,358,178.549 (meters)      COMP
AF9624 Y      - -5,573,621.476 (meters)      COMP
AF9624 Z      - 2,007,084.160 (meters)      COMP
AF9624 ELLIP HEIGHT- 91.45 (meters)      (03/??/02) GPS OBS
AF9624 GEOID HEIGHT- -46.19 (meters)      GEOID99
AF9624
AF9624 HORZ ORDER - SPECIAL (CORS)
AF9624 ELLP ORDER - SPECIAL (CORS)
AF9624
AF9624. ITRF positions are available for this station.
AF9624. The coordinates were established by GPS observations
AF9624. and adjusted by the National Geodetic Survey in March 2002.
AF9624. The coordinates are valid at the epoch date displayed above.
AF9624. The epoch date for horizontal control is a decimal equivalence
AF9624. of Year/Month/Day.
AF9624
AF9624
AF9624. The PID for the CORS L1 Phase Center is AJ7923.
AF9624
AF9624. The XYZ, and position/ellipsoidal ht. are equivalent.
AF9624
AF9624. The ellipsoidal height was determined by GPS observations
AF9624. and is referenced to NAD 83.
AF9624
AF9624. The geoid height was determined by GEOID99.
AF9624
AF9624;           North      East      Units Scale  Converge.
AF9624; SPC PRVI - 269,805.621 133,073.229 MT 1.00000193 -0 11 53.7
AF9624
AF9624                SUPERSEDED SURVEY CONTROL
AF9624
AF9624 NAD 83(CORS)- 18 27 46.70185(N) 067 04 01.05430(W) AD(1997.00) c
AF9624 ELLIP H (07/??/00) 91.42 (m)      GP(1997.00) c c
AF9624 NAD 83(CORS)- 18 27 46.70256(N) 067 04 01.05461(W) AD(1997.00) c
AF9624 ELLIP H (07/??/98) 91.46 (m)      GP(1997.00) c c
AF9624 NAD 83(CORS)- 18 27 46.70229(N) 067 04 01.05525(W) AD(1996.00) c
AF9624 ELLIP H (03/??/97) 91.46 (m)      GP(1996.00) c c
AF9624
AF9624. Superseded values are not recommended for survey control.
AF9624. NGS no longer adjusts projects to the PR datum.
AF9624. See file dsdata.txt to determine how the superseded data were derived.
AF9624
AF9624 U.S. NATIONAL GRID SPATIAL ADDRESS: 19QGA0412742499(NAD 83)
AF9624 _MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
AF9624
AF9624                STATION DESCRIPTION
AF9624
AF9624'DESCRIBED BY NATIONAL GEODETIC SURVEY 2002

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AF9624'STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
AF9624'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
AF9624'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
AF9624' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG
AF9624' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

AJ7923 *****

AJ7923 CORS - This is a GPS Continuously Operating Reference Station.

AJ7923 DESIGNATION - PUERTO RICO 3 CORS L1 PHASE CENTER

AJ7923 CORS_ID - PUR3

AJ7923 PID - AJ7923

AJ7923 COUNTRY - PUERTO RICO

AJ7923 USGS QUAD -

AJ7923

AJ7923 *CURRENT SURVEY CONTROL

AJ7923

AJ7923* NAD 83(CORS)- 18 27 46.70249(N) 067 04 01.05083(W) ADJUSTED

AJ7923* LOCAL TIDAL -

AJ7923

AJ7923 EPOCH DATE - 2002.00

AJ7923 X - 2,358,178.582 (meters) COMP

AJ7923 Y - -5,573,621.555 (meters) COMP

AJ7923 Z - 2,007,084.187 (meters) COMP

AJ7923 ELLIP HEIGHT- 91.54 (meters) (03/??/02) GPS OBS

AJ7923 GEOID HEIGHT- -46.19 (meters) GEOID99

AJ7923

AJ7923 HORZ ORDER - SPECIAL (CORS)

AJ7923 ELLP ORDER - SPECIAL (CORS)

AJ7923

AJ7923. ITRF positions are available for this station.

AJ7923. The coordinates were established by GPS observations

AJ7923. and adjusted by the National Geodetic Survey in March 2002.

AJ7923. The coordinates are valid at the epoch date displayed above.

AJ7923. The epoch date for horizontal control is a decimal equivalence

AJ7923. of Year/Month/Day.

AJ7923

AJ7923

AJ7923. The PID for the CORS ARP is AF9624.

AJ7923

AJ7923. The XYZ, and position/ellipsoidal ht. are equivalent.

AJ7923

AJ7923. The ellipsoidal height was determined by GPS observations

AJ7923. and is referenced to NAD 83.

AJ7923

AJ7923. The geoid height was determined by GEOID99.

AJ7923

AJ7923; North East Units Scale Converg.

AJ7923; SPC PRVI - 269,805.620 133,073.228 MT 1.00000193 -0 11 53.7

AJ7923

AJ7923 SUPERSEDED SURVEY CONTROL

AJ7923

AJ7923 NAD 83(CORS)- 18 27 46.70181(N) 067 04 01.05433(W) AD(1997.00) c

AJ7923 ELLIP H (07/??/00) 91.50 (m) GP(1997.00) c c

AJ7923 NAD 83(CORS)- 18 27 46.70252(N) 067 04 01.05464(W) AD(1997.00) c

AJ7923 ELLIP H (07/??/98) 91.55 (m) GP(1997.00) c c

AJ7923 NAD 83(CORS)- 18 27 46.70225(N) 067 04 01.05528(W) AD(1996.00) c

AJ7923 ELLIP H (03/??/97) 91.55 (m) GP(1996.00) c c

AJ7923

AJ7923. Superseded values are not recommended for survey control.

AJ7923. NGS no longer adjusts projects to the PR datum.

AJ7923. See file dsdata.txt to determine how the superseded data were derived.

AJ7923

AJ7923 U.S. NATIONAL GRID SPATIAL ADDRESS: 19QGA0412742499(NAD 83)

AJ7923 MARKER: STATION IS THE L1 PHASE CENTER OF THE GPS ANTENNA

AJ7923

AJ7923 STATION DESCRIPTION

AJ7923

AJ7923 DESCRIBED BY NATIONAL GEODETIC SURVEY

AJ7923'S STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
AJ7923'S VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
AJ7923' BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
AJ7923' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG
AJ7923' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

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DF8978 *****
DF8978 CORS      - This is a GPS Continuously Operating Reference Station.
DF8978 DESIGNATION - SAN JUAN WAAS 1 CORS ARP
DF8978 CORS_ID   - ZSU1
DF8978 PID       - DF8978
DF8978 COUNTRY   - PUERTO RICO
DF8978 USGS QUAD  -
DF8978
DF8978                *CURRENT SURVEY CONTROL
DF8978
DF8978* NAD 83(CORS)- 18 25 52.80327(N)  065 59 36.51747(W)  ADJUSTED
DF8978* LOCAL TIDAL -
DF8978
DF8978 EPOCH DATE - 2002.00
DF8978 X      - 2,462,589.792 (meters)      COMP
DF8978 Y      - -5,529,372.996 (meters)      COMP
DF8978 Z      - 2,003,724.610 (meters)      COMP
DF8978 ELLIP HEIGHT- -27.16 (meters)      (11/??/03) GPS OBS
DF8978 GEOID HEIGHT- -44.70 (meters)      GEOID99
DF8978
DF8978 HORZ ORDER - SPECIAL (CORS)
DF8978 ELLP ORDER - SPECIAL (CORS)
DF8978
DF8978. ITRF positions are available for this station.
DF8978. The coordinates were established by GPS observations
DF8978. and adjusted by the National Geodetic Survey in November 2003.
DF8978. The coordinates are valid at the epoch date displayed above.
DF8978. The epoch date for horizontal control is a decimal equivalence
DF8978. of Year/Month/Day.
DF8978
DF8978
DF8978. The PID for the CORS L1 Phase Center is DF8979.
DF8978
DF8978. The XYZ, and position/ellipsoidal ht. are equivalent.
DF8978
DF8978. The ellipsoidal height was determined by GPS observations
DF8978. and is referenced to NAD 83.
DF8978
DF8978. The geoid height was determined by GEOID99.
DF8978
DF8978;           North      East      Units Scale  Converg.
DF8978; SPC PRVI  - 266,243.692 246,468.351 MT 0.99999988 +0 08 15.5
DF8978
DF8978                SUPERSEDED SURVEY CONTROL
DF8978
DF8978. No superseded survey control is available for this station.
DF8978
DF8978_ U.S. NATIONAL GRID SPATIAL ADDRESS: 20QJF8376640521(NAD 83)
DF8978_ MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DF8978
DF8978                STATION DESCRIPTION
DF8978
DF8978' DESCRIBED BY NATIONAL GEODETIC SURVEY 2003
DF8978' STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
DF8978' VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DF8978' BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DF8978' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG
DF8978' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

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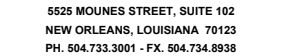
DF8979 *****
DF8979 CORS      - This is a GPS Continuously Operating Reference Station.
DF8979 DESIGNATION - SAN JUAN WAAS 1 CORS L1 PHASE CENTER
DF8979 CORS_ID   - ZSU1
DF8979 PID       - DF8979
DF8979 COUNTRY   - PUERTO RICO
DF8979 USGS QUAD  -
DF8979
DF8979              *CURRENT SURVEY CONTROL
DF8979
DF8979* NAD 83(CORS)- 18 25 52.80320(N) 065 59 36.51746(W) ADJUSTED
DF8979* LOCAL TIDAL -
DF8979
DF8979 EPOCH DATE - 2002.00
DF8979 X      - 2,462,589.944 (meters)      COMP
DF8979 Y      - -5,529,373.334 (meters)      COMP
DF8979 Z      - 2,003,724.732 (meters)      COMP
DF8979 ELLIP HEIGHT- -26.77 (meters)      (11/??/03) GPS OBS
DF8979 GEOID HEIGHT- -44.70 (meters)      GEOID99
DF8979
DF8979 HORZ ORDER - SPECIAL (CORS)
DF8979 ELLP ORDER - SPECIAL (CORS)
DF8979
DF8979. ITRF positions are available for this station.
DF8979. The coordinates were established by GPS observations
DF8979. and adjusted by the National Geodetic Survey in November 2003.
DF8979. The coordinates are valid at the epoch date displayed above.
DF8979. The epoch date for horizontal control is a decimal equivalence
DF8979. of Year/Month/Day.
DF8979
DF8979
DF8979. The PID for the CORS ARP is DF8978.
DF8979
DF8979. The XYZ, and position/ellipsoidal ht. are equivalent.
DF8979
DF8979. The ellipsoidal height was determined by GPS observations
DF8979. and is referenced to NAD 83.
DF8979
DF8979. The geoid height was determined by GEOID99.
DF8979
DF8979;          North      East      Units Scale  Converge.
DF8979; SPC PRVI - 266,243.690 246,468.352 MT 0.99999988 +0 08 15.5
DF8979
DF8979              SUPERSEDED SURVEY CONTROL
DF8979
DF8979. No superseded survey control is available for this station.
DF8979
DF8979_ U.S. NATIONAL GRID SPATIAL ADDRESS: 20QJF8376640521(NAD 83)
DF8979_ MARKER: STATION IS THE L1 PHASE CENTER OF THE GPS ANTENNA
DF8979
DF8979              STATION DESCRIPTION
DF8979
DF8979' DESCRIBED BY NATIONAL GEODETIC SURVEY
DF8979' STATION IS A GPS CORS. LATEST INFORMATION INCLUDING POSITIONS AND
DF8979' VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DF8979' BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DF8979' FTP CORS.NGS.NOAA.GOV: CORS/COORD AND CORS/STATION_LOG
DF8979' HTTP://WWW.NGS.NOAA.GOV UNDER PRODUCTS AND SERVICES.

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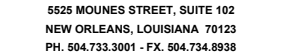
1 National Geodetic Survey, Retrieval Date = JANUARY 20, 2004
 AA7661 *****
 AA7661 DESIGNATION - ZSU A
 AA7661 PID - AA7661
 AA7661 COUNTRY - PUERTO RICO
 AA7661 USGS QUAD -
 AA7661
 AA7661 *CURRENT SURVEY CONTROL
 AA7661
 AA7661 *NAD 83(1993)- 18 25 49.03298(N) 065 59 36.81759(W) ADJUSTED
 AA7661 *NAVD 88 - 2.3 (meters) 8. (feet) GPS OBS
 AA7661
 AA7661 EPOCH DATE - 1995.00
 AA7661 X - 2,462,591.520 (meters) COMP
 AA7661 Y - -5,529,398.523 (meters) COMP
 AA7661 Z - 2,003,610.428 (meters) COMP
 AA7661 LAPLACE CORR- -0.25 (seconds) DEFLEC99
 AA7661 ELLIP HEIGHT- -40.47 (meters) (07/24/97) GPS OBS
 AA7661 GEOID HEIGHT- -44.68 (meters) GEOID99
 AA7661 DYNAMIC HT - 2.3 (meters) 8. (feet) COMP
 AA7661 MODELED GRAV- 978,678.8 (mgal) NAVD 88
 AA7661
 AA7661 HORZ ORDER - A
 AA7661 VERT ORDER - FIRST CLASS II (See Below)
 AA7661 ELLP ORDER - SECOND CLASS I
 AA7661
 AA7661. The horizontal coordinates were established by GPS observations
 AA7661. and adjusted by the National Geodetic Survey in November 1995.
 AA7661. The horizontal coordinates are valid at the epoch date displayed above.
 AA7661. The epoch date for horizontal control is a decimal equivalence
 AA7661. of Year/Month/Day.
 AA7661
 AA7661. The orthometric height was determined by GPS observations and a
 AA7661. high-resolution geoid model.
 AA7661. The vertical order pertains to the NGVD 29 superseded value.
 AA7661
 AA7661. The X, Y, and Z were computed from the position and the ellipsoidal ht.
 AA7661
 AA7661. The Laplace correction was computed from DEFLEC99 derived deflections.
 AA7661
 AA7661. The ellipsoidal height was determined by GPS observations
 AA7661. and is referenced to NAD 83.
 AA7661
 AA7661. The geoid height was determined by GEOID99.
 AA7661
 AA7661. The dynamic height is computed by dividing the NAVD 88
 AA7661. geopotential number by the normal gravity value computed on the
 AA7661. Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 AA7661. degrees latitude (g = 980.6199 gals.).
 AA7661
 AA7661. The modeled gravity was interpolated from observed gravity values.
 AA7661
 AA7661; North East Units Scale Converg.
 AA7661; SPC PRVI - 266,127.751 246,459.822 MT 0.99999982 +0 08 15.4
 AA7661; UTM 20 - 2,040,405.444 183,755.433 MT 1.00083660 -0 56 49.9
 AA7661; UTM 19 - 2,040,428.004 817,606.142 MT 1.00084727 +0 57 04.6
 AA7661
 AA7661|-----|
 AA7661| PID Reference Object Distance Geod. Az |
 AA7661| dddmmss.s |
 AA7661| AA7662 ZSU B 174.392 METERS 05106 |
 AA7661|-----|

AA7661
 AA7661 SUPERSEDED SURVEY CONTROL
 AA7661
 AA7661 ELLIP H (05/12/97) -40.42 (m) GP() 4 2
 AA7661 NAD 83(1996)- 18 25 49.03309(N) 065 59 36.81815(W) AD() A
 AA7661 ELLIP H (12/09/96) -40.47 (m) GP() 1 1
 AA7661 ELLIP H (11/13/95) -40.42 (m) GP(1995.00) 1 2
 AA7661 PRVD02 (04/25/03) 1.890 (m) 6.20 (f) ADJUSTED 1 2
 AA7661
 AA7661.Superseded values are not recommended for survey control.
 AA7661.NGS no longer adjusts projects to the PR datum.
 AA7661.See file dsdata.txt to determine how the superseded data were derived.
 AA7661
 AA7661_U.S. NATIONAL GRID SPATIAL ADDRESS: 20QJF8375540405(NAD 83)
 AA7661_MARKER: I = METAL ROD
 AA7661_SETTING: 59 = STAINLESS STEEL ROD IN SLEEVE (10 FT.+)
 AA7661_STAMPING: ZSU A 1995
 AA7661_MARK LOGO: NGS
 AA7661_PROJECTION: RECESSED 5 CENTIMETERS
 AA7661_MAGNETIC: I = MARKER IS A STEEL ROD
 AA7661_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD
 AA7661+STABILITY: POSITION/ELEVATION WELL
 AA7661_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 AA7661+SATELLITE: SATELLITE OBSERVATIONS - 1995
 AA7661_ROD/PIPE-DEPTH: 14 meters
 AA7661_SLEEVE-DEPTH : 1.3 meters
 AA7661
 AA7661 HISTORY - Date Condition Report By
 AA7661 HISTORY - 1995 MONUMENTED NGS
 AA7661
 AA7661 STATION DESCRIPTION
 AA7661
 AA7661'DESCRIBED BY NATIONAL GEODETIC SURVEY 1995 (CSM)
 AA7661'THE STATION IS LOCATED IN CAROLINA NEAR THE SOUTHEAST CORNER OF THE
 AA7661'LUIS MUNOZ MARIN INTERNATIONAL AIRPORT ON THE GROUNDS OF THE FEDERAL
 AA7661'AVIATION ADMINISTRATION (FAA) COMBINED CENTER RADAR APPROACH CONTROL
 AA7661'(CERAP) FACILITY. THE STATION IS INTENDED AS A WIDE AREA AUGMENTATION
 AA7661'SYSTEM (WAAS) REFERENCE STATION. SITE POINT OF CONTACT, MAYRA DIAZ,
 AA7661'CARTOGRAPHER, FAA-AFS, 5000 CARR 190, CAROLINA, PR 00979, PHONE
 AA7661'809-253-8690 OR 809-253-8651. THE STATION IS LOCATED IN THE GRASSY
 AA7661'LAWN ALONG THE SOUTH SIDE OF THE FAA PROPERTY JUST INSIDE THE SECURITY
 AA7661'FENCE. TO REACH THE STATION FROM THE EASTBOUND LANES OF HIGHWAY 26 AT
 AA7661'THE HWY 17 OVERPASS JUST WEST OF THE AIRPORT ENTRANCE, PROCEED EAST ON
 AA7661'HWY 26 FOR 1.1 MI (1.8 KM) TO A STOP LIGHT AND A ROAD RIGHT. TURN
 AA7661'RIGHT AND TAKE AN IMMEDIATE LEFT ONTO A MARGINAL WHICH PARALLELS HWY
 AA7661'26, CONTINUE EAST ON THE MARGINAL FOR 0.9 MI (1.4 KM) TO A ROAD LEFT
 AA7661'PASSING UNDER HWY 26. TURN LEFT AND PROCEED TO A STOP SIGN, TURN LEFT
 AA7661'AND PROCEED NORTH AND WEST ON A ROAD PARALELLING HWY 26 FOR 0.3 MI
 AA7661'(0.5 KM) TO A ROAD RIGHT, TURN RIGHT AND PROCEED NORTH FOR 0.1 MI (0.2
 AA7661'KM) TO A GATE ON THE LEFT AT THE CERAP, THE STATION IS IN THE GRASS
 AA7661'LAWN ABOUT 130 METERS (426.5 FT) WEST OF THE GATE, 97 FT (29.6 M) EAST
 AA7661'OF A SECURITY LAMP POLE, 51.9 FT (15.8 M) NORTHWEST OF A SECURITY LAMP
 AA7661'POLE, 32.9 FT (10.0 M) NORTH OF A CHAINLINK FENCE AND AN ORANGE
 AA7661'CARSONITE WITNESS POST. A STAINLESS STEEL ROD DRIVEN TO REFUSAL WITH
 AA7661'GREASE SECURITY SLEEVE ENCASED IN 5 INCH PVC PIPE WITH AN ALUMINUM
 AA7661'ALLOY ACCESS COVER. THE SS ROD WAS ROUNDED AND CENTERPUNCHED AT THE
 AA7661'TOP TO FACILITATE PRECISE LEVELING AND INSTRUMENT CENTERING. THE
 AA7661'ACCESS COVER IS FLUSH WITH GROUND LEVEL. DESCRIBED BY C.S. MIDDLETON
 AA7661'JR.

FLIGHT LOGS



LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	6:15:35
ALS40 Data Collection Time:	4:05:06
Miles Flown on Flights:	560.08



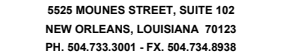
LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	6:19:07
ALS40 Data Collection Time:	3:20:55
Miles Flown on Flights:	453.12



3001 the spatial data company 5525 MOUNES STREET, SUITE 102 NEW ORLEANS, LOUISIANA 70123 PH. 504.733.3001 - FX. 504.734.8938				LIDAR Flight Log								GPS Information		Meteorological Conditions																			
				Project #		02043-05		Lever Arm				Base 1		PSEA		Elevation		Temp		Pressure													
				Project Description				x		y		z		Base 2		LD01		Airport		100		19.1°c		292.25°k		29.95 inHg		101422 Pa					
				PUERTO RICO LIDAR				0		0.01		-1.32		Base3				@ Altitude		8,000		11.5°c		284.65°k		29.95 inHg		101422 Pa					
				IMU				-0.05		0.09		-0.26		Aero 2				@ Altitude															
				Location				Attenuator POS #								IMU Information		GPS Base Station Information															
				PUERTO RICO				0.0 Open (Full Red) (High Altitude)								Start Time		7:47:23		Base 1		File Name		RNX File		Ant Hgt		Ant Type					
				Aircraft				0.5 POS 1 (Half Red/Half Black) (Medium Altitude)								Stop Time		13:40:26		Base 2		PSEA0141.dat				1.873		Zypher					
				C-GNWC				1.0 POS 2 (1/4 Red/ 3/4 Black) (Low Altitude)												Base 3													
				Flight Date		Pilot		Operator		Total Time		Altitude		Scan Angle/Rate		AGL (m)		AMSL (ft)		Attenuator		RCC		AGC		Speed		Miles Flwn		Void "Y"		Conditions/Comments	
1/14/2004		BELL		BORDELON																													
999		W		8:06:32		8:08:24		0:01:52		8000		40°		17°		2438		8000		0		3+3		3/3		120 kts		138 mph		2.30		BORE SITE	
999		E		8:11:15		8:13:35		0:02:20		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		4.79		BORE SITE	
998		W		8:16:34		8:18:23		0:01:49		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		2.40		BORE SITE	
163		W		8:50:41		8:59:51		0:00:00		9500		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		0.00		Y 2 MILES FROM EAST END (BEGINNING OF LINE) RE FLY	
32		W		9:07:06		9:13:57		0:06:51		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		14.38			
31		E		9:17:26		9:24:07		0:06:41		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		14.38			
30		W		9:27:05		9:33:36		0:06:31		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		14.38			
29		E		9:36:53		9:43:29		0:06:36		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		14.38			
28		W		9:46:38		9:53:17		0:06:39		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		14.38			
27		E		9:56:15		10:03:07		0:06:52		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		14.38			
26		W		10:05:57		10:12:36		0:06:39		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		14.38			
25		E		10:15:40		10:22:44		0:07:04		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		16.78			
24		W		10:25:58		10:32:46		0:06:48		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		14.38			
23		E		10:35:51		10:42:47		0:06:56		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		14.38			
22		W		10:48:57		10:59:25		0:10:28		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		23.97			
21		E		11:02:50		11:13:40		0:10:50		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		23.97			
20		W		11:16:48		11:27:19		0:10:31		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		23.97			
19		E		11:30:07		11:41:00		0:10:53		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		23.97			
18		W		11:43:59		11:54:39		0:10:40		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		23.97		CHECK LAST 2 MILES FOR FOG (NW OF SMALL LAKE)	
17		E		11:57:40		12:08:35		0:10:55		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		23.97		CHECK FIRST TWO MILES FOR FOG (NW OF SMALL LAKE)	
16		W		12:11:32		12:22:18		0:10:46		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		23.97			
33		E		12:28:17		12:35:21		0:07:04		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		16.78			
65		E		12:43:48		12:50:34		0:06:46		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		14.38			
66		W		12:53:54		13:00:40		0:06:46		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		14.38			
82		W		13:18:33		13:22:54		0:04:21		8000		40°		17°		2438		8000		0		3+3		3/3		125 kts		144 mph		9.59			

 5525 MOUNES STREET, SUITE 102 NEW ORLEANS, LOUISIANA 70123 PH. 504.733.3001 - FX. 504.734.8938			LIDAR Flight Log										GPS Information																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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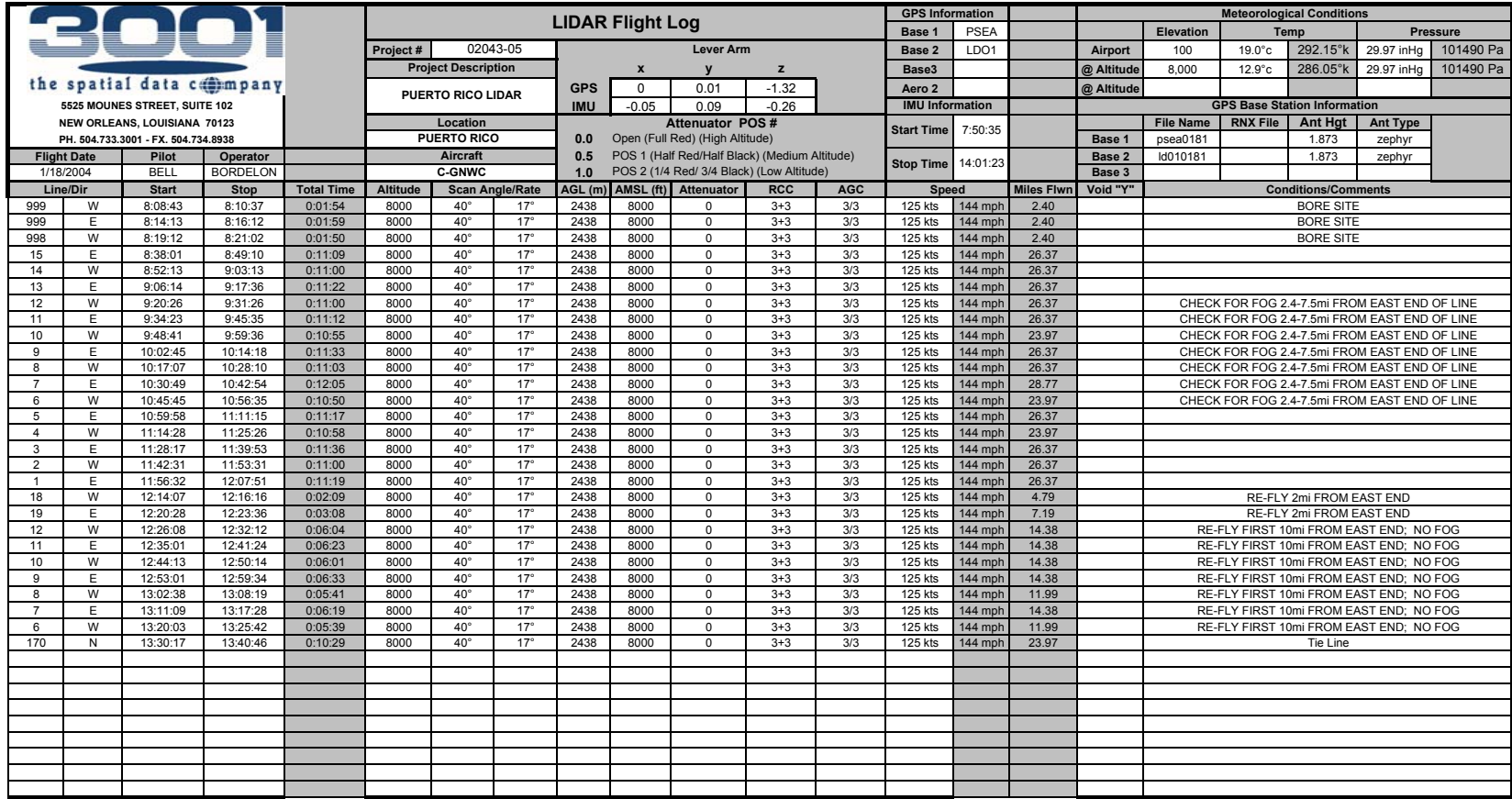
LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	6:32:50
ALS40 Data Collection Time:	2:41:32
Miles Flown on Flights:	#VALUE!



LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	6:54:23
ALS40 Data Collection Time:	4:11:00
Miles Flown on Flights:	565.13

[illegible]

LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	1:00:00
ALS40 Data Collection Time:	0:14:12
Miles Flown on Flights:	26.39



LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	6:10:48
ALS40 Data Collection Time:	3:52:28
Miles Flown on Flights:	529.84

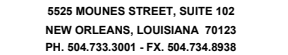
ALS40 Data Collection Time: 3:52:28

3001 the spatial data company 5525 MOUNES STREET, SUITE 102 NEW ORLEANS, LOUISIANA 70123 PH. 504.733.3001 - FX. 504.734.8938			LIDAR Flight Log										GPS Information		Meteorological Conditions							
			Project #		02043-05		Lever Arm						Base 1	PSEA	Elevation		Temp		Pressure			
			Project Description		x						y		z		Base 2	rrs2	Airport	100	20.2°c	293.35°k	29.97 inHg	101490 Pa
					GPS		0		0.01		-1.32		Base3		@ Altitude	8,000	13.1°c	286.25°k	29.97 inHg	101490 Pa		
			PUERTO RICO LIDAR		IMU		-0.05		0.09		-0.26		Aero 2		@ Altitude	11,700	9.4°c	282.55°k	29.97 inHg	101490 Pa		
			Location		Attenuator POS #						IMU Information		GPS Base Station Information									
					0.0		Open (Full Red) (High Altitude)				Start Time	7:46:57	Base 1	File Name	RNX File	Ant Hgt	Ant Type					
			PUERTO RICO		0.5		POS 1 (Half Red/Half Black) (Medium Altitude)				Stop Time	10:39:18	Base 2	PSEA0211.dat		1.873	Zypher					
			Aircraft		1.0		POS 2 (1/4 Red/ 3/4 Black) (Low Altitude)						Base 3	rrs20221.dat								
C-GNWC																						
Flight Date		Pilot		Operator		Total Time		Altitude	Scan Angle/Rate	AGL (m)	AMSL (ft)	Attenuator	RCC	AGC	Speed	Miles Flwn	Void "Y"	Conditions/Comments				
1/22/2004		BELL		BORDELON														BORE SITE				
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 5525 MOUNES STREET, SUITE 102 NEW ORLEANS, LOUISIANA 70123 PH. 504.733.3001 - FX. 504.734.8938			LIDAR Flight Log										GPS Information		Meteorological Conditions				
			Project # 02043-05		Lever Arm					Base 1	PSEA			Elevation		Temp		Pressure	
			Project Description							Base 2	Finn								
			PUERTO RICO LIDAR		GPS	x y z			Base3		@ Altitude	8,000	11.1°c	284.25°k	29.98 inHg	101524 Pa			
			Location		IMU	0 -0.05 0.01 0.09 -1.32 -0.26			Aero 2		@ Altitude								
			PUERTO RICO		Attenuator POS #					IMU Information		GPS Base Station Information							
			Aircraft		0.0 Open (Full Red) (High Altitude)					Start Time	7:49:45	File Name		RNX File	Ant Hgt	Ant Type			
			C-GNWC		1.0 POS 1 (Half Red/Half Black) (Medium Altitude)					Stop Time	15:05:31	Base 1		psea0231.dat	1.873	Zypher			
					1.0 POS 2 (1/4 Red/ 3/4 Black) (Low Altitude)							Base 2		finn0231.dat	1.873	Zypher			
			Flight Date	Pilot	Operator	Aircraft		AGL (m)	AMSL (ft)	Attenuator	RCC	AGC	Speed	Miles Flwn	Void "Y"	Conditions/Comments			
1/23/2004	BELL	BORDELON																	
Line/Dir	Start	Stop	Total Time	Altitude	Scan Angle/Rate	AGL (m)	AMSL (ft)	Attenuator	RCC	AGC	Speed	Miles Flwn	Void "Y"	Conditions/Comments					
999	W	8:06:40	8:08:32	0:01:52	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	2.40		BORE SITE						
999	E	8:11:51	8:13:36	0:01:45	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	2.40		BORE SITE						
998	W	8:16:34	8:18:27	0:01:53	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	2.40		BORE SITE						
85	E	8:34:54	8:43:37	0:08:43	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	19.18								
86	W	8:47:43	8:56:46	0:09:03	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	21.58								
87	E	9:03:20	9:08:32	0:05:12	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	11.99								
88	W	9:12:24	9:18:04	0:05:40	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	11.99								
89	E	9:21:12	9:26:50	0:05:38	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	11.99								
90	W	9:28:44	9:35:27	0:06:43	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	14.38								
91	E	9:38:54	9:44:57	0:06:03	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	14.38								
92	W	9:48:57	9:56:00	0:07:03	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	16.78								
93	E	9:59:07	10:06:28	0:07:21	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	16.78								
94	W	10:09:29	10:16:22	0:06:53	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	14.38								
95	E	10:19:58	10:25:15	0:05:17	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	11.99								
123	E	10:42:55	10:45:43	0:02:48	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	4.79								
122	W	10:49:48	10:52:29	0:02:41	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	4.79								
121	E	10:55:41	10:58:21	0:02:40	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	4.79								
120	W	11:01:27	11:05:30	0:04:03	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	9.59								
119	E	11:07:52	11:11:53	0:04:01	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	9.59								
118	W	11:14:22	11:18:36	0:04:14	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	9.59								
117	E	11:21:02	11:25:07	0:04:05	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	9.59								
116	W	11:27:50	11:32:52	0:05:02	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	11.99								
115	E	11:35:33	11:40:06	0:04:33	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	9.59								
114	W	11:42:51	11:48:01	0:05:10	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	11.99								
113	E	11:50:21	11:55:05	0:04:44	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	9.59								
112	W	11:57:57	12:03:11	0:05:14	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	11.99								
111	E	12:06:15	12:12:11	0:05:56	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	11.99								
110	W	12:15:08	12:22:45	0:07:37	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	16.78								
109	E	12:24:51	12:32:51	0:08:00	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	19.18								
108	W	12:35:59	12:44:08	0:08:09	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	19.18		CHECK FOR CLOUD LAST 4mi - East END						
107	E	12:46:25	12:54:30	0:08:05	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	19.18		CHECK FOR CLOUD FIRST 3mi OF LINE - East end						
106	W	12:57:24	13:05:55	0:08:31	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	19.18		CHECK LAST 4.5mi OF THE LINE - WEST END						
105	E	13:07:54	13:14:32	0:06:38	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	14.38								
104	W	13:17:52	13:24:18	0:06:26	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	14.38								
103	E	13:26:47	13:31:56	0:05:09	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	11.99								
102	W	13:35:03	13:40:06	0:05:03	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	11.99								
101	E	13:42:27	13:47:10	0:04:43	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	9.59								
100	W	13:50:04	13:54:26	0:04:22	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	9.59								
99	E	13:56:50	14:01:03	0:04:13	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	9.59								
98	W	14:03:26	14:08:08	0:04:42	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	9.59								
97	E	14:09:56	14:14:47	0:04:51	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	9.59								
96	W	14:17:50	14:22:55	0:05:05	8000 40° 17°	2438 8000	0	3+3	3/3	125 kts 144 mph	11.99								

LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	7:15:46
ALS40 Data Collection Time:	3:45:51
Miles Flown on Flights:	498.67

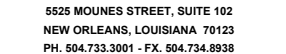
3001 the spatial data company 5525 MOUNES STREET, SUITE 102 NEW ORLEANS, LOUISIANA 70123 PH. 504.733.3001 - FX. 504.734.8938			LIDAR Flight Log										GPS Information		Meteorological Conditions						
			Project #		02043-05		Lever Arm						Base 1	PSEA	Elevation		Temp		Pressure		
			Project Description		GPS IMU						x	y	z	Base 2	RRS2	Airport	100	15.6°c	288.75°k	29.99 inHg	101558 Pa
			PUERTO RICO LIDAR								0	0.01	-1.32	Base3		@ Altitude	8,000	14.3°c	287.45°k	29.99 inHg	101558 Pa
			Location		Attenuator POS #						Aero 2		@ Altitude		GPS Base Station Information						
			PUERTO RICO								IMU Information		Start Time								9:42:45
			Aircraft								0.0	Open (Full Red) (High Altitude)							Base 2		psea0251.dat
			C-GNWC		0.5	POS 1 (Half Red/Half Black) (Medium Altitude)							Base 3								
					1.0	POS 2 (1/4 Red/ 3/4 Black) (Low Altitude)							Stop Time		12:31:18						
			Flight Date	Pilot	Operator		Altitude	Scan Angle/Rate	AGL (m)	AMSL (ft)	Attenuator	RCC	AGC	Speed	Miles Flwn	Void "Y"	Conditions/Comments				
1/25/2004	BELL	BORDELON																			
999	W	9:59:15	10:01:08	0:01:53	8000	40°	17°	8000	0	3+3	3/3	125 kts	144 mph	2.40	BORE SITE						
999	E	10:04:46	10:06:37	0:01:51	8000	40°	17°	8000	0	3+3	3/3	125 kts	144 mph	2.40	BORE SITE						
998	W	10:09:33	10:11:32	0:01:59	8000	40°	17°	8000	0	3+3	3/3	125 kts	144 mph	2.40	BORE SITE						
82	W	10:29:08	10:33:23	0:04:15	8000	40°	17°	8000	0	3+3	3/3	125 kts	144 mph	9.59							
83	E	10:36:04	10:42:11	0:06:07	8000	40°	17°	8000	0	3+3	3/3	125 kts	144 mph	14.38							
84	W	10:46:42	10:54:31	0:07:49	8000	40°	17°	8000	0	3+3	3/3	125 kts	144 mph	16.78							
85	E	10:57:43	11:06:10	0:08:27	8000	40°	17°	8000	0	3+3	3/3	125 kts	144 mph	19.18							
86	W	11:09:34	11:18:56	0:09:22	8000	40°	17°	8000	0	3+3	3/3	125 kts	144 mph	21.58							
87	E	11:23:55	11:29:10	0:05:15	8000	40°	17°	8000	0	3+3	3/3	125 kts	144 mph	11.99							
88	W	11:31:51	11:37:28	0:05:37	8000	40°	17°	8000	0	3+3	3/3	125 kts	144 mph	11.99							
89	E	11:40:24	11:46:01	0:05:37	8000	40°	17°	8000	0	3+3	3/3	125 kts	144 mph	11.99							
90	W	11:48:33	11:54:47	0:06:14	8000	40°	17°	8000	0	3+3	3/3	125 kts	144 mph	14.38							
91	E	11:57:16	12:01:25	0:04:09	8000	40°	17°	8000	0	3+3	3/3	125 kts	144 mph	9.59	DATA LOGGER DISCONNECTED						



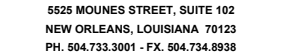
LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	5:30:55
ALS40 Data Collection Time:	2:22:37
Miles Flown on Flights:	367.02

3001 the spatial data company 5525 MOUNES STREET, SUITE 102 NEW ORLEANS, LOUISIANA 70123 PH. 504.733.3001 - FX. 504.734.8938			LIDAR Flight Log										GPS Information		Meteorological Conditions																
			Project #		02043-05		Lever Arm						Base 1	PSEA				Elevation	Temp		Pressure										
			Project Description		GPS IMU x y z 00.01-1.32 -0.050.09-0.26						Base 2	LD01			Airport	100	19.1°c	292.25°k	29.99 inHg	101558 Pa											
			PUERTO RICO LIDAR								Base3			@ Altitude	8,000	14.3°c	287.45°k	29.99 inHg	101558 Pa												
			Location		Attenuator POS #						Aero 2			@ Altitude	11,500	12.3°c	285.45°k	29.99 inHg	101558 Pa												
			PUERTO RICO		0.0 Open (Full Red) (High Altitude)						IMU Information		GPS Base Station Information																		
			Aircraft		0.5 POS 1 (Half Red/Half Black) (Medium Altitude)						Start Time	7:52:24		Base 1	File Name	RNX File	Ant Hgt	Ant Type	L2												
			C-GNWC		1.0 POS 2 (1/4 Red/ 3/4 Black) (Low Altitude)						Stop Time	10:49:43		Base 2	ld010281.dat		1.863	rocentered													
															Base 3																
Flight Date		Pilot		Operator						Speed		Miles Flwn	Void "Y"	Conditions/Comments																	
1/28/2004		BELL		BORDELON																											
Line/Dir		Start		Stop		Total Time		Altitude		Scan Angle/Rate		AGL (m)		AMSL (ft)		Attenuator		RCC		AGC											
999		W		8:27:25		8:28:35		0:01:10		8000		40°		17°				11778		0		3+3		3/3		125 kts		144 mph		2.40	
999		E		8:32:55		8:34:07		0:01:12		8000		40°		17°				11778		0		3+3		3/3		125 kts		144 mph		2.40	
998		W		8:37:59		8:39:09		0:01:10		8000		40°		17°				11778		0		3+3		3/3		125 kts		144 mph		2.40	
206		W		9:42:00		9:47:30		0:05:30		11500		60°		14°		3589		11778		0		3+3		3/3		170 kts		196 mph		16.30	
207		E		9:52:11		10:02:55		0:10:44		11500		60°		14°		3589		11778		0		3+3		3/3		170 kts		196 mph		32.61	
208		W		10:11:32		10:24:18		0:12:46		11500		60°		14°		3589		11778		0		3+3		3/3		170 kts		196 mph		39.13	

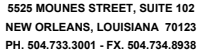
3001 the spatial data company 5525 MOUNES STREET, SUITE 102 NEW ORLEANS, LOUISIANA 70123 PH. 504.733.3001 - FX. 504.734.8938			LIDAR Flight Log										GPS Information		Meteorological Conditions															
			Project #		02043-05		Lever Arm						Base 1		PSEA		Elevation		Temp		Pressure									
			Project Description								Base 2		RRS2		Airport		100		16.9°c		29.96 inHg 101456 Pa									
			PUERTO RICO LIDAR		GPS		x		y		z		Base3		LD01		@ Altitude		8,000		12.5°c 285.65°k									
					IMU		-0.05		0.09		-1.32 -0.26		Aero 2				@ Altitude		11,500		12.3°c 285.45°k									
			Location		Attenuator POS #										IMU Information		GPS Base Station Information													
			PUERTO RICO		0.0		Open (Full Red) (High Altitude)						Start Time		7:46:58		Base 1		File Name		RNX File		Ant Hgt		Ant Type					
			Aircraft		0.5		POS 1 (Half Red/Half Black) (Medium Altitude)						Stop Time		12:03:40		Base 2		rrs20301											
			C-GNWC		1.0		POS 2 (1/4 Red/ 3/4 Black) (Low Altitude)										Base 3		ld010301				1.863		MCR L1/L2					
			Flight Date		Pilot		Operator		Altitude		Scan Angle/Rate		AGL (m)		AMSL (ft)		Attenuator		RCC		AGC		Speed		Miles Flwn		Void "Y"		Conditions/Comments	
1/30/2004		BELL		BORDELON		8000		40° 17°		2348		7700		0		3+3		3/3		140 kts 161 mph		2.69				BORE SITE				
						8000		40° 17°		2348		7700		0		3+3		3/3		120 kts 138 mph		2.30				BORE SITE				
998		W		8:13:40 8:14:55		0:01:15		8000 40° 17°		2348 7700		0		3+3		3/3		3/3		125 kts 144 mph		2.40				BORE SITE				
82		W		8:32:52 8:36:45		0:03:53		8000 40° 17°		2348 7700		0		3+3		3/3		3/3		125 kts 144 mph		7.19								
83		E		8:40:35 8:45:55		0:05:20		8000 40° 17°		2348 7700		0		3+3		3/3		3/3		125 kts 144 mph		11.99								
84		W		8:51:17 8:58:39		0:07:22		8000 40° 17°		2348 7700		0		3+3		3/3		3/3		125 kts 144 mph		16.78								
85		E		9:02:49 9:10:24		0:07:35		8000 40° 17°		2348 7700		0		3+3		3/3		3/3		125 kts 144 mph		16.78								
86		W		9:14:12 9:22:20		0:08:08		8000 40° 17°		2348 7700		0		3+3		3/3		3/3		125 kts 144 mph		19.18								
87		E		9:28:17 9:32:52		0:04:35		8000 40° 17°		2348 7700		0		3+3		3/3		3/3		125 kts 144 mph		9.59								
88		W		9:36:27 9:41:11		0:04:44		8000 40° 17°		2348 7700		0		3+3		3/3		3/3		125 kts 144 mph		9.59								
89		E		9:44:58 9:50:03		0:05:05		8000 40° 17°		2348 7700		0		3+3		3/3		3/3		125 kts 144 mph		11.99								
90		W		9:53:51 9:59:19		0:05:28		8000 40° 17°		2348 7700		0		3+3		3/3		3/3		125 kts 144 mph		11.99				CHECK FOR CLOUD ON EAST END				
91		E		10:03:02 10:08:34		0:05:32		8000 40° 17°		2348 7700		0		3+3		3/3		3/3		125 kts 144 mph		11.99				CHECK FOR CLOUD ON EAST END				
206		E		10:46:42 10:52:20		0:05:38		11,500 60° 14°		3589 11,778		0		3+3		3/3		3/3		170 kts 196 mph		16.30								
228		E		10:57:40 11:06:56		0:09:16		11,500 60° 14°		3589 11,778		0		3+3		3/3		3/3		170 kts 196 mph		29.34				CHECK FOR CLOUD 7mi FROM EAST END				
207		W		11:11:11 11:20:30		0:09:19		11,500 60° 14°		3589 11,778		0		3+3		3/3		3/3		170 kts 196 mph		29.34				0-25mi; CHECK FOR CLOUD 5mi FROM EAST END				
207		W		11:24:55 11:34:08		0:09:13		11,500 60° 14°		3589 11,778		0		3+3		3/3		3/3		170 kts 196 mph		29.34				25mi-END;				



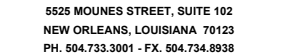
LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	3:50:20
ALS40 Data Collection Time:	1:58:10
Miles Flown on Flights:	366.20



LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	4:55:21
ALS40 Data Collection Time:	1:23:01
Miles Flown on Flights:	241.38



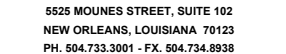
LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	3:06:14
ALS40 Data Collection Time:	0:54:51
Miles Flown on Flights:	124.67



LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	4:01:39
ALS40 Data Collection Time:	1:42:26
Miles Flown on Flights:	235.32



LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	3:00:51
ALS40 Data Collection Time:	1:00:43
Miles Flown on Flights:	136.54



LIDAR FLIGHT SUMMARY	
Approximate Aircraft Flight Time:	5:27:06
ALS40 Data Collection Time:	2:25:24
Miles Flown on Flights:	326.05

FIELD BOOKS AND GPS LOGS

Field Books

Peninsular

FIELD BOOK

1382

Puerto Rico
Lidar GPS

02043-05

INDEX

Date	Page	Description
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"	3	Static Sessions
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10 Jan	8	" "
14 Jan	9	" "
15 Jan	10	" "
16 Jan	11	" "
20 Jan	12	" "
22 Jan	13	" "
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27 Jan	18	" "
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10 Feb	22	Network Sketch

Day 001

" 002

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Title Page

Contract 1003

Job # : 99160 - CS03

Boal Inc.

K Comeaux

J Ellard

J Bordeleau

C Hebert

Equipment :

2- Trimble 5700

1 " 4700

ALS 40 upgraded to ALS 50

IMU - Applanix

Antenna Type's used

Zephyr = TRM 39105.00

Micro cent. L1/L2 = TRM 33429.00 - GP

Ash 700839.3 snow

NOV-WAAS-600

AOAD-M-T

Ash 700718.0A

31 Dec 03

1

Control Found and Used

Designation	PID	Condition
PSE ARP	TV1211	Good
Lajas 2	AB9841	"
LD01	-	"
ZSU1	DF8978	"
PUR3	AF9624	"
ZSU A	AA7661	"
BQW B	TV1515	"
Donna	TV0019	"
Manati 2	AB9831	"
RRS2	-	"
RRS4	-	"
9455371A Tidal	TV1513	"
Fajardo	AB9834	"
Fajardo Inn	-	"
CRO1	AF9484	

1 Jan 04

NGS

"

Set 2' x 3/8" Rebar w/Plastic cap
CORS Station

"

"

NGS

"

"

"

RLDA

"

NGS

New

Day 001

Session 1

Flora

PSEADON

LATADON

ZSWOOD

PUR30011

Start Stop

15:06 17:06

15:52 17:07

14:00 23:59

14:00 23:59

Ant.
Type

Zephyr

Micro
Cent. W/L

NOV-10#AS
600

ASH 1008293

ARP

Ant. Hgt

1.800

1.800

0.00

0.00

③

1 Jan 04

Point Name

PSEARP

LATAS 2

ZSU 1

PUR 3

SR#

0068

0372

NGS

"

CORS

CORS

Day 002
Session 1

Filename	Start	Stop	Ant. Type	ARP Ant. Hgt.
PSEAD001	11:08	21:51	Zephyr	1.800
AW30021	13:00	0:59	ASH7008293	0.00
ZSU10021	12:00	23:59	NOUWAAAS- 600	0.00

(4)

2 Jan 04

Designation

PSE ARP

CORS ID: PUR3

CORS ID: ZSU1

NGS

CORS Tower

CORS Tower

Day 004

Filename	Session 1		Ant.	ARP
	Start	Stop	Type Hot.	Ant. Hot.
Laj20041	14:09	15:10	Micro cent 4/22-GP	1.800
PSE00041	13:18	19:33	zephyr	"
PWT30041	13:00	00:59	Asht700829.3	0.00

5

4 Jan 04

Designation

LATAS 2	NGS
PSE ARP	"
PWT3	CORS

Day 005

Filename	Session 1		Ant. Type	Ant. Hgt
	Start	Stop		
Donn0051	13:17	19:37	Zephyr	1.800
Laj20051	17:43	18:45	Micro Cent. 4/L2	"
PSEAB051	11:17	16:55	Zephyr	"
PUR30051	13:00	0:59	Ash700829.0 NOV	0.00
ZSU10051	13:00	0:59	Waes 600	0.00

8

5 Jan 04

Designation	
Donna	NBS
Lajas 2	"
PSE ARP	"
PUR3	CORS Tower
ZSU1	" "

Day 006

Session 1

Filename	Start	Stop	Ant. Type	Ant. Hgt
Manat0061	14:01	15:06	Micro Cent. 4/12	1.800
PUR30061	13:00	0:59	Ash 700839.0	0.00
ZSU10061	13:00	0:59	Nov 100V. 1000S. 600	0.00

Session 2

Manat0062	15:32	16:56	Micro Cent. 4/12	1.8
PUR30061	13:00	0:59	Ash 700839.00	0.00
ZSU10061	13:00	0:59	Nov 100V. 1000S. 600	0.00

6 Jan 04

(7)

Designation

Manat 2	NGS
PUR 3	CORS Tower
ZSU 1	" "

Manat 2	NGS
PUR 3	CORS Tower
ZSU 10061	" "

Day 010

Session 1

Filename	Start	Stop	Ant. Type	Ant. Hgt.
LD010101	8:58	14:30	zephyr	1.800
PSEA0101	7:42	15:16	Zephyr	1.800
PUR30101	6:00	22:00	Ash 700829.0	0.00
ZSU10101	7:00	19:00	Nov. Woods- 600	0.00
RRS40101	0:00	23:59	Ash 700718.0	0.00

10 Jan 64

LD01	New
PSEARP	NGS
PUR3	COTS Tower
ZSU1	" "
RRS4	RLDA

Day 014

Session 1

Filename

Start Stop

Ant.

Type

ARP

Ant.

Hgt.

Laj20141

15:42

16:12

Micro
Cent. 4/12

1.800

LD010141

08:11

17:02

Zephyr

1.800

PSEA0141

07:36

18:41

Zephyr

1.800

PUR30141

07:00

22:00

Ask
720839

0.00

Session 2

Laj20142

16:12

16:42

Micro
Cent. 4/12

1.800

LD010141

08:11

17:02

Zephyr

1.800

PUR30141

07:00

22:00

Ask
700839

0.00

9

14 Jan 04

Designation

Lajas 2

NGS

LD01

New

PSE ARP

NGS

PUR3

CORS Tower

Lajas 2

NGS

LD01

New

PUR3

CORS

Day 315

Session 1

Filename	Start	Stop	Ant. Type	Ant. Hgt.
BAW0151	01:23	14:44	Micro	1.500
Donna0151	16:44	18:55	Zephyr	1.800
LD010151	08:24	14:39	"	1.800
ZSUAB151	22:30	15:18	Nov. GPS 600 w/ Alp.	2.11
PSEA0151	07:37	14:41	Zephyr	1.800
PWF30151	7:00	22:00	Ash 700829	0.00
ZSU10151	7:00	22:00	Nov. Leads 600	0.00
RR340151	0:00	22:09	Ash 700718.0	0.00

Session 2

Donna0151	16:44	18:55	Zephyr	1.800
PSEA0152	16:21	19:20	"	1.800

15 Jan 04

Designation

BAW B	NGS
Donna	"
LD01	New
ZSU A	NGS
PSEA ARP	"
PWF3	Cors Tower
ZSU1	" "
RR34	RLDA

Donna	NGS
PSEA ARP	"

Day 016 Session 1

Filename

ZSUA0161

ZSUA0161

Start Stop

22:55=15^h 17:53=15^h

7:00 20:00

Ant.
Type
NOV: GPS
600
NOV: DMS
600

ARR

Ant.
Hgt.

2.110

0.00

16 Jan 04

11

Designation

ZSUA

ZSU 1

NGS

COTS

Day 020

Session 1

Filename	Start	Stop	Ant. Type	ARP Ant. Hgt.
BQNB0201	13:18	15:24	zephyr	1.500
LD010201	12:21	14:32	"	1.800
PUR30201	12:00	18:00	Ash 700829.0	0.00

Session 2

LD010202	14:32	15:26	zephyr	1.800
BQNB0201	15:24	17:23	"	1.500
PUR30201	12:00	18:00	Ash 700829.0	0.00

Session 3

BQNB0203	15:24	17:27	zephyr	1.500
LD010203	15:26	17:32	"	1.800
PUR30201	12:00	18:00	Ash 700829.0	0.00

20 Jan 04

BQNB	NGS
LD01	New
PUR3	CORS

LD01	New
BQNB	NGS
PUR3	CORS

BQNB	NGS
LD01	New
PUR3	CORS

Day 022

Session 1

Filename	Start	Stop	Ant. Type	ARP Ant. Hgt. 15
Man20221	13:55	15:04	zephyr	1.800
Donn0221	13:15	16:29	Micro Cent. 1/4	"
PSEA0221	07:34	14:47	zephyr	"
RRS20221			ASH 700718.0	0.00
ZSW10221	13:00	00:59	NOV 7005-600	"
RRS40221	01:00	22:00	ASH 700718.0	"
PUS30221	13:00	01:59	700829.1	"

Session 2

Man20222	15:06	15:59	zephyr	1.800
Donn0221	13:15	16:29	Micro Cent. 1/4	"
PSEA0222	14:48	16:52	zephyr	"
RRS20221	01:00	22:00	ASH 700718.0	0.00
RRS40221	01:00	22:00	ASH 700718.0	"
ZSW10221	13:00	01:59	NOV 7005-600	"

22 Jan 02

Designation

Manati. 2	NGS
Donna	"
PSEA ARP	"
RRS2	" RLDA
ZSW1	CORS
RRS4	RLDA

Manati. 2

NGS

Donna

"

PSEARP

"

RRS2

" RLDA

RRS4

RLDA

ZSW1

CORS

Day 023

Session 1

Filename	Start	Stop	Ant. Type	ARP Ant Hgt.
ZSU10231	07:00	17:00	Woods-bro	0.00
Finn0031	7:05	15:11	Zephyr	1.800
PSEA0231	7:34	15:13	Zephyr	1.800
RRSH0231	0:00	23:59	ASH 700718.0	0.00
CRO10231	07:00	17:00	ADAD/MT	0.00

(14)

23 Jan 04

ZSU1	CORS
Fajardo Inn	New
PSE-ARP	NGS
RRSH	ALDA
CRO1	CORS

Day 024

Session 1

Filename	Start	Stop	Ant. Type	ARP Ant. Hgt.
Fim0241	13:59	16:45	Zephyr	1,800
ZSU10241	7:00	19:00	NOV WGS 600	0.00
RRS0241			ASH 700 118.0	0.00
CRO10241	7:00	18:59	ADAD/MT	0.00
ZSUA0241			NOV GPS 600	2.11

Session 2

Fim0242	16:49	19:26	Zephyr	1,800
--------------------	------------------	------------------	-------------------	------------------

15

24 Jan 04

Designation

Fajardo Inn	New
ZSU1	CORS
RRS2	NGS / RLDA
CRO1	CORS
ZSUA	NGS

Fajardo Inn

New

Day 025

Session 1

Filename	Start	Stop	Ant. Type	APP Ant. Hgt.
Final0251	7:05	17:44	zephyr	1.800
ZSU0251	12:12	15:39	NOV GPS-600	2.110
ZSU15251	7:00	19:00	NOV GPS-600	0.00
CRO10251	7:00	18:59	ROAD/M.T	0.00

(16)

25 Jun 04

Designation

Fajardo In	New
ZSU A	NGS
ZSU 1	CORS
CRO 1	"

Day 026

Session 1

Filename	Start	Stop	Ant. Type	ARP Ant. Hgt.
Fin0261	7:02	01:00	Zephyr	1.800
zsu0261	7:00	19:00	Nov was-bow	0.00
cro0261	7:00	18:59	ADD-RT	0.00

26 Jan 04

Designation
Fajardo Inn
ZSU 1
CRO 1

New
CORS
"

Day 027

Session

Ant

Ant
Hgt

Filename

Start Stop

Ant.
Type

Finn0271

6:59 17:33

Zephyr

1.800

CRO10271

7:00 16:59

ROAD/MT

0.00

RR320271

14:23 16:59

^{Ash}
700718.0

0.00

ZSU10271

7:00 17:00

^{Nov}
Weas-600

0.00

BEA0271

07:37 15:11

Zephyr

1.800

RRS40271

7:00 15:00

^{Ash}
700718.0

0.00

27 Jan 04

Designation

Fajardo Inn

new

CRO1

CORS

RRS2

" RLDA

ZSU1

"

PSE ARP

NGS

RRS4

RLDA

Day 028

Session 1

Filename	Start	Stop	Ant Type	ARP Ant Hgt,
RRS40281	8:00	16:00	700718.0	0.00
RRS20281	8:00	16:00	700718.0	0.00
PSEA0281	7:33	11:04	zephyr	1.800
Finn0281	7:03	13:35	zephyr	1.800
CRO10281	7:00	19:00	HOLO-47	0.00
ZSW10281	11:00	24:00	Nov was 600	0.00

19

28 Jan 04

Description

RRS4	RLDA
RRS2	"
PSE ARP	10GS
Fajardo Inn	New
CRO1	CORS
ZSW1	"

Day 034

Session 1

Filename	Start	Stop	Ant Type	Ant Hgt.
53710341	14:22	15:22	Zep ¹ yr	1.800
ZSW0341	14:00	18:00	Nov Wass 600	0.00
RRS40341	14:00	18:00	700718.0	0.00
RRS20341	12:00	23:00	700718.0	0.00

Session 2

53710342	15:23	16:23	Zep ¹ yr	1.800
ZSW0341	14:00	18:00	Nov Wass 600	0.00
RRS40341	14:00	18:00	700718.0	0.00

3 Feb 04

Description

975 5371 A Tidal	NGS
ZSW1	CORS
RRS4	RLDA
RRS2	

975 5371 A Tidal	NGS
ZSW1	CORS
RRS4	RLDA

Day 040

Session 1

Filename	Start	Stop	Ant Type	Ant Hgt
CRO10401	12:00	17:59	ROAD HT	0.00
Finn0401	13:35	15:54	zephyr	1.800
RRS0401			700718.0	0.00
ZSU10401	13:00	18:59	100V was 600	0.00
Faj0401	14:38	15:53	Micro Cent. 4/12	2.00

Session 2

CRO10401			ROAD HT	0.00
Finn0402	15:54	17:06	zephyr	1.800
RRS0401			700718.0	0.00
ZSU10401	13:00	18:59	100V was 600	0.00
Faj0401	15:53	17:08	Micro Cent. 4/12	2.00

(21)

9 Feb 04

Description

CRO1	CORS
Fajardo Inn	New
RRS2	ALDA
ZSU1	CORS
Fajardo	NGS

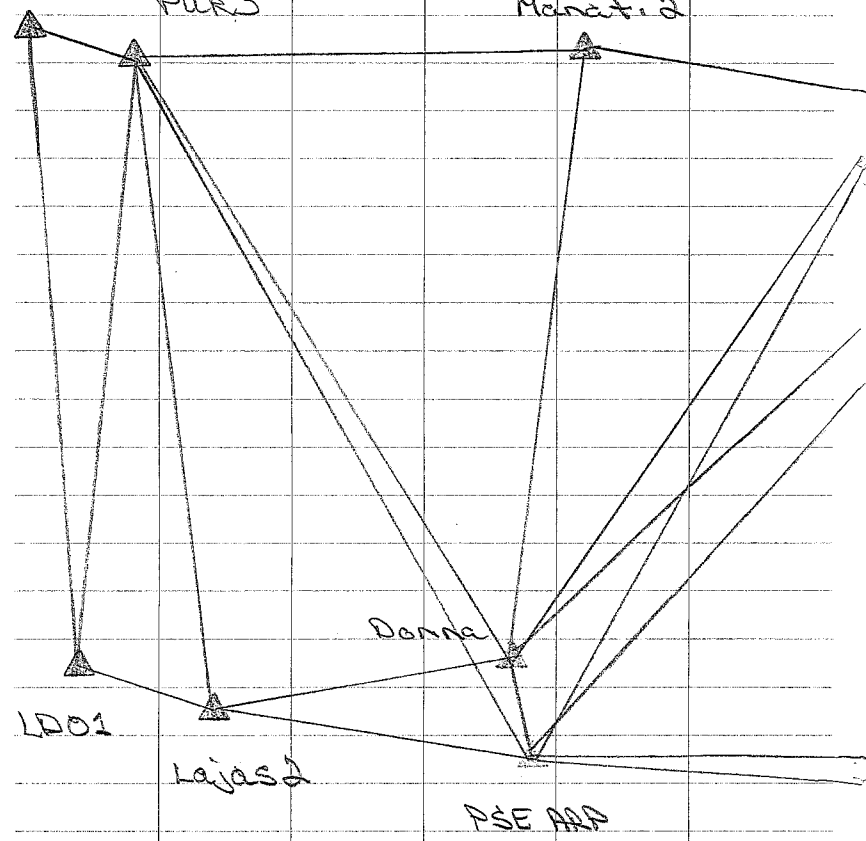
CRO1	CORS
Fajardo Inn	New
RRS2	ALDA
ZSU1	CORS
Fajardo	NGS

Network Sketch

BAND

PUR3

Manati 2



975 5371A Tidal

ZSU1

Fajardo

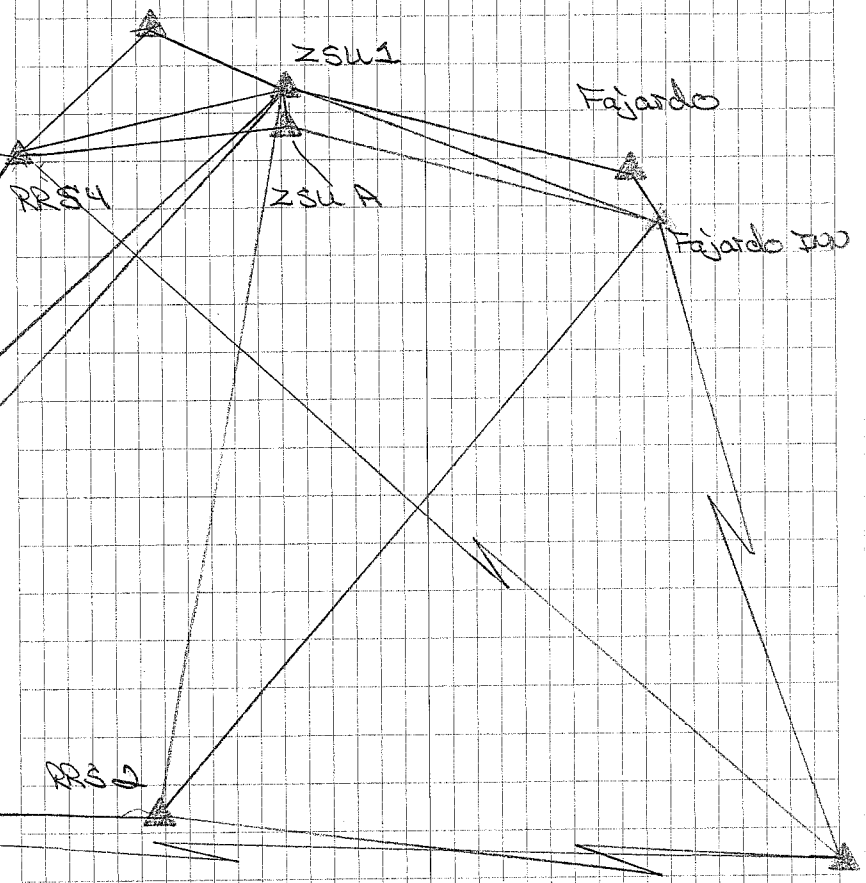
RRS4

ZSU A

Fajardo 200

RRS 12

CRO1



Peninsular

FIELD BOOK

FB 803

PUERTO RICO

LIDAR GPS

02043-05

Page	Date	Description
1		Title Page
2		Feature Code List
3	1 Jan	GPS Observation
4	"	Lidar Checks
5	"	" "
6	2 Jan	GPS Observation
7	"	Lidar Checks
8	3 Jan	GPS Observation
9	"	Lidar Checks
10	"	" "
11	6 Jan	GPS Observation
12	"	Lidar Checks
13	"	" "
14	7 Jan	GPS Observation
15	"	" "
16	"	Lidar Checks
17	"	" "
18	"	" "
19	"	" "
20	"	" "
21	17 Jan	GPS Observation
22	"	Lidar Checks
23	19 Jan	" "
24	24 Jan	GPS Observation

Day 001

Loja 52

PR 01

Day 002

PR 02

Day 003

PR 04

PR 05

Day 006

PR 06

PR 07

Day 007

" "

PR 08

PR 09

PR 10

PR 11

PR 12

Day 017

PR 16

Boresight Area RSE ARP

Day 024

Index Cont'd

Page	Date	Description
25	24 Jan	Lider checks
26	28 Jan	GPS Observation
27	"	Lider checks
28	29 Jan	GPS Observation
29	"	Lider checks
30	"	" "
31		Void
32		Void

II

PR 18

Day 028

PR 19

Day 029

PR 20

PR 21

Title Page

Puerto Rico Lidar Survey

Survey No. 02-203

Contract: DADW43-03-D-0504

3001 Inc,

Comeaux

Ellard

Hebert

Bordelon

Equip's

ALS40 upgraded to ALS50

Applanix Pos System

Trimble S700 - 2

" 4700 - 1

RTK

Feature Code List

Surface Type

Sky Vis

1 Dirt

1-open

2 Sand

2-Part open

3 Asphalt

3-covered

4 Concrete

5 Tall grass

6 Mowed grass

7 Trees + Brush

8 Weed + Short grass

9 Thick Brush

A Thick Cut Grass

B Scattered Trees + grass

C Limestone

D Trees + grass

E Gravel

F Brush + Grass

2

Surface Slope

Can Aidance

1-Flat

1-Good

2-Slight Slope

2-Fair

3-Slope

3-Bad

GPS OBSERVATIONS

Session 1

Filename	Start	Stop	Ant. Type Micro. cent.	Ant. Hgt.	
Laj20011	15:52	17:07	1/1/12	1.863	True
PUR30011	14:00	23:59	Ant. 700829.3 zephyr	0.00	ARP
PSEA0011	13:53	15:06	Ant. 39105.0	1.873	True

Session 2

Filename	Start	Stop	Ant. Type Micro. cent.	Ant. Hgt.	
PSEA0012	15:06	17:06	Ant. 39105.0 zephyr	1.873	True
PUR30011	14:00	23:59	Ant. 700829.3 ASH	0.00	ARP
PRB10012	18:26	19:40	Ant. 700829.3 Micro. Cent. 1/1/12	1.863	True

1 Jan 04

③

Point Name

Lajas 2	NGS, AB9841
PUR3	CORS
PSEA	NGS, TV1211

PSEA	NGS, TV1211
PUR3	CORS
Nail	New

RTR Lidar chks

Ref. Station = Lajes 2
 Lat 18-04-19.167145
 Long. 66-57-33.382174
 Ellip. 48.5567 Mts
 Ant. Hgt. 1.873 Mts

Point Name	Feature Code	Ant. Type	Ant. Hgt.
B1	CHK1	zephyr	2.973
B2	CHK2	"	"
B3-B38	G111	"	"
B39	C111	"	"
B40-B57	Dirt111	"	"
B58-B67	G111	"	"
B68-B82	Rock111	"	"
B83-B85	G111	"	"
B86	CHK2	"	"
B87-B101	Rock111	"	"

1 Jan 04

④

NGS, AB9841

WAD83

" "

Ellip. Hgt.

Micro Cent. 4/12

Description

Wall

"

Mowed Grass on Baseball Field

Dirt on Baseball Field

Mowed grass on Baseball Field

Rock Track around baseball field

Mowed Grass on baseball field

B1, B2, B86 Same Point

Rock Track around field

RTK Lidar CHKS

Ref Station = RR01

Lat 18-01-45.894590

Long 67-08-03.214178

Ellip. Hgt. 24.882 Mts.

Ant. Hgt. 1.863 "

Point Name	Feature Code	Ant. Type	Ant. Hgt.
C1	CHK1	zephyr	2.073
C2-C74	6111	"	"
C75-C92	1111	"	"
C93-C100	4111	"	"
C101	CHK1	"	"

1 Jan 04

Mail Gap

NRD 83

"

Micro. Cent. 4/42

Description

check Point

Mowed Grass on baseball field

Dirt on baseball field

Concrete

check Point CHC101 same Point

GPS Observation

Session 1

Filename	Start	Stop	An4, Type	An4, Hgt.	
PRO26521	14'18	15'33	Micro, cont. vils	1.863	True
ZSU00020	0'00	23'59	low, b Ash,	0.00	ARD.
PRP30000	13'00	21'59	7008A.3	0.00	"

2 Jan 04

Day 609

25/11/17

CO 75

Pr 13

11

RTK Lidar chks

Ref. Station = PROJ2

Lat. 18-11-30.663973

Long. 67-09-12.903597

Ellip. Hgt. -38.620

Ant. Hgt. 1.863

Point Name	Feature Code	Ant. Type	Ant. Hgt.
PROJ201	chk1	Zephyr	2.073
PROJ201-PROJ2063	3111	"	"
PROJ2064-PROJ2065	chk1	"	"
PROJ2066-PROJ2095	6111	"	"
PROJ2100-PROJ2101	chk1	"	"

2 Jan 04

WAD 83

"

Ellip. Hgt

Micro. Cent. 4/12

Description

check Point

Old Asphalt

check Points

Mowed Grass on baseball field

check Points

* PROJ201, PROJ2064, PROJ2065, PROJ2100, PROJ2101
are all same Point.

GPS Observations

Session 1

Filename	Start	Stop	Ant. Type	Ant. Hgt.	
PRO40031	18:53	19:40	Micro. Ant. W/6	1.863	True
PUR30030	13:00	00:59	Ash. 700809.3	0.00	ARP
ZSU10030	14:00	01:59	1000. 6000 600	0.00	"

Session 2

PRO50031	17:05	18:01	Zephyr	1.873	True
PUR30030	13:00	00:59	Ash. 700809.3	0.00	ARP
ZSU10030	14:00	01:59	1000. 6000 600	0.00	"

3 Jan 03

Point Name

Mail box	New
PUR3	CORS
ZSU1	"

Point Name

Mail box	New
PUR3	CORS
ZSU1	"

RTR Lidar checks

Ref. Station = PROJ

Lat 18-22-09.612761

Long 67-09-14.879972

Ellip. Hgt -14.880 Mts.

Ant. Hgt. 1.873 Mts.

Point Name	Feature Code	Ant. Type	Ant. Hgt.
PROJ001	CHK 1	zephyr	2.073
PROJ002-PROJ009	6111	"	"
PROJ070-PROJ083	1111	"	"
PROJ084-PROJ103	6111	"	"
PROJ104	CHK 1	"	"

3 Jan 04

9

MAN 83

"

Ellip. Hgt.

zephyr

Check Point

Mowed Grass

Dirt

Mowed Grass

Check Point PROJ001, PROJ104 is Same Point

RTK Lidar checks

Ref Station = PRAS

Lat. 18-29-50.229923

Long. 67-09-15.757488

Ellip. Hgt. 21.173 Mts

Ant. Hgt. 1.873 "

Point Name	Feature Code	Ant. Type	Ant. Hgt.
PROSD1	CHK1	zephyr	2.073
PROSD2-PROSD21	3111	"	"
PROSD22-PROSD103	6111	"	"
PROSD104	CHK1	"	"

3 Jan 04

Uail 60p

UAD 83

"

zephyr

Description

check point

Old asphalt

Mowed Grass on Baseball Field

check Point PROSD1, PROSD104 is

Same Point,

GPS Observation

Session 1

Filename	Start	Stop	Ant. Type	Ant. Hgt.	
PROB0061	14:00	14:48	Zephyr	1.873	True
PUR30061	13:00	0:59	Ask 700839.3	0.00	ARP
ZSW10061	13:00	0:05	NOV, was 600	0.00	"

Session 2

PRO70062	16:23	17:28	Zephyr	1.873	True
PUR30061	13:00	0:59	Ask 700839.3	0.00	ARP
ZSW10061	13:00	0:59	NOV, was 600	0.00	"

6 Jan 04

11

Point Name

PROB	Mail box	New
PUR3		CORS
ZSW1		"

PRO7	Mail box	New
PUR3		CORS
ZSW1		"

RTK 1160r chks

Ref. Station = PROB

Lat, 18-27-24.845153

Long, 66-43-29.634928

Ellip. Hgt, 40.674 Mts,

Ant. Hgt, 1.873 Mts,

Point Name	Feature Code	Ant. Type	Ant. Hgt.
PROBA1	chk1	zephyr	1.873
PROBA2-A100	bill	"	"
PROBA101	chk1	"	"

6 Jan 04

1001 60p

1000 83

"

zephyr

Description

check point

Mowed Grass

Check Point PROBA1, PROBA101 is same point,

RTR Lidar checks

Ref. Station = PR07

Lat 18-25-22.311089

Long 66-28-20.811434

Elev 34.820 Mts

Ant. Hgt. 1.873 "

Point Name	Feature Code	Ant. Type	Ant Hgt.
PR07B1	CHK1	zephyr	2.073
PR07B2-PR07B101	6111	"	"
PR07B102	CHK1	"	"

13

6 Jan 04

Wall 60p

New

WAD 83

"

Zephyr

Description

Check Point

Mowed Grass on Soccer Field

Check Point *PR07B1, PR07B102 is same Point.

GPS observations

Session 1

Filename	Start	Stop	Ant, Type	Ant Hgt,	
PR030070	11:40	12:38	Zephyr	1.873	True
PUR30070	01:00	23:59	ASH, 700829.3	0.00	ARP
CRO10070	11:00	23:59	ABAD/H-T	0.00	"

Session 2

PR090071	13:39	14:41	Zephyr	1.873	True
PUR30070	01:00	23:59	ASH, 700829.3	0.00	ARP
ZSU10070	13:00	01:59	Nov, 600	0.00	"
CRO10070	11:00	23:59	ABAD/H-T	0.00	"

Session 3

PR100072	15:26	16:27	Zephyr	1.873	True
ZSU10070	13:00	01:59	Nov, 600	0.00	ARP
CRO10070	11:00	23:59	ABAD/H-T	0.00	"

Session 4

PR110073	17:43	18:44	Zephyr	1.873	True
ZSU10070	13:00	01:59	Nov, 600	0.00	ARP
PUR30070	01:00	23:59	ASH, 700829.3	0.00	"
CRO10070	11:00	23:59	ABAD/H-T	0.00	"

141

7 Jan 04

Point Name

PR03	Naill bop	New
PUR3		CORS
CRO1		"

PR09	Naill bop	New
PUR3		CORS
ZSU1		"
CRO1		"

PR10	Naill bop	New
ZSU1		CORS
CRO1		"

PR11	Naill bop	New
ZSU1		CORS
PUR3		"
CRO1		"

Cont'd

Session 5

PR130074	19.29	20.29	Zephyr ASH	1.873	True
PR130070	0.00	23.59	100889.3 1000	0.00	ARP
ZSU10070	13.00	0.59	Wes 600	0.00	"
CR010070	11.00	23.59	ACAD/MT	0.00	"

15

7 Jan 04

PR12	Nail 62p	New
PR13		CORS
ZSU1		"
CR01		"

RTR Lidar Checks

Ref. Station = PROB

Lat. 18-27-57.963576

Long. 66-05-28.031188

Ellip. -40.661 Mts

Ant. Hgt. 1.873 "

Point Name	Feature Code	Ant. Type	Ant. Hgt.
PROBA1	CHK1	zephyr	2.073
PROBA2-PROBA63	6111	"	"
PROBA4	CHK2	"	"
PROBA5-PROBA102	0111	"	"
PROBA103-PROBA104	CHK2	"	"
PROBA105	CHK1	"	"

7 Jan 04

16

Mail 60p

OAD 83

"

zephyr

Description

Check Point

Mowed Grass on Baseball Field

Check Point

Road w/dirt on Field

check Points

" "

*PROBA1, PROBA105 is same Point

*PROBA103, PROBA104 " " "

RTR Lidar checks

Ref. Station = PR09

Lat, 18-22-34.369890

Long, 65-50-08.625961

Elev. -32.552 Mts

Ant. Hgt, 1.873 "

Point Name	Feature Code	Ant. Type	Ant. Hgt.
PR09B1	CHK1	Zephyr	2.073
PR09B4-PR09B5	6111	"	"
PR09B6-PR09B8	3211	"	"
PR09B99	CHK1	"	"

7 Jan 04

Nail 60p

NAD 83

Zephyr

Description

Check Point

Mowed grass on baseball field

Old Asphalt Parking

check Point

* PR09B1, PR09B99 is same point

RTR Llder Cheeks

Ref. station = RR 10

Lat. 18-19-52.07652

Long 65-38-57.660799

Elev. -29.198

Ant. Hgt. 1.873

Point Name	Feature Code	Ant. Type	Ant. Hgt.
PR10C1	CHK1	zephyr	2.073
PR10C2-PR10C7	CH11	"	"
PR10C8-PR10C79	CH11	"	"
PR10C80	CHK1	"	"
PR10C81-PR10C100	CH11	"	"
PR10C101-PR10C115	CH11	"	"

18

7 Jan 04

Nail 60p

UAD 33

"

zephyr

Description

Check Point

Limestone (small) Rock

Mowed Grass on Baseball Field

Check Point

Asphalt (Kinda Paved)

Dirt on a small baseball field.

RTR Lidar checks

Ref. station = PR 11

Lat, 18-12-33.811148

Long, 65-43-58.801355

Ellip, -26.696 Mts

Ant. Hgt, 1.873 Mts

Point Name	Feature Code	Ant. Type	Ant. Hgt.
PR1101	CH21	zephyr	2.073
PR1103-PR11078	6111	"	"
PR11079-PR11099	1111	"	"
PR110100	CH21	"	"

7 Jan

Nail bop

WAD 83

"

zephyr

Description

check Point

Mowed grass on baseball Field

Dirt w/ Rock on Field

check Point

RTR Lidar checks

Ref. Station = PR12

Lat 18-02-50.463276

Long 65-52-17.925767

Elev. -27.206

Ant. Hgt. 1.873

Point Name	Feature Code	Ant. Type	Ant. Hgt.
PR12E1	CHK1	Zephyr	2.073
PR12E2-PR12E09	6111	"	"
PR12E10-PR12E13	C111	"	"
PR12E14-PR12E160	C211	"	"
PR12E121-PR12E153	C111	"	"
PR12E154	CHK1	"	"

7 Jan 04

20

Mail box

NAD 83

"

Zephyr

Description
Check Point
Mowed Grass on Soccer Field
Rock Road around Field
" " " " near obstruction
" " " "
check Point

GPS Observation

Session 1

Filename	Start	Stop	Ant Type	Ant Hgt.	
PR160171	17:25	18:26	zephyr	1.873	True
PUR30170	11:00	23:59	Ash, 2008273 NOV, Woodsboro	0.00	ARP
ZSU10170	11:00	23:59	Woodsboro	0.00	"

21

17 Jan 04

Naill 600

new

PUR3

CORS

ZSU1

"

RTR Lidar checks

Ref. Station: PR16

Lat 18-12-57.353166

Long 66-35-50.641527

Elev 388.088 Mts

Ant. Hgt. 1.873 "

Point name	Feature Code	Ant. Type	Ant. Hgt.
PR1601	CHK1	zephyr	2.073
PR1602-PR1699	6111	"	"
PR16100	CHK1	"	"

17 Jan 04

Nail box

WAD 83

"

zephyr

Description

check point

Mowed Grass

check point

RTR Lidar checks
Boresight Area

Ref. Station = PSE ARP

Lat, 18-00-31.4691167

Long, 66-33-47.641140

Ellip -31.324 MTS

Ant. Hgt, 1.873 "

Point Name	Feature Code	Ant Type	Ant Hgt.
A1	CHK1	zephyr	2.073
A2-A92	3111	"	"
A93-A104	6111	"	"
Bore 200-Bore 308	3111	"	"
Bore 329	CHK1	"	"
Bore 330-Bore 444	3111	"	"
Bore 415	CHK1	"	"
Bore 446-Bore 663	4111	"	"
Bore 664	CHK1	"	"

23

19 Jan 04

NGS See Network

NAD83

"

zephyr

Description
Check Point
Old Asphalt
Mowed Grass
Old Asphalt
Check Point
Old Asphalt
Check Point
Concrete Pad
Check Point

GPS Observation

Session 1

Filename	Start	Stop	Ant. Type	Ant. Hgt.	
PR180242	18:06	19:08	Micro Ant. 4/12	1.863	True
PUR30240	11:00	23:59	Ash 700839.3	0.00	ARP
ZSU10240	11:00	23:59	NOV, Woods 600	0.00	"

24 Jan

24

Point Name

PR18	Nail 600	New
PUR3		CORS
ZSU1		"

RTR Linder Chks

Ref. Station = PR18

Lat 18-14-44.864216

Long 66-24-29.410381

Elev. 542.334 Mts.

Ant. Hgt. 1.863 "

Point Name	Feature Code	Ant Type	Ant. Hgt.
PR1801	CHK1	zephyr	2073
PR1802-PR1891	6111	"	"
PR1892-PR1899	1111	"	"

25

24 Jan 04

Mail Gap New

WAD 83

" "

zephyr

Description

check Point

Mowed Grass

Rock

GPS observations

Filename	Start	Stop	Session	Ant	True
			Type	Hgt	
PR190281	17:17	18:21	cont. 46	1.863	True
PR30380	11:00	23:59	Ash, 7008393	0.00	ARP
ZSW10280	11:00	23:59	NOV, was 600	0.00	ARP

26

28 Jan

PR19 Na1160p New
 PUR3 CORS
 ZSW1 "

RTR Lidar Checks

Ref. Station = PR 19
 Lat. 18-02-45.479250
 Long 66-43-11.308273
 Ellip. -4.525 Mts.
 Ant. Hgt. 1.863 Mts.

Point Name	Feature Code	Ant Type	Ant. Hgt.
PR1901	CHK1	Zephyr	2.073
PR1902-PR1967	6111	"	"
PR1968-PR1986	0111	"	"
PR1987-PR2001	3111	"	"
PR2002	CHK1	"	"

27

28 Jan

Mail 60p
 NAD 83

New
 CORS

"

"

Zephyr

Description
 Check Point
 Mowed Grass
 Rock
 Old Asphalt
 Check Point

GPS Observations

Session 1

Filename	Start	Stop	Ant. Type	Ant. Hgt.	
PR200391	13:59	14:59	Micro Cent. 4/62	1.863	True
PR30390	11:00	23:59	Ash 200839.3	0.00	ARP
ZSU10390	11:00	23:59	No U. Waas 600	0.00	"

Session 2

PR210391	16:55	17:57	Micro Cent. 4/62	1.863	True
PR30390	11:00	23:59	Ash 200839.3	0.00	ARP
ZSU10390	11:00	23:59	No U. Waas 600	0.00	"

28

29 Jan

Point Name

PR20	Nail box	New
PR3		CORS
ZSU1		CORS

PR21	Nail box	New
PR3		CORS
ZSU1		"

RTR Lidar checks

Ref. Station = PR20

Lat 18-25-05.395326

Long 66-49-05.930132

Ellip -30.573 Mts

Ant. Hgt 1.873 "

Point Name	Feature Code	Ant Type	Ant Hgt
PR20001	CHK1	zephyr	2.073
PR20002-PR20078	6111	"	"
PR20079-PR20099	0111	"	"
PR20100	CHK1	"	"

29

29 Jan

Nail 60 p

NAD 83

"

zephyr

check Point

Mowed Grass

Rock

check Point

RTR Lidar chks

Ref Station = PR21
 Lat 18-20-18.219253
 Long 66-59-51.196346
 Ellip 16.282 MHS
 Ant. Hgt. 1.873 "

Point Name	Feature Code	Ant Type	Ant Hgt
PR21001	CHK1	zephyr	2.073
PR21002-PR21094	6111	"	"
PR21095-PR21111	1111	"	"
PR21112-PR21113	CHK1	"	"
PR21001-PR21007	1111	"	"
PR21008-PR21096	6111	"	"
PR21097-PR210100	4111	"	"
PR210101	CHK1	"	"

29 Jan

Nail 160p
 NAD83

zephyr

Description
 Check Point
 Mowed Grass
 Dirt
 Check Point
 Dirt
 Mowed Grass
 Concrete
 Check Point

GPS observation

Session 1

Filename	Start	Stop	Ant Type	Ant Hgt	
PR230371	16:01	17:06	zephyr	1.873	True
PR130370	0:00	23:59	Ask 700839.3 1000	0.00	ARP
ZSU10370	11:00	23:59	was 600	0.00	ARP

VOID

6 Feb 04

31

Point Name

Nail bop

NEW

PUR3

CORS

ZSU1

?

RTK Lidar Checks

Ref. Station = PR22

Lat. 18-13-49.306664

Long 66-01-26.606542

Elev 23.096

Ant. Hgt. 1.873

VOID

6 Feb 04

32

GPS Log Sheets



5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

PAGE:

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	RLDA	APPROXIMATE POSITION (C/A/CODE)			
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RECEIVER MODEL		Latitude		HGT.	
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RECEIVER S/N		LONGITUDE			
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SESSION		DATE:	1/10/2004	START TIME	7:00	Y	U.T.C.
		DAY OF YEAR	10	END TIME	15:00		LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER			

ANTENNA HEIGHT (VERTICAL)			
METERS		FEET	
	MEASURED		FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH			STEEL POINT			
	LOW			BRASS COLLAR			

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:	SKETCH



**AERIAL CONTROL
FIELD DATA SHEET**

PAGE:

1

JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

5525 Mounes St., Suite 12

New Orleans, LA 70123

504-733-3001 voice 504-734-8938 fax

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	RLDA
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APPROXIMATE POSITION (C/A/CODE)			
Latitude			HGT.
LONGITUDE			

RECEIVER MODEL	
RECEIVER S/N	

SESSION		DATE:	
		DAY OF YEAR	

START TIME	
END TIME	

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER			

ANTENNA HEIGHT (VERTICAL)			
METERS		FEET	
	MEASURED		FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:	SKETCH

**AERIAL CONTROL
FIELD DATA SHEET**

PAGE:

1 of 1

JOB REFERENCE

Puerto Rico

POINT ID:

BQN B

JN:

02043-05

5525 Mounes St., Suite 12

New Orleans, LA 70123

504-733-3001 voice 504-734-8938 fax

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Jamie
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APPROXIMATE POSITION (C/A/CODE)

Latitude	18 29 31.29419	68.676	HGT.
LONGITUDE	067 08 01.03648		

RECEIVER MODEL	Trimble 4700
RECEIVER S/N	5559

SESSION		DATE:	1/27/2004
BQNB0271		DAY OF YEAR	27

START TIME	1:07
END TIME	14:07

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	90096 / Microcentered L1 L2 / TRM33429.00 -G		

ANTENNA HEIGHT (VERTICAL)			
METERS	1.863 Meters	FEET	
	MEASURED		FIXED HGT

TOP OF MON. IS:		FLUSH
METERS	0.5m	ABOVE GROUND
METERS		BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	y	BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1515	



5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

PAGE:

JOB REFERENCE

Puerto Rico

POINT ID:

Fajardo Inn

JN:

02043-05

STATE	Puerto Rico	COUNTY		QUAD:	
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OPERATOR	Comeaux
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RECEIVER MODEL	Trimble 5700
RECEIVER S/N	68

SESSION	FINN0321	DATE:	1/32/2004
		DAY OF YEAR	32

START TIME	1:52
END TIME	14:49

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 True	FEET	
	MEASURED	Y	FIXED HGT

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	Zephyr without GP		

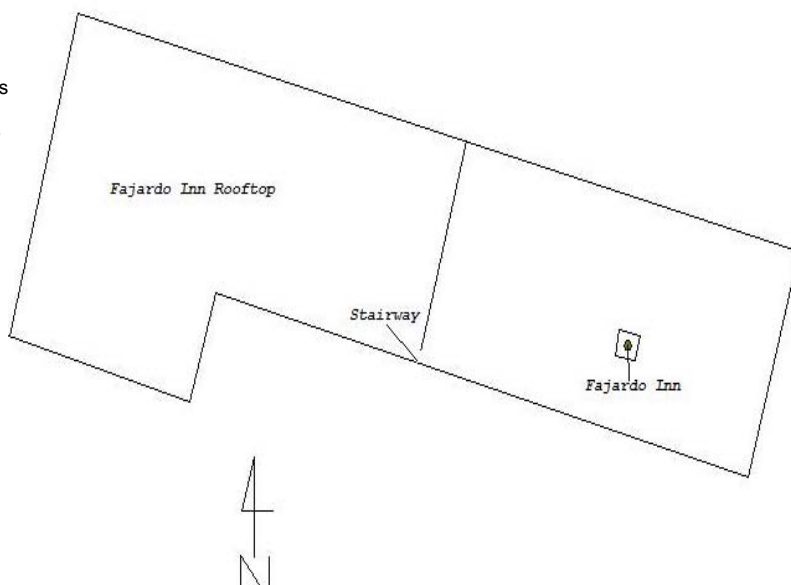
TOP OF MON. IS:	Y	FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK	Y	NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:

Station is located in Fajardo at the Fajardo Inn. To reach station from the intersection of PR 3 and 194 go east and south on 194 to 195. Turn left on 195 east and go the a road on left saying Fajardo Inn turn left and go to first curve in road and turn right into Fajardo Inn. Go to the front desk and ask for permission to get on Roof top where station is located. Station is on top of the main building towards the east side of building where the stairs to the rooftop are. Station is a Standard COE disk set flush with concrete on a square concrete pad on the top of roof. The station is stamped Fajardo Inn 2004.

SKETCH





5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

PAGE:

JOB REFERENCE

Puerto Rico

POINT ID:

Fajardo Inn

JN:

02043-05

STATE	Puerto Rico	COUNTY		QUAD:	
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OPERATOR	Comeaux
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APPROXIMATE POSITION (C/A/CODE)

Latitude		HGT.	
LONGITUDE			

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	68

SESSION	DATE:	2/7/2004
FINN0381	DAY OF YEAR	38

START TIME		Y	U.T.C.
END TIME			LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	Zephyr without GP		

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 True	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:	Y	FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

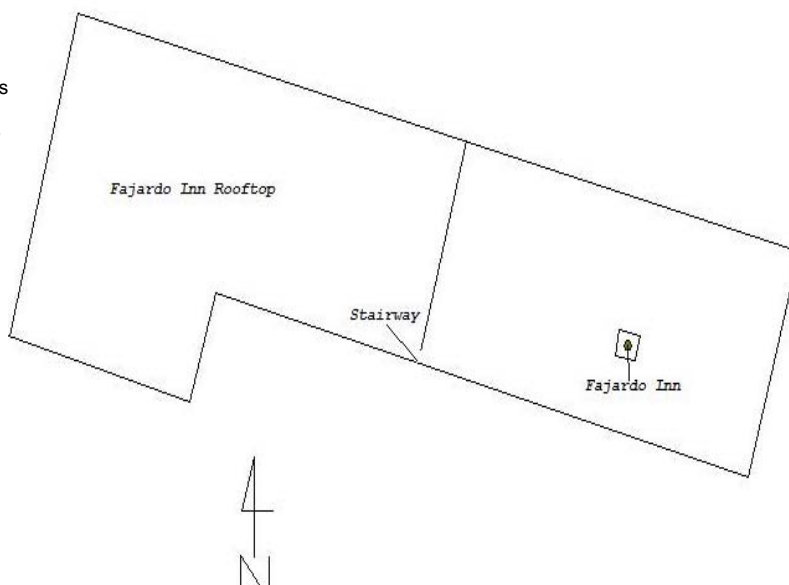
SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK	Y	NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:

Station is located in Fajardo at the Fajardo Inn. To reach station from the intersection of PR 3 and 194 go east and south on 194 to 195. Turn left on 195 east and go the a road on left saying Fajardo Inn turn left and go to first curve in road and turn right into Fajardo Inn. Go to the front desk and ask for permission to get on Roof top where station is located. Station is ontop of the main building towards the east side of building where the stairs to the rooftop are. Station is a Standard COE disk set flush with concrete on a square concrete pad on the top of roof. The station is stamped Fajardo Inn 2004.

SKETCH





5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

PAGE:

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Chuck Hebert
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APPROXIMATE POSITION (C/A/CODE)

Latitude		HGT.	
LONGITUDE			

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	

SESSION		DATE:	1/14/2004
LD010141		DAY OF YEAR	14

START TIME	8:11	Y	U.T.C.
END TIME	17:02		LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER			

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:	Y	FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

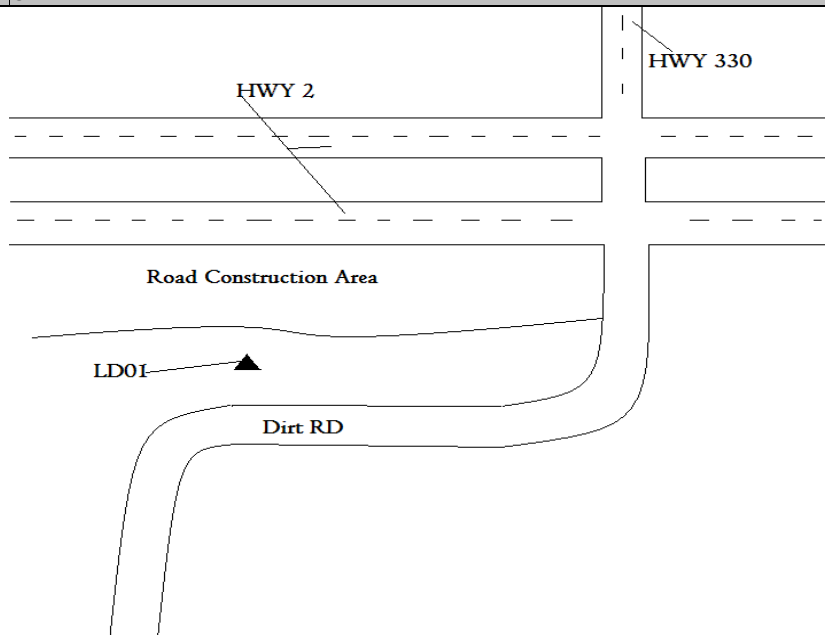
SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:

This Point is located by the intersection of HW2 & HWY330. The point is a 1/2" rebar with a orange cap drove flush with the ground.

SKETCH





AERIAL CONTROL FIELD DATA SHEET

PAGE:

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

LD01

JN:

02043-05

5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Chuck Hebert
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APPROXIMATE POSITION (C/A/CODE)			
Latitude	18 07 07.894	-2.52	HGT.
LONGITUDE	067 04 59.120		

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	68

SESSION	DATE:	1/16/2004
LD010161	DAY OF YEAR	16

START TIME		Y	U.T.C.
END TIME			LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	\ Zypher \TRM39105.00		

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

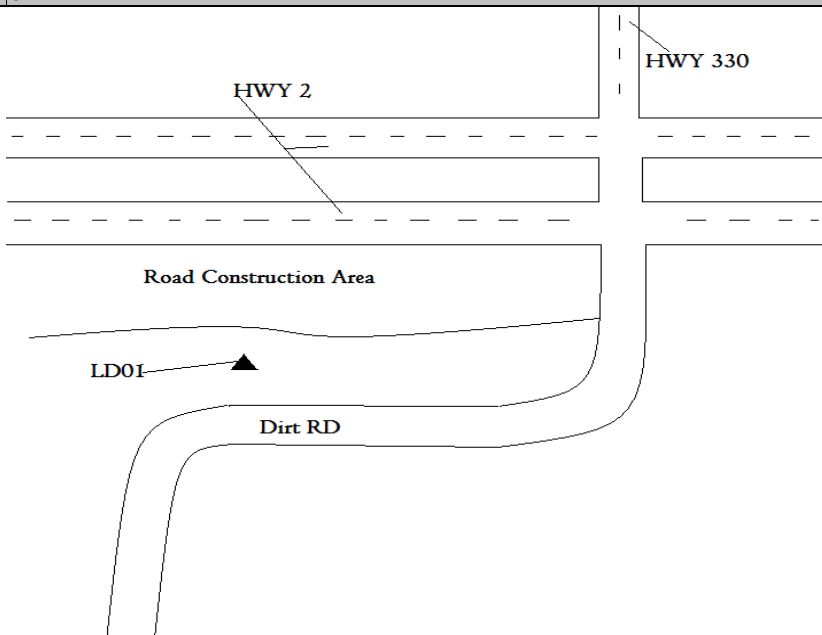
TOP OF MON. IS:	Y	FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1: SKETCH

This Point is located by the intersection of HW2 & HWY330. The point is a 1/2" rebar with a orange cap drove flush with the ground.





5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

PAGE:

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

LD01

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Chuck Hebert
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APPROXIMATE POSITION (C/A/CODE)

Latitude	18 07 07.894	-2.52	HGT.
LONGITUDE	067 04 59.120		

RECEIVER MODEL	Trimble 4700
RECEIVER S/N	5559

SESSION	LD010281	DATE:	1/28/2004
		DAY OF YEAR	28

START TIME	8:25	Y	U.T.C.
END TIME	10:52		LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	90096 / Microcentered L1 L2 / TRM33429.00 -G		

ANTENNA HEIGHT (VERTICAL)			
METERS	1.863 Mts	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:	Y	FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

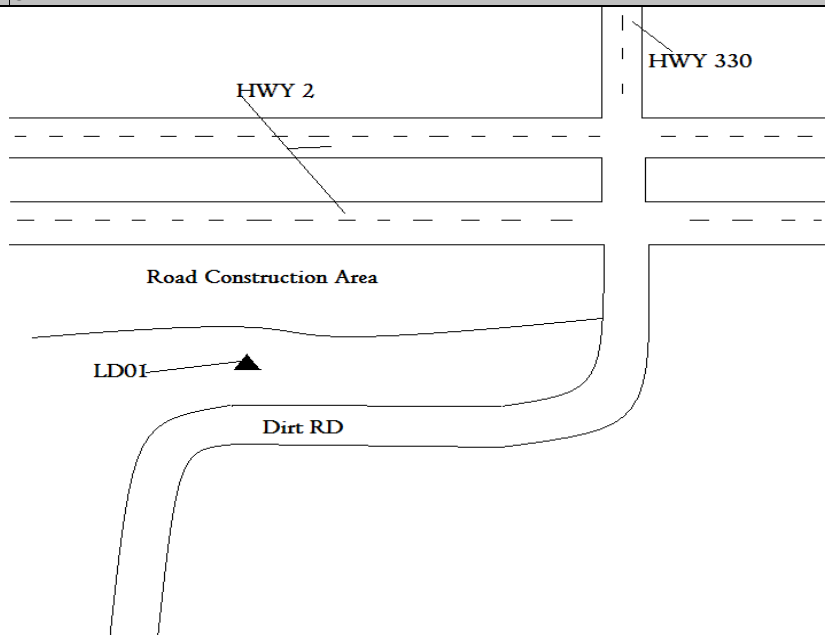
SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:

This Point is located by the intersection of HW2 & HWY330. The point is a 1/2" rebar with a orange cap drove flush with the ground.

SKETCH





5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

PAGE:

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

LD01

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Chuck Hebert
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APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL	Trimble 4700
RECEIVER S/N	5559

Latitude	18 07 07.894	-2.52	HGT.
LONGITUDE	067 04 59.120		

SESSION		DATE:	1/30/2004
LD010301		DAY OF YEAR	30

START TIME	8:20
END TIME	16:29

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
MEASURED		FIXED HGT.	

ANTENNA INFO			
RADIUS (M)		0.000	
S/N NUMBER	90096 / Microcentered L1 L2 / TRM33429.00 -G		

ANTENNA HEIGHT (VERTICAL)			
METERS	1.863 Mts	FEET	
MEASURED	Y	FIXED HGT	

TOP OF MON. IS:	Y	FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

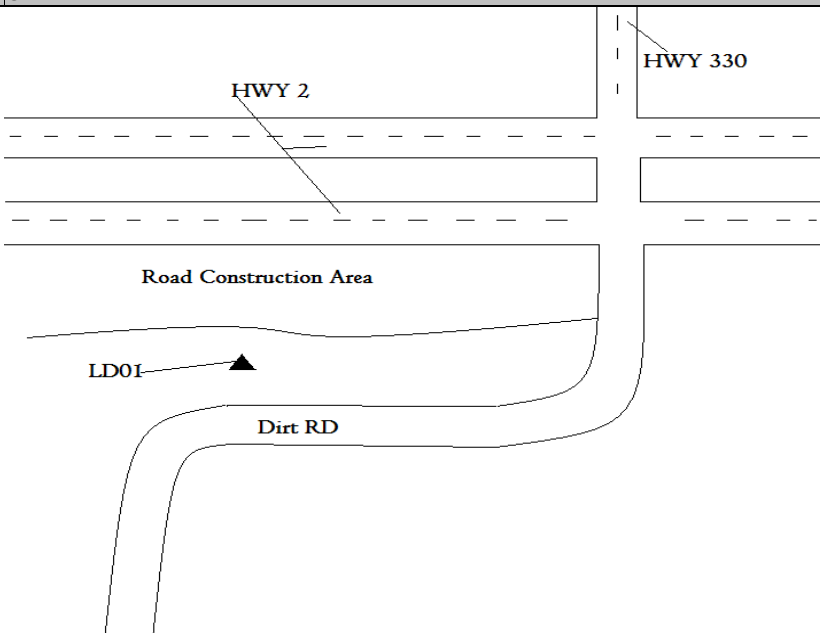
SECO ANTENNA SUPPORT							
HIGH		STEEL POINT					
LOW		BRASS COLLAR					

AERIAL TARGET	PHOTO I.D.
PUB. BENCH MARK	NEW CONTROL
PUB. CONTROL	Y BASE STATION

DESCRIPTION 1:

This Point is located by the intersection of HWY2 & HWY330. The point is a 1/2" rebar with a orange cap drove flush with the ground.

SKETCH





5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

PAGE:

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

LD01

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Chuck Hebert
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APPROXIMATE POSITION (C/A/CODE)

Latitude	18 07 07.894	-2.52	HGT.
LONGITUDE	067 04 59.120		

RECEIVER MODEL	Trimble 4700
RECEIVER S/N	5559

SESSION	LD010321	DATE:	2/1/2004
		DAY OF YEAR	32

START TIME	9:28
END TIME	13:46

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA HEIGHT (VERTICAL)			
METERS	1.863 Mts	FEET	
	MEASURED	Y	FIXED HGT

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	90096 / Microcentered L1 L2 / TRM33429.00 -G		

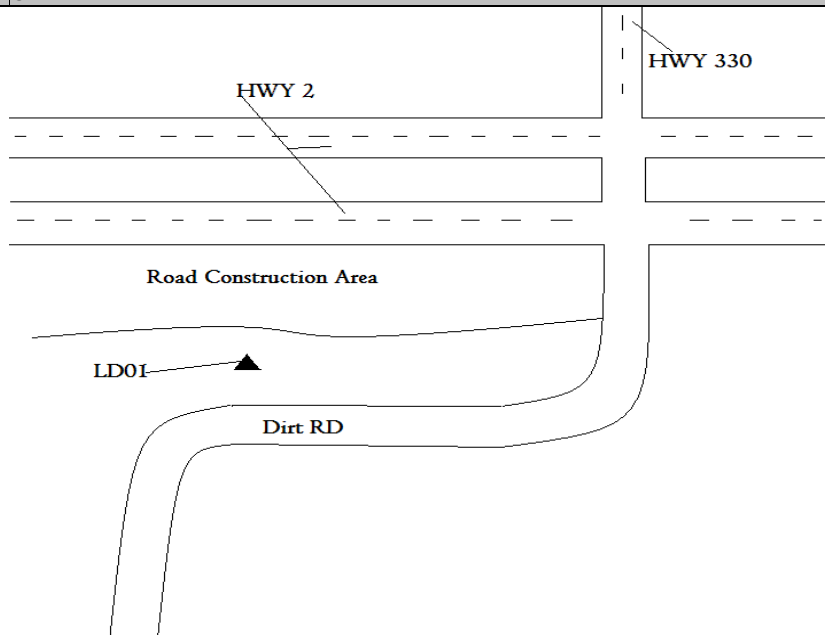
TOP OF MON. IS:	Y	FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:

This Point is located by the intersection of HW2 & HWY330. The point is a 1/2" rebar with a orange cap drove flush with the ground.

SKETCH





5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

PAGE:

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

LD01

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Chuck Hebert
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APPROXIMATE POSITION (C/A/CODE)

Latitude	18 07 07.894	-2.52	HGT.
LONGITUDE	067 04 59.120		

RECEIVER MODEL	Trimble 4700
RECEIVER S/N	5559

SESSION	LD010301	DATE:	1/30/2004
		DAY OF YEAR	30

START TIME	8:20
END TIME	16:29

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA HEIGHT (VERTICAL)			
METERS	1.863 Mts	FEET	
	MEASURED	Y	FIXED HGT

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	90096 / Microcentered L1 L2 / TRM33429.00 -G		

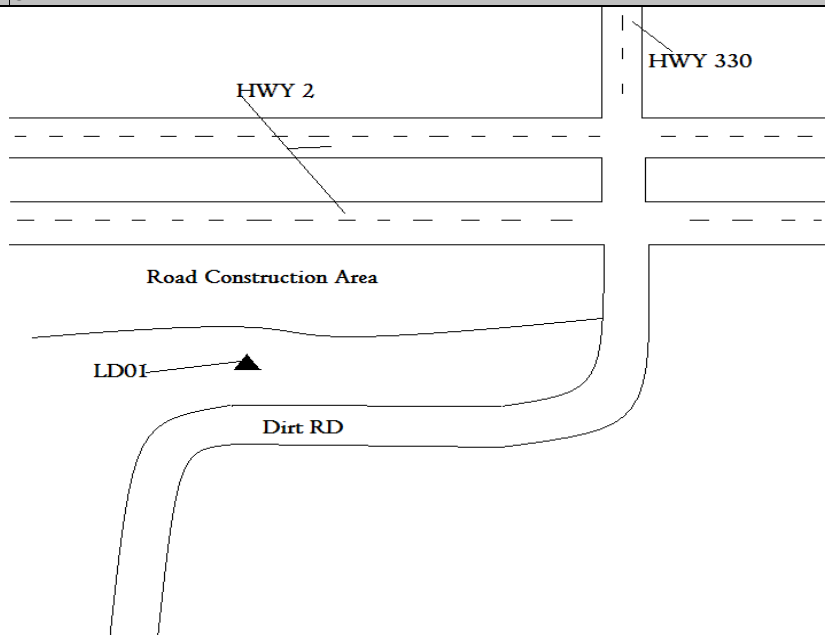
TOP OF MON. IS:	Y	FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:

This Point is located by the intersection of HWY2 & HWY330. The point is a 1/2" rebar with a orange cap drove flush with the ground.

SKETCH



**AERIAL CONTROL
FIELD DATA SHEET**

PAGE:

1

JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Comeaux / Ellard
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APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

Latitude	18-04-19.16543	48.55	HGT.
LONGITUDE	066-57-33.08621		

SESSION		DATE:	1/10/2004
PSEA0101		DAY OF YEAR	10

START TIME	7:42
END TIME	15:16

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER			

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET
	PUB. BENCH MARK
Y	PUB. CONTROL

	PHOTO I.D.
	NEW CONTROL
	BASE STATION

DESCRIPTION 1: PID=TV1211	SKETCH
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**AERIAL CONTROL
FIELD DATA SHEET**

PAGE:

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Comeaux / Ellard
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APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

Latitude	18-04-19.16543	48.55	HGT.
LONGITUDE	066-57-33.08621		

SESSION		DATE:	1/13/2004
PSEA0113		DAY OF YEAR	13

START TIME	7:44
END TIME	14:50

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER			

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET
	PUB. BENCH MARK
Y	PUB. CONTROL

	PHOTO I.D.
	NEW CONTROL
	BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	4 N TAXI-WAY PSEARP—▲ INT. D RUNWAY {Black Asphalt}



5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Comeaux / Ellard
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APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

Latitude	18-04-19.16543	48.55	HGT.
LONGITUDE	066-57-33.08621		

SESSION		DATE:	1/14/2004
PSEA0141		DAY OF YEAR	14

START TIME	7:36
END TIME	18:41

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER			

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET
	PUB. BENCH MARK
Y	PUB. CONTROL

	PHOTO I.D.
	NEW CONTROL
	BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	4 N TAXI-WAY PSEARP — ▲ INT. D RUNWAY {Black Asphalt}



5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

**AERIAL CONTROL
FIELD DATA SHEET**

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Jamie
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APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

Latitude	18-04-19.16543	48.55	HGT.
LONGITUDE	066-57-33.08621		

SESSION		DATE:	1/15/2004
PSEA0151		DAY OF YEAR	15

START TIME		Y	U.T.C.
END TIME			LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	Zypher		

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
Y	PUB. CONTROL		BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	4 N TAXI-WAY PSEARP—▲ INT. D RUNWAY {Black Asphalt}

**AERIAL CONTROL
FIELD DATA SHEET**

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Comeaux / Ellard
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APPROXIMATE POSITION (C/A/CODE)

Latitude	18-04-19.16543	48.55	HGT.
LONGITUDE	066-57-33.08621		

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

SESSION		DATE:	1/16/2004
PSEA0161		DAY OF YEAR	16

START TIME		Y	U.T.C.
END TIME			LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	\ Zypher \TRM39105.00		

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
Y	PUB. CONTROL		BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	4 N TAXI-WAY PSEARP—▲ INT. D RUNWAY {Black Asphalt}



5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Comeaux / Ellard
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APPROXIMATE POSITION (C/A/CODE)

Latitude	18-04-19.16543	48.55	HGT.
LONGITUDE	066-57-33.08621		

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

SESSION		DATE:	1/16/2004
PSEA0162		DAY OF YEAR	16

START TIME		Y	U.T.C.
END TIME			LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	\ Zypher \TRM39105.00		

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH			STEEL POINT			
	LOW			BRASS COLLAR			

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
Y	PUB. CONTROL		BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	4 N TAXI-WAY PSEARP —▲ INT. D RUNWAY {Black Asphalt}

**AERIAL CONTROL
FIELD DATA SHEET**

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Comeaux / Ellard
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APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

Latitude	18-04-19.16543	48.55	HGT.
LONGITUDE	066-57-33.08621		

SESSION		DATE:	1/18/2004
PSEA0181		DAY OF YEAR	18

START TIME	7:40
END TIME	14:27

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	\ Zypher \TRM39105.00		

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET
	PUB. BENCH MARK
Y	PUB. CONTROL

	PHOTO I.D.
	NEW CONTROL
	BASE STATION

DESCRIPTION 1: PID=TV1211	SKETCH
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TAXI-WAY

PSEARP —▲

INT. D

RUNWAY
{Black Asphalt}

4
N

**AERIAL CONTROL
FIELD DATA SHEET**

PAGE:

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Comeaux / Ellard
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APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

Latitude	18-04-19.16543	48.55	HGT.
LONGITUDE	066-57-33.08621		

SESSION		DATE:	1/23/2004
PSEA0231		DAY OF YEAR	23

START TIME		Y	U.T.C.
END TIME			LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	\ Zypher \TRM39105.00		

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
Y	PUB. CONTROL		BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	TAXI-WAY PSEARP —▲ INT. D RUNWAY {Black Asphalt} 4 N



5525 Mounes St., Suite 12
New Orleans, LA 70123
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**AERIAL CONTROL
FIELD DATA SHEET**

PAGE:

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Comeaux / Ellard
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RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

SESSION		DATE:	1/25/2004
PSEA0251		DAY OF YEAR	25

START TIME	9:33
END TIME	13:04

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	\ Zypher \TRM39105.00		

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

	AERIAL TARGET
	PUB. BENCH MARK
Y	PUB. CONTROL

	PHOTO I.D.
	NEW CONTROL
	BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	4 N TAXI-WAY PSEARP—▲ INT. D RUNWAY {Black Asphalt}

**AERIAL CONTROL
FIELD DATA SHEET**

PAGE:

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Ellard
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APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

Latitude	18-04-19.16543	48.55	HGT.
LONGITUDE	066-57-33.08621		

SESSION		DATE:	1/27/2004
PSEA0271		DAY OF YEAR	27

START TIME	7:37
END TIME	15:11

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	\ Zypher \TRM39105.00		

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET
	PUB. BENCH MARK
Y	PUB. CONTROL

	PHOTO I.D.
	NEW CONTROL
	BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	4 N TAXI-WAY PSEARP—▲ INT. D RUNWAY {Black Asphalt}



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New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

PAGE:

1

JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Ellard
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APPROXIMATE POSITION (C/A/CODE)

Latitude	18-04-19.16543	48.55	HGT.
LONGITUDE	066-57-33.08621		

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

SESSION		DATE:	1/28/2004
PSEA0281		DAY OF YEAR	28

START TIME	7:33
END TIME	11:04

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	\ Zypher \TRM39105.00		

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
Y	PUB. CONTROL		BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	4 N TAXI-WAY PSEARP —▲ INT. D RUNWAY {Black Asphalt}



5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

PAGE:

1

JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Ellard
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RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

SESSION		DATE:	1/30/2004
PSEA0301		DAY OF YEAR	30

START TIME	7:35
END TIME	16:44

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	\ Zypher \TRM39105.00		

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
Y	PUB. CONTROL		BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	4 N TAXI-WAY PSEARP —▲ INT. D RUNWAY {Black Asphalt}



5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

PAGE:

1

JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Ellard
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APPROXIMATE POSITION (C/A/CODE)

Latitude	18-04-19.16543	48.55	HGT.
LONGITUDE	066-57-33.08621		

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

SESSION		DATE:	2/1/2004
PSEA0321		DAY OF YEAR	27

START TIME	8:43
END TIME	14:22

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	\ Zypher \TRM39105.00		

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
Y	PUB. CONTROL		BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	

**AERIAL CONTROL
FIELD DATA SHEET**

PAGE:

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Ellard
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APPROXIMATE POSITION (C/A/CODE)

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

Latitude	18-04-19.16543	48.55	HGT.
LONGITUDE	066-57-33.08621		

SESSION		DATE:	2/5/2004
PSEA0361		DAY OF YEAR	36

START TIME	7:39
END TIME	11:26

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	\ Zypher \TRM39105.00		

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET
	PUB. BENCH MARK
Y	PUB. CONTROL

	PHOTO I.D.
	NEW CONTROL
	BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	4 N TAXI-WAY PSEARP—▲ INT. D RUNWAY {Black Asphalt}



5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

AERIAL CONTROL FIELD DATA SHEET

PAGE:

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Ellard
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RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

SESSION	PSEA0381	DATE:	2/7/2004
		DAY OF YEAR	38

START TIME	11:55
END TIME	16:24

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	\ Zypher \TRM39105.00		

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

	AERIAL TARGET
	PUB. BENCH MARK
Y	PUB. CONTROL

	PHOTO I.D.
	NEW CONTROL
	BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	4 N TAXI-WAY PSEARP —▲ INT. D RUNWAY {Black Asphalt}

**AERIAL CONTROL
FIELD DATA SHEET**

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

PSE_ARP

JN:

02043-05

5525 Mounes St., Suite 12
New Orleans, LA 70123
504-733-3001 voice 504-734-8938 fax

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	Ellard
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APPROXIMATE POSITION (C/A/CODE)

Latitude	18-04-19.16543	48.55	HGT.
LONGITUDE	066-57-33.08621		

RECEIVER MODEL	Trimble 5700
RECEIVER S/N	372

SESSION		DATE:	2/8/2004
PSEA0391		DAY OF YEAR	39

START TIME	9:44
END TIME	15:54

Y	U.T.C.
	LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER	\ Zypher \TRM39105.00		

ANTENNA HEIGHT (VERTICAL)			
METERS	1.873 Mts	FEET	
	MEASURED	Y	FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS	0.06	BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET
	PUB. BENCH MARK
Y	PUB. CONTROL

	PHOTO I.D.
	NEW CONTROL
	BASE STATION

DESCRIPTION 1:	SKETCH
PID=TV1211	4 N TAXI-WAY PSEARP—▲ INT. D RUNWAY {Black Asphalt}



**AERIAL CONTROL
FIELD DATA SHEET**

PAGE:

JOB REFERENCE

Puerto Rico

POINT ID:

RRS2

JN:

02043-05

5525 Mounes St., Suite 12

New Orleans, LA 70123

504-733-3001 voice 504-734-8938 fax

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	RLDA
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APPROXIMATE POSITION (C/A/CODE)

Latitude		HGT.	
LONGITUDE			

RECEIVER MODEL	
RECEIVER S/N	

SESSION		DATE:	1/25/2004
RRS20251		DAY OF YEAR	25

START TIME		Y	U.T.C.
END TIME			LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER			

ANTENNA HEIGHT (VERTICAL)			
METERS	0	FEET	
	MEASURED		FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:	SKETCH



**AERIAL CONTROL
FIELD DATA SHEET**

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JOB REFERENCE

Puerto Rico

POINT ID:

RRS2

JN:

02043-05

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STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	RLDA
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APPROXIMATE POSITION (C/A/CODE)

Latitude		HGT.	
LONGITUDE			

RECEIVER MODEL	
RECEIVER S/N	

SESSION		DATE:	1/25/2004
RRS20251		DAY OF YEAR	25

START TIME		Y	U.T.C.
END TIME			LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER			

ANTENNA HEIGHT (VERTICAL)			
METERS	0	FEET	
	MEASURED		FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:	SKETCH



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**AERIAL CONTROL
FIELD DATA SHEET**

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JOB REFERENCE

Puerto Rico

POINT ID:

RRS2

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	RLDA
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APPROXIMATE POSITION (C/A/CODE)

Latitude		HGT.	
LONGITUDE			

RECEIVER MODEL	
RECEIVER S/N	

SESSION		DATE:	2/5/2004
RRS20361		DAY OF YEAR	36

START TIME		Y	U.T.C.
END TIME			LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER			

ANTENNA HEIGHT (VERTICAL)			
METERS	0	FEET	
	MEASURED		FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH				STEEL POINT		
	LOW				BRASS COLLAR		

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:	SKETCH



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AERIAL CONTROL FIELD DATA SHEET

PAGE:

JOB REFERENCE

Puerto Rico

POINT ID:

RRS2

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	RLDA	APPROXIMATE POSITION (C/A/CODE)	
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RECEIVER MODEL		Latitude		HGT.	
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RECEIVER S/N		LONGITUDE			
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SESSION		DATE:	2/8/2004	START TIME		Y	U.T.C.
RRS20391		DAY OF YEAR	39	END TIME			LOCAL

ANTENNA HEIGHT (SLANT)				ANTENNA INFO			
METERS		FEET		RADIUS (M)			0.000
	MEASURED		FIXED HGT.				0.000
S/N NUMBER							

ANTENNA HEIGHT (VERTICAL)				TOP OF MON. IS:			
METERS		FEET					FLUSH
	MEASURED		FIXED HGT	METERS			ABOVE GROUND
				METERS			BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH			STEEL POINT			
	LOW			BRASS COLLAR			

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:	SKETCH



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AERIAL CONTROL FIELD DATA SHEET

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

RRS4

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	RLDA	APPROXIMATE POSITION (C/A/CODE)			
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RECEIVER MODEL	
RECEIVER S/N	

Latitude		HGT.	
LONGITUDE			

SESSION		DATE:	2/5/2004
RRS40361		DAY OF YEAR	36

START TIME		Y	U.T.C.
END TIME			LOCAL

ANTENNA HEIGHT (SLANT)			
METERS		FEET	
	MEASURED		FIXED HGT.

ANTENNA INFO			
RADIUS (M)			0.000
			0.000
S/N NUMBER			

ANTENNA HEIGHT (VERTICAL)			
METERS	0	FEET	
	MEASURED		FIXED HGT

TOP OF MON. IS:		FLUSH
METERS		ABOVE GROUND
METERS		BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH			STEEL POINT			
	LOW			BRASS COLLAR			

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:	SKETCH



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AERIAL CONTROL FIELD DATA SHEET

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JOB REFERENCE

Puerto Rico Lidar

POINT ID:

RRS4

JN:

02043-05

STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	RLDA	APPROXIMATE POSITION (C/A/CODE)	
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RECEIVER MODEL		Latitude		HGT.	
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RECEIVER S/N		LONGITUDE			
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SESSION		DATE:	2/7/2004	START TIME		Y	U.T.C.
RRS40381		DAY OF YEAR	38	END TIME			LOCAL

ANTENNA HEIGHT (SLANT)				ANTENNA INFO			
METERS		FEET		RADIUS (M)			0.000
	MEASURED		FIXED HGT.				0.000

ANTENNA HEIGHT (VERTICAL)				TOP OF MON. IS:			
METERS		FEET					FLUSH
	MEASURED		FIXED HGT	METERS			ABOVE GROUND
				METERS			BELOW GROUND

SECO ANTENNA SUPPORT							
	HIGH			STEEL POINT			
	LOW			BRASS COLLAR			

	AERIAL TARGET		PHOTO I.D.
	PUB. BENCH MARK		NEW CONTROL
	PUB. CONTROL	Y	BASE STATION

DESCRIPTION 1:	SKETCH



**AERIAL CONTROL
FIELD DATA SHEET**

PAGE:

1

JOB REFERENCE

Puerto Rico Lidar

POINT ID:

RRS4

JN:

02043-05

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STATE	Puerto Rico	COUNTY	NA	QUAD:	
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OPERATOR	RLDA
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APPROXIMATE POSITION (C/A/CODE)

Latitude

HGT.

LONGITUDE

RECEIVER MODEL

RECEIVER S/N

SESSION

RRS40391

DATE:

2/8/2004

DAY OF YEAR

39

START TIME

END TIME

Y

U.T.C.

LOCAL

ANTENNA HEIGHT (SLANT)

METERS

FEET

MEASURED

FIXED HGT.

ANTENNA HEIGHT (VERTICAL)

METERS

0

FEET

MEASURED

FIXED HGT

ANTENNA INFO

RADIUS (M)

0.000

0.000

S/N NUMBER

TOP OF MON. IS:

FLUSH

METERS

ABOVE GROUND

METERS

BELOW GROUND

SECO ANTENNA SUPPORT

HIGH

STEEL POINT

LOW

BRASS COLLAR

AERIAL TARGET

PUB. BENCH MARK

PUB. CONTROL

PHOTO I.D.

NEW CONTROL

Y

BASE STATION

DESCRIPTION 1:

SKETCH