VERTICAL ACCURACY REPORT

Professional Management
and LiDAR Data Collection
and Processing Services

Block 8

PROJECT TITLE:	Professional Management and LiDAR Data Collection and Processing Services
WORK ORDER NAME:	Task Order A
WORK ORDER NUMBER:	2007058492720
CONSULTANT NAME:	3001, Inc., CH2M Hill, Inc.
PROJECT MANAGERS:	Jeremy Conner, 3001 Project Manager JoLee Gardner, CH2M Hill Project Manager

Services provided by:

3001, INC. THE GEOSPATIAL COMPANY
501 Robert Blvd. 2nd Floor
Slidell, Louisiana 70458

November 2008

Florida Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100

Re: Professional Management and LiDAR Data Collection and Processing Services, Block 8

This photogrammetric mapping ground control survey is certified as meeting or exceeding, in quality and precision, the standards applicable for this work as set forth in Chapter 61G17-6, Florida Adminstrative Code.

Dean T. Epling, PSM
Florida Professional Surveyor and Mapper
License # 5417
401 Dividend Drive, Suite K
Peachtree City, GA 30269
(770) 631-0903

Signed:_____Date:_____

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DATA ANALYSIS

This report documents the vertical accuracy of the LIDAR data as compared to the surveyed ground truth data for the Professional Management and LiDAR Data Collection and Processing Services project, Block 8. Fundamental Vertical Accuracy, Supplemental Vertical Accuracies and the Consolidated Vertical Accuracy have been calculated based on the appropriate land cover classes, and are shown in the following sections.

Data analysis was accomplished by comparing ground truth checkpoints with LIDAR points from the edited data set, which were within 3 feet horizontally from the ground truth points. 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. Comparisons were also made between the survey points and the LIDAR derived terrain surface. These comparisons provide an additional verification of the LIDAR data against the survey data.

The survey data was collected in accordance with the *FEMA FLOOD HAZARD MAPPING PROGRAM, GUIDELINES AND SPECIFICATIONS FOR FLOOD HAZARD MAPPING PARTNERS, APPENDIX A*.

Ground truth data was collected for each of the following land cover categories:

1. Bare-earth and low grass
2. Brush lands and low trees
3. Forested areas fully covered by trees
4. Urban areas

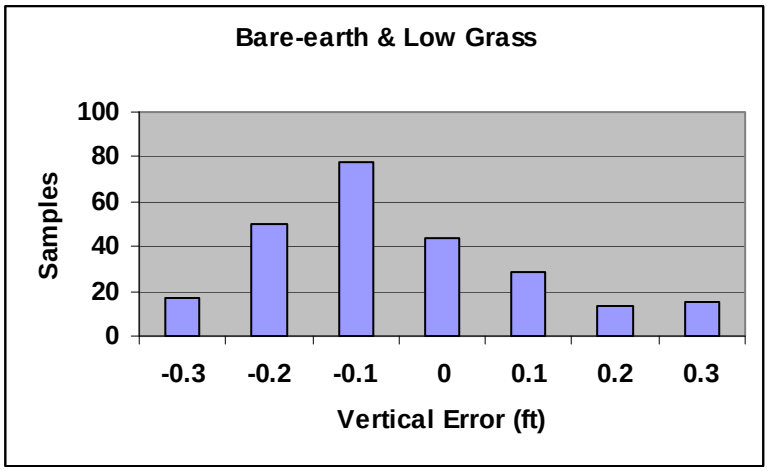
The accuracy assessment was performed using a standard method to compute the root mean square error (RMSE) based on a comparison of ground control points (GCP) and filtered LiDAR data points. Filtered LiDAR data has had vegetation and cultural features removed and by analysis represents bare-earth elevations. . The RMSE figure was used to compute the vertical National Standard for Spatial Data Accuracy (NSSDA). Ground control was established by 3001, Inc. A spatial proximity analysis was used to select edited LiDAR data points contiguous to the relevant GCPs. A search radius decision rule is applied with consideration of terrain complexity, cumulative error and adequate sample size. Cumulative error results from the errors inherent in the various sources of horizontal measurement. These sources include the airborne GPS, GCPs and the uncertainty of the accuracy of the LiDAR data points. This accuracy is achieved prior to the sub-sampling that occurs through integration with the inertial measurement unit (IMU) positions that are recorded. It is unclear at this time whether the initial accuracy is maintained. The horizontal accuracy of the GCPs is estimated to be in the range of approximately 1 to 1.6 inches. Finally, sample size was considered. The specification for the National Standard for Spatial Data Accuracy is a minimum of 20 points to conduct a statistically significant accuracy evaluation (Minnesota Planning,

1999, Positional Accuracy Handbook, Minnesota Planning Land Management Information Center, St. Paul, Minnesota., p.3). Most statistical texts indicate that a minimum of 30 sample points provide a reasonable Approximation of a normal distribution. The intent of the NSSDA is to reflect the geographic area of interest and the distribution of error in the data set (Federal Geographic Data Committee, 1998, Geospatial National Standard for Spatial Data Accuracy, Federal Geographic Data Committee Secretariat, Reston, Virginia, p.3-4). Additional steps were taken to ensure the vertical accuracy of the LiDAR data including: Step 1: Precision Bore sighting (Check Edge-matching) Step 2: Compare the LiDAR data to the Field Survey (Field survey is to FEMA specifications and more stringent internal specifications) Step 3: Automated Filtering Step 4: Manual Editing (Quality Control) Step 5: 3-D digitizing and photogrammetric compilation of hydrographic breaklines. Data analysis was accomplished by comparing ground truth checkpoints with LIDAR points from the edited data set, which were within 3 feet horizontally from the ground truth points. 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. Comparisons were also made between the survey points and the LIDAR derived terrain surface. These comparisons provide an additional verification of the LIDAR data against the survey data. The survey data was collected in accordance with the FEMA FLOOD HAZARD MAPPING PROGRAM, GUIDELINES AND SPECIFICATIONS FOR FLOOD HAZARD MAPPING PARTNERS, APPENDIX A.

FUNDAMENTAL VERTICAL ACCURACY

The Fundamental Vertical Accuracy is calculated using the bare-earth and low grass land class. A comparison of these values indicated a Vertical Root Mean Square Error (RMSEz) of 0.16 feet, which equates to a Vertical Accuracy of 0.31 feet at the 95 percent confidence level. Descriptive statistics and a histogram of the vertical error distribution are shown below.

Bare-earth & Low Grass (ft)	
RMSEz	0.16
Mean	-0.05
Standard Error	0.01
Median	-0.07
Mode	-0.19
Standard Deviation	0.15
Sample Variance	0.02
Kurtosis	-0.05
Skewness	0.57
Range	0.68
Minimum	-0.34
Maximum	0.34
Count	246



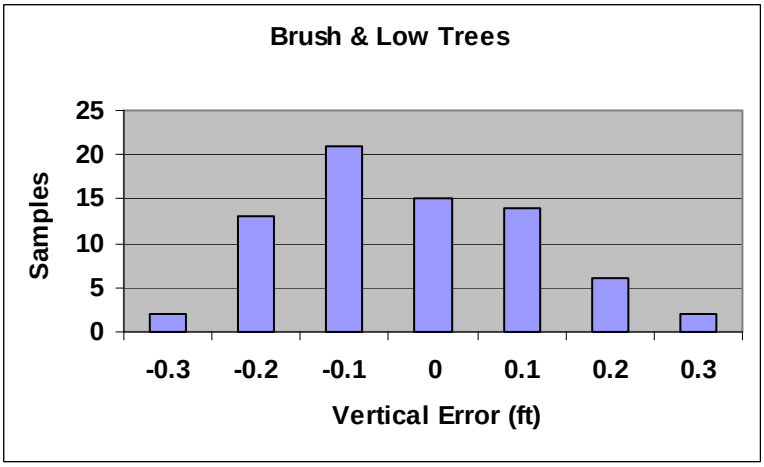
SUPPLEMENTAL VERTICAL ACCURACIES

The Supplemental Vertical Accuracies are calculated using each of the land cover classes, except for the bare-earth and low grass land class. The remaining land cover classes that are used for comparisons are brush lands and low trees, forested areas fully covered by trees, and urban areas. The RMSEz values and Vertical Accuracies are shown with each respective land class, along with histograms of vertical error distribution.

Brush Lands and Low Trees

This set includes only those points that were collected in areas of brush lands and low trees. The resulting RMSEz is 0.14 feet, which equates to a Vertical Accuracy of 0.27 feet at the 95 percent confidence level.

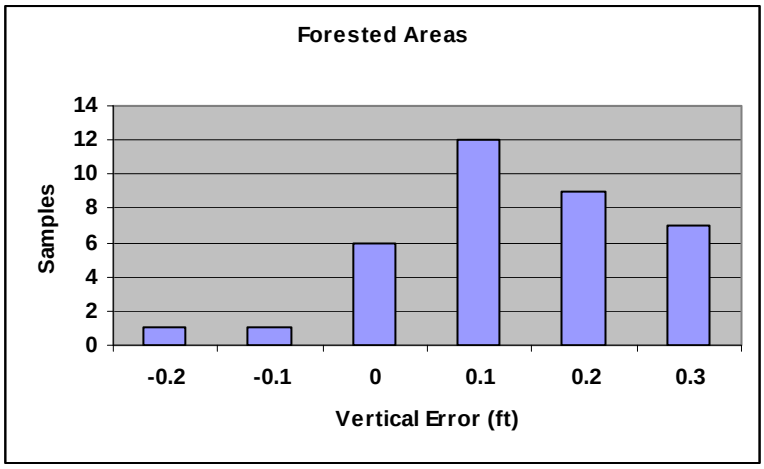
Brush & Low Trees (ft)	
RMSEz	0.14
Mean	-0.03
Standard Error	0.02
Median	-0.04
Mode	-0.10
Standard Deviation	0.13
Sample Variance	0.02
Kurtosis	-0.45
Skewness	0.35
Range	0.58
Minimum	-0.28
Maximum	0.30
Count	73



Forested Areas

This set includes only those points that were collected in forested areas fully covered by trees. The resulting RMSEz is 0.17 feet, which equates to a Vertical Accuracy of 0.33 feet at the 95 percent confidence level.

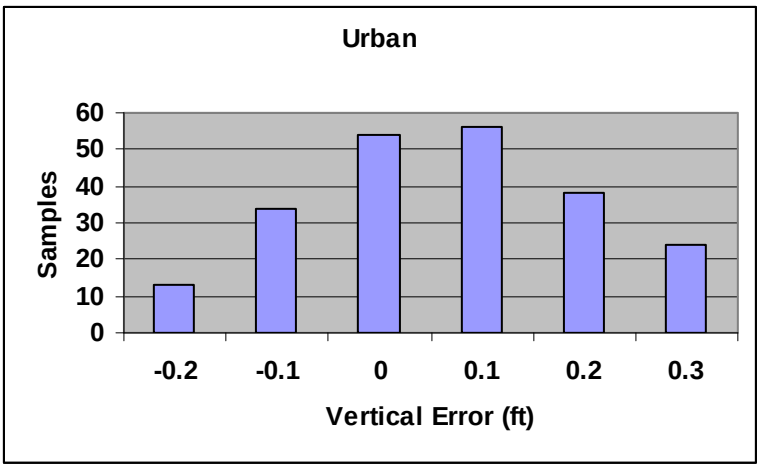
Forested Areas (ft)	
RMSEz	0.17
Mean	0.13
Standard Error	0.02
Median	0.13
Mode	0.11
Standard Deviation	0.11
Sample Variance	0.01
Kurtosis	0.07
Skewness	-0.46
Range	0.46
Minimum	-0.15
Maximum	0.31
Count	36



Urban Areas

This set includes only those points that were collected in areas of urban land cover. The resulting RMSEz is 0.15 feet, which equates to a Vertical Accuracy of 0.29 feet at the 95 percent confidence level.

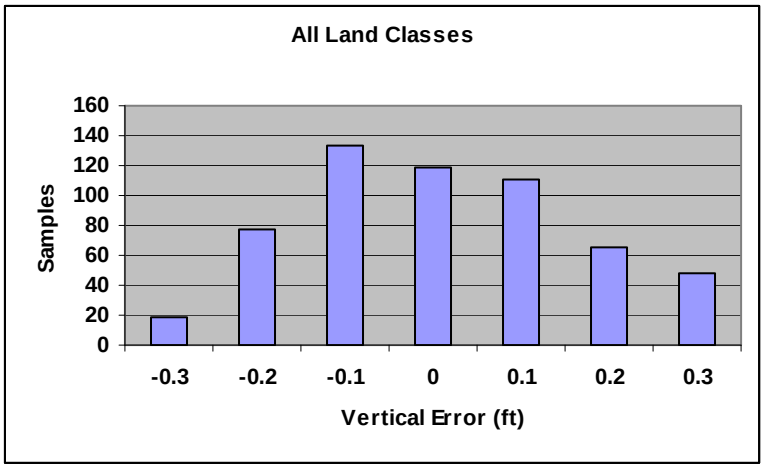
Urban (ft)	
RMSEz	0.15
Mean	0.06
Standard Error	0.01
Median	0.06
Mode	0.04
Standard Deviation	0.13
Sample Variance	0.02
Kurtosis	-0.72
Skewness	0.03
Range	0.56
Minimum	-0.22
Maximum	0.34
Count	219



CONSOLIDATED VERTICAL ACCURACY

The Consolidated Vertical Accuracy is calculated using all land cover classes. The result of these comparisons of these values indicated a Vertical Root Mean Square Error (RMSEz) of 0.15 feet, which equates to Vertical Accuracy of 0.29 feet at the 95 percent confidence level. Descriptive statistics and a histogram of the vertical error distribution for all comparisons are shown below.

All Land Classes (ft)	
RMSEz	0.15
Mean	0.01
Standard Error	0.01
Median	0.00
Mode	0.06
Standard Deviation	0.15
Sample Variance	0.02
Kurtosis	-0.67
Skewness	0.15
Range	0.68
Minimum	-0.34
Maximum	0.34
Count	574



GROUND TRUTH ANALYSIS
Comparison of LIDAR Points to Ground-Truth Points

Horizontal units = US Survey Feet [US State Plane, Florida East, NAD83 (1999)]
Vertical units = US Survey feet [NAVD88 – Geoid03]

Name	Survey X	Survey Y	Survey Z	LIDAR X	LIDAR Y	LIDAR Z	dx	dy	dz	dist	Code
1A1	874937.70	1173970.44	14.34	874938.57	1173970.19	14.48	-0.87	0.25	-0.14	0.90	Bare-earth
1A2	874930.82	1173967.53	14.54	874930.40	1173967.30	14.48	0.42	0.23	0.06	0.48	Bare-earth
1A3	874932.55	1173962.70	14.62	874932.73	1173963.43	14.67	-0.18	-0.73	-0.05	0.75	Bare-earth
1A4	874938.70	1173964.89	14.66	874936.96	1173964.51	14.77	1.74	0.38	-0.11	1.78	Bare-earth
1A5	874941.05	1173960.42	14.63	874941.56	1173960.38	14.67	-0.51	0.04	-0.04	0.51	Bare-earth
1A6	874934.80	1173957.57	14.65	874934.08	1173956.90	14.54	0.72	0.67	0.11	0.98	Bare-earth
1A7	874936.64	1173952.73	14.56	874936.57	1173951.85	14.51	0.07	0.88	0.05	0.88	Bare-earth
1A8	874943.47	1173954.65	14.59	874942.28	1173955.23	14.67	1.19	-0.58	-0.08	1.32	Bare-earth
1A9	874946.11	1173950.31	14.55	874945.10	1173950.64	14.67	1.01	-0.33	-0.12	1.07	Bare-earth
1A10	874939.32	1173948.37	14.51	874938.73	1173949.03	14.58	0.59	-0.66	-0.07	0.89	Bare-earth
1A11	875208.28	1173819.33	9.13	875208.71	1173819.57	8.97	-0.43	-0.24	0.15	0.49	Urban
1A12	875217.87	1173822.33	9.35	875217.08	1173822.06	9.20	0.79	0.27	0.15	0.83	Urban
1A13	875236.72	1173814.86	9.32	875235.68	1173815.43	9.13	1.04	-0.57	0.19	1.18	Urban
1A14	875246.25	1173813.47	9.17	875246.54	1173812.81	9.03	-0.30	0.66	0.14	0.72	Urban
1A15	875249.63	1173802.63	9.14	875249.59	1173801.65	8.97	0.04	0.98	0.17	0.98	Urban
1A16	875241.01	1173801.65	9.26	875240.70	1173803.13	9.13	0.31	-1.48	0.13	1.51	Urban
1A17	875234.82	1173800.47	9.39	875234.44	1173801.29	9.16	0.38	-0.82	0.23	0.91	Urban
1A18	875225.79	1173797.39	9.48	875226.07	1173798.80	9.20	-0.28	-1.41	0.28	1.44	Urban
1A19	875226.36	1173788.80	9.41	875225.38	1173788.37	9.33	0.98	0.43	0.08	1.07	Urban
1A20	875233.50	1173789.87	9.49	875233.75	1173790.86	9.33	-0.25	-0.99	0.16	1.02	Urban
1A21	875239.83	1173790.49	9.41	875239.55	1173790.63	9.20	0.28	-0.14	0.21	0.31	Urban
1A22	875251.87	1173792.31	9.14	875252.09	1173792.14	9.13	-0.22	0.17	0.01	0.28	Urban
1A23	875257.45	1173781.47	9.13	875258.68	1173780.49	9.00	-1.23	0.98	0.13	1.57	Urban
1A24	875249.36	1173779.55	9.28	875250.41	1173777.97	9.10	-1.05	1.58	0.18	1.90	Urban
1A25	875238.81	1173778.17	9.40	875238.93	1173778.59	9.26	-0.12	-0.42	0.14	0.43	Urban
1A26	875227.65	1173775.08	9.32	875228.40	1173775.47	9.10	-0.75	-0.39	0.22	0.84	Urban
1A27	875230.42	1173765.78	9.29	875230.34	1173765.73	9.13	0.08	0.05	0.16	0.10	Urban
1A28	875241.33	1173767.03	9.46	875241.42	1173767.07	9.33	-0.09	-0.04	0.13	0.10	Urban
1A29	875244.08	1173757.44	9.40	875245.03	1173757.56	9.33	-0.95	-0.12	0.07	0.95	Urban
1A30	875237.60	1173754.88	9.36	875236.67	1173755.00	9.13	0.93	-0.12	0.23	0.94	Urban
1A34	874872.01	1173908.13	14.74	874872.86	1173908.28	14.83	-0.85	-0.15	-0.09	0.86	Urban
1A35	874876.45	1173909.76	14.85	874877.12	1173909.33	14.93	-0.67	0.43	-0.08	0.80	Urban
1A36	874875.32	1173913.95	14.86	874876.14	1173914.58	14.89	-0.82	-0.63	-0.04	1.04	Urban
1A37	874871.02	1173912.19	14.72	874869.80	1173912.94	14.83	1.22	-0.75	-0.11	1.43	Urban
1A38	874869.32	1173915.77	14.67	874870.49	1173915.60	14.40	-1.17	0.17	0.27	1.18	Urban
1A39	874873.43	1173917.22	14.78	874872.76	1173916.25	14.63	0.67	0.97	0.15	1.18	Urban
1A40	874872.48	1173921.38	14.79	874871.97	1173921.34	14.53	0.51	0.04	0.26	0.52	Urban
1A41	874868.26	1173919.50	14.65	874867.51	1173920.06	14.34	0.75	-0.56	0.31	0.94	Urban
1A42	874866.38	1173923.26	14.61	874866.03	1173923.04	14.80	0.35	0.22	-0.19	0.41	Urban
1A43	874870.49	1173924.76	14.75	874870.23	1173924.13	14.86	0.26	0.63	-0.11	0.68	Urban
1A44	874869.69	1173928.71	14.76	874869.44	1173929.28	14.80	0.25	-0.57	-0.04	0.62	Urban
1A45	874864.90	1173927.17	14.63	874865.21	1173928.23	14.70	-0.31	-1.06	-0.07	1.11	Urban
1A46	874863.54	1173930.41	14.64	874863.54	1173930.79	14.60	0.00	-0.39	0.04	0.39	Urban
1A47	874867.32	1173931.51	14.74	874866.95	1173930.89	14.53	0.37	0.62	0.21	0.72	Urban

1A48	874866.79	1173935.91	14.77	874866.72	1173936.53	14.57	0.07	-0.62	0.20	0.62	Urban
1A49	874862.31	1173934.43	14.66	874862.36	1173935.31	14.53	-0.05	-0.88	0.13	0.88	Urban
1A50	874860.51	1173938.12	14.61	874861.47	1173937.94	14.70	-0.96	0.18	-0.09	0.98	Urban
1A51	874864.84	1173939.70	14.77	874865.67	1173939.06	14.86	-0.83	0.64	-0.09	1.05	Urban
1A52	874863.81	1173944.09	14.78	874862.91	1173943.65	14.86	0.90	0.44	-0.08	1.00	Urban
1A53	874859.08	1173942.50	14.63	874858.72	1173942.57	14.70	0.36	-0.07	-0.07	0.37	Urban
1A54	874857.83	1173945.69	14.64	874857.37	1173946.27	14.47	0.46	-0.58	0.17	0.74	Urban
1A61	875161.78	1173864.21	8.13	875159.63	1173863.66	8.28	2.15	0.55	-0.15	2.22	Forest
1A62	875166.84	1173864.37	8.25	875165.60	1173863.92	8.08	1.24	0.45	0.17	1.32	Forest
1A63	875172.56	1173864.24	8.32	875168.75	1173861.07	8.34	3.81	3.17	-0.02	4.96	Forest
1A64	875178.09	1173862.72	8.35	875174.00	1173866.42	8.28	4.09	-3.70	0.07	5.52	Forest
1A65	875183.27	1173860.94	8.38	875183.65	1173856.48	8.11	-0.38	4.46	0.27	4.47	Forest
1A66	875188.42	1173858.47	8.42	875183.65	1173856.48	8.11	4.77	1.99	0.31	5.17	Forest
1A67	875196.67	1173856.05	8.73	875195.56	1173853.69	8.57	1.11	2.36	0.16	2.61	Forest
1A68	875203.44	1173849.73	9.00	875199.73	1173846.40	8.80	3.71	3.33	0.20	4.99	Forest
1A69	875192.26	1173832.70	8.91	875190.28	1173832.26	8.80	1.98	0.44	0.11	2.03	Forest
1A70	875183.53	1173855.84	8.33	875181.71	1173850.70	8.34	1.82	5.14	-0.01	5.46	Forest
1A72	875183.37	1173829.97	8.66	875185.81	1173825.54	8.47	-2.44	4.43	0.19	5.06	Forest
1A73	875189.28	1173827.35	8.72	875185.81	1173825.54	8.47	3.47	1.81	0.25	3.91	Forest
1A74	875192.19	1173816.30	8.76	875196.05	1173815.83	8.74	-3.86	0.47	0.02	3.89	Forest
1A77	875180.00	1173810.48	8.32	875183.32	1173805.95	8.21	-3.32	4.53	0.11	5.61	Forest
1A78	875185.30	1173808.77	8.38	875185.42	1173806.58	8.34	-0.12	2.19	0.04	2.19	Forest
1A80	875196.11	1173804.66	8.79	875191.82	1173806.51	8.54	4.29	-1.85	0.25	4.67	Forest
1A81	875197.42	1173798.27	8.74	875192.11	1173796.57	8.44	5.31	1.70	0.30	5.58	Forest
1A82	875192.38	1173798.05	8.67	875192.11	1173796.57	8.44	0.27	1.48	0.23	1.50	Forest
1A83	875187.36	1173796.22	8.49	875183.52	1173796.31	8.41	3.84	-0.09	0.08	3.84	Forest
1A84	875185.34	1173788.70	8.33	875184.34	1173783.25	8.34	1.00	5.45	-0.01	5.54	Forest
1A85	875192.24	1173790.00	8.63	875195.33	1173785.41	8.51	-3.09	4.59	0.12	5.54	Forest
1A86	875199.32	1173791.39	8.69	875199.53	1173786.66	8.60	-0.21	4.73	0.09	4.73	Forest
1A87	875201.36	1173783.78	8.73	875199.53	1173786.66	8.60	1.83	-2.88	0.13	3.41	Forest
1A88	875194.64	1173782.40	8.68	875195.33	1173785.41	8.51	-0.69	-3.01	0.17	3.09	Forest
1A89	875188.22	1173777.28	8.61	875185.49	1173776.42	8.31	2.73	0.86	0.30	2.86	Forest
1A90	875206.31	1173765.17	8.83	875204.84	1173760.61	8.83	1.47	4.56	0.00	4.79	Forest
1A91	875140.72	1173838.15	5.56	875136.08	1173836.14	5.49	4.64	2.01	0.07	5.06	Forest
1A92	875144.33	1173829.71	5.65	875146.18	1173826.52	5.55	-1.85	3.19	0.10	3.69	Forest
1A93	875138.22	1173828.45	5.30	875133.94	1173825.67	5.16	4.28	2.78	0.14	5.11	Forest
1A94	875135.83	1173835.86	5.60	875136.08	1173836.14	5.49	-0.25	-0.28	0.11	0.38	Forest
1A95	875129.67	1173838.88	5.50	875128.20	1173835.87	5.62	1.47	3.01	-0.12	3.35	Forest
1A96	875124.48	1173830.52	5.15	875123.97	1173826.10	4.96	0.51	4.42	0.19	4.45	Forest
1A97	875117.39	1173833.40	5.26	875112.06	1173834.13	5.13	5.33	-0.73	0.13	5.38	Forest
1A98	875116.76	1173842.28	5.51	875115.57	1173836.40	5.23	1.19	5.88	0.28	6.00	Forest
1A99	875109.03	1173844.34	5.48	875105.89	1173846.34	5.29	3.14	-2.00	0.19	3.73	Forest
1A40	875106.09	1173837.25	5.38	875111.31	1173835.15	5.23	-5.22	2.10	0.15	5.63	Forest
2A1	844268.21	1145792.06	19.74	844267.44	1145793.28	19.81	0.77	-1.22	-0.07	1.44	Bare-earth
2A2	844258.63	1145790.84	19.57	844259.30	1145791.05	19.68	-0.67	-0.21	-0.11	0.70	Bare-earth
2A3	844247.69	1145790.58	19.58	844246.05	1145792.26	19.48	1.64	-1.68	0.10	2.35	Bare-earth
2A4	844241.58	1145801.25	19.50	844241.13	1145800.56	19.55	0.45	0.69	-0.05	0.83	Bare-earth
2A5	844240.49	1145812.94	19.54	844240.04	1145811.52	19.58	0.45	1.42	-0.04	1.49	Bare-earth
2A6	844248.52	1145816.54	19.54	844247.69	1145816.67	19.48	0.83	-0.13	0.06	0.84	Bare-earth
2A7	844257.28	1145819.39	19.36	844258.61	1145819.66	19.45	-1.33	-0.27	-0.09	1.35	Bare-earth
2A8	844266.70	1145812.68	19.53	844265.93	1145812.18	19.68	0.77	0.50	-0.15	0.92	Bare-earth
2A9	844271.65	1145804.64	19.77	844270.78	1145803.91	19.61	0.87	0.73	0.16	1.13	Bare-earth
2A10	844259.17	1145803.85	19.42	844260.19	1145802.63	19.42	-1.02	1.22	0.00	1.59	Bare-earth

2A11	844302.86	1145654.32	20.78	844302.35	1145654.27	20.63	0.51	0.05	0.15	0.52	Urban
2A12	844310.46	1145654.41	20.61	844309.86	1145654.17	20.53	0.60	0.24	0.08	0.65	Urban
2A13	844310.72	1145639.60	20.61	844310.42	1145639.80	20.56	0.30	-0.21	0.05	0.37	Urban
2A14	844303.26	1145635.28	20.77	844303.07	1145634.95	20.66	0.19	0.33	0.11	0.38	Urban
2A15	844302.93	1145618.40	20.78	844302.54	1145618.25	20.66	0.39	0.15	0.12	0.42	Urban
2A16	844311.51	1145618.01	20.56	844311.30	1145617.52	20.56	0.21	0.49	0.00	0.54	Urban
2A17	844311.13	1145605.66	20.56	844310.25	1145605.55	20.47	0.88	0.11	0.09	0.89	Urban
2A18	844303.17	1145605.76	20.76	844304.15	1145606.01	20.76	-0.98	-0.25	0.00	1.01	Urban
2A19	844303.05	1145591.46	20.77	844303.23	1145591.05	20.70	-0.18	0.41	0.07	0.45	Urban
2A20	844312.09	1145591.20	20.51	844312.06	1145591.11	20.47	0.03	0.09	0.04	0.10	Urban
2A21	844312.39	1145578.64	20.52	844313.11	1145578.61	20.53	-0.72	0.02	-0.01	0.72	Urban
2A22	844303.17	1145577.25	20.77	844302.28	1145576.02	20.56	0.89	1.23	0.21	1.51	Urban
2A23	844302.65	1145561.77	20.79	844303.99	1145561.65	20.63	-1.34	0.12	0.16	1.34	Urban
2A24	844311.70	1145560.55	20.52	844310.42	1145561.32	20.60	1.28	-0.77	-0.08	1.49	Urban
2A25	844311.75	1145548.70	20.51	844310.78	1145548.82	20.40	0.97	-0.12	0.11	0.97	Urban
2A26	844302.53	1145547.71	20.77	844302.61	1145546.89	20.63	-0.08	0.82	0.14	0.82	Urban
2A27	844302.38	1145532.69	20.78	844302.15	1145532.06	20.76	0.23	0.63	0.02	0.67	Urban
2A28	844311.68	1145531.99	20.51	844312.06	1145532.55	20.56	-0.38	-0.56	-0.05	0.68	Urban
2A29	844310.70	1145519.65	20.58	844309.56	1145519.39	20.30	1.14	0.26	0.28	1.17	Urban
2A30	844302.28	1145519.17	20.78	844302.61	1145520.58	20.66	-0.33	-1.41	0.12	1.45	Urban
2A31	844335.52	1145566.52	18.41	844335.42	1145567.23	18.69	0.09	-0.71	-0.28	0.71	Brush
2A32	844334.75	1145553.73	18.30	844335.55	1145554.56	18.50	-0.80	-0.83	-0.20	1.15	Brush
2A33	844335.44	1145541.77	18.31	844336.20	1145543.08	18.46	-0.76	-1.31	-0.15	1.51	Brush
2A34	844335.33	1145529.42	18.27	844335.61	1145528.32	18.23	-0.28	1.10	0.04	1.14	Brush
2A35	844335.46	1145516.93	18.25	844335.88	1145515.79	18.17	-0.42	1.14	0.08	1.22	Brush
2A36	844335.43	1145505.35	18.29	844334.53	1145505.88	18.50	0.90	-0.53	-0.21	1.05	Brush
2A37	844335.44	1145492.93	18.46	844336.99	1145492.03	18.56	-1.55	0.90	-0.10	1.79	Brush
2A38	844335.34	1145479.99	18.39	844335.84	1145480.32	18.46	-0.49	-0.33	-0.07	0.59	Brush
2A39	844335.86	1145467.40	18.41	844335.55	1145467.20	18.43	0.31	0.20	-0.02	0.37	Brush
2A40	844335.91	1145455.99	18.40	844335.55	1145454.96	18.50	0.36	1.03	-0.11	1.09	Brush
2A41	844335.64	1145441.91	18.48	844334.89	1145440.65	18.73	0.75	1.26	-0.25	1.47	Brush
2A42	844334.59	1145429.54	18.52	844334.20	1145429.40	18.50	0.39	0.14	0.02	0.42	Brush
2A43	844334.65	1145417.71	18.45	844333.97	1145417.95	18.69	0.68	-0.24	-0.24	0.72	Brush
2A44	844334.54	1145405.21	18.58	844335.78	1145404.76	18.65	-1.24	0.45	-0.07	1.32	Brush
2A45	844334.50	1145392.81	18.67	844334.07	1145392.72	18.68	0.43	0.09	-0.01	0.44	Brush
2A46	844334.20	1145380.30	18.63	844332.73	1145380.75	18.72	1.47	-0.45	-0.09	1.54	Brush
2A47	844334.17	1145367.56	18.65	844333.94	1145369.30	18.82	0.23	-1.74	-0.17	1.75	Brush
2A48	844334.37	1145354.99	18.69	844335.22	1145354.43	18.82	-0.85	0.56	-0.13	1.02	Brush
2A49	844334.63	1145342.92	18.61	844334.47	1145342.39	18.82	0.16	0.53	-0.21	0.55	Brush
2A50	844334.42	1145329.75	18.58	844334.04	1145330.48	18.82	0.38	-0.73	-0.24	0.82	Brush
2A51	844334.41	1145316.48	18.64	844335.19	1145316.54	18.68	-0.78	-0.06	-0.04	0.78	Brush
2A52	844334.20	1145304.17	18.71	844333.28	1145304.30	18.72	0.92	-0.13	-0.01	0.93	Brush
2A53	844333.49	1145291.50	18.79	844332.46	1145292.20	18.95	1.03	-0.70	-0.16	1.25	Brush
2A54	844332.76	1145279.03	18.84	844331.97	1145280.19	18.78	0.79	-1.16	0.06	1.40	Brush
2A55	844332.84	1145264.88	18.83	844333.05	1145265.06	18.95	-0.21	-0.18	-0.12	0.27	Brush
2A56	844332.55	1145251.69	18.90	844332.07	1145250.60	19.05	0.48	1.09	-0.15	1.19	Brush
2A57	844332.27	1145237.93	18.89	844330.63	1145238.62	18.72	1.64	-0.69	0.17	1.78	Brush
2A58	844331.95	1145225.34	18.94	844331.58	1145224.22	18.85	0.37	1.12	0.09	1.18	Brush
2A59	844331.64	1145213.40	18.99	844331.45	1145213.26	18.95	0.19	0.14	0.04	0.24	Brush
2A60	844331.20	1145200.60	19.01	844330.76	1145200.27	18.88	0.44	0.33	0.13	0.55	Brush
2A61	844330.87	1145187.50	19.00	844331.05	1145187.11	18.85	-0.18	0.39	0.15	0.43	Brush
2A62	844330.08	1145174.28	19.08	844328.82	1145174.48	19.21	1.26	-0.20	-0.13	1.28	Brush
2A63	844329.74	1145160.77	19.14	844329.61	1145160.11	19.18	0.13	0.66	-0.04	0.68	Brush

2A64	844329.24	1145122.00	19.25	844330.13	1145122.77	19.14	-0.89	-0.77	0.11	1.18	Brush
2A65	844330.56	1145107.12	19.27	844331.61	1145108.17	19.41	-1.05	-1.05	-0.14	1.48	Brush
2A66	844331.55	1145093.14	19.28	844332.04	1145092.85	19.44	-0.49	0.29	-0.16	0.57	Brush
2A67	844332.12	1145077.60	19.27	844332.14	1145077.47	19.41	-0.02	0.13	-0.14	0.13	Brush
2A68	844332.36	1145063.72	19.31	844331.58	1145064.61	19.05	0.78	-0.89	0.26	1.18	Brush
2A69	844332.82	1145049.84	19.31	844333.19	1145049.48	19.41	-0.37	0.36	-0.10	0.52	Brush
2A70	844332.39	1145035.07	19.31	844331.94	1145035.90	19.11	0.45	-0.83	0.20	0.95	Brush
3A1	871218.47	1124160.80	17.55	871218.53	1124161.01	17.56	-0.06	-0.21	-0.01	0.22	Bare-earth
3A2	871218.46	1124168.11	17.46	871217.48	1124167.80	17.60	0.98	0.31	-0.14	1.02	Bare-earth
3A3	871218.34	1124176.34	17.53	871217.74	1124177.05	17.56	0.60	-0.71	-0.03	0.93	Bare-earth
3A4	871218.76	1124185.14	17.52	871218.43	1124184.99	17.56	0.33	0.15	-0.04	0.36	Bare-earth
3A5	871218.66	1124192.09	17.49	871219.12	1124192.34	17.43	-0.46	-0.25	0.06	0.53	Bare-earth
3A6	871220.22	1124201.27	17.46	871221.22	1124200.74	17.56	-1.00	0.53	-0.10	1.13	Bare-earth
3A7	871220.20	1124210.48	17.46	871219.32	1124211.27	17.46	0.89	-0.79	0.00	1.19	Bare-earth
3A8	871230.88	1124211.48	17.58	871230.77	1124211.46	17.63	0.11	0.02	-0.05	0.11	Bare-earth
3A9	871229.37	1124205.17	17.62	871229.52	1124205.76	17.46	-0.15	-0.59	0.16	0.61	Bare-earth
3A10	871228.69	1124198.17	17.46	871228.83	1124197.91	17.43	-0.14	0.26	0.03	0.30	Bare-earth
3A11	871205.23	1124249.93	17.34	871205.21	1124249.75	17.33	0.02	0.18	0.01	0.18	Urban
3A12	871192.80	1124251.83	17.50	871193.20	1124251.75	17.37	-0.40	0.08	0.13	0.40	Urban
3A13	871202.56	1124239.46	17.30	871202.46	1124238.89	17.20	0.10	0.57	0.10	0.58	Urban
3A14	871202.19	1124228.54	17.24	871203.18	1124228.43	17.17	-0.99	0.11	0.07	0.99	Urban
3A15	871191.84	1124228.22	17.35	871191.86	1124228.52	17.33	-0.02	-0.30	0.02	0.30	Urban
3A16	871191.50	1124216.43	17.33	871191.07	1124216.94	17.37	0.43	-0.51	-0.04	0.66	Urban
3A17	871202.35	1124215.75	17.26	871201.77	1124214.78	17.17	0.58	0.97	0.09	1.13	Urban
3A18	871202.36	1124215.76	17.24	871201.77	1124214.78	17.17	0.59	0.98	0.07	1.15	Urban
3A19	871202.37	1124204.08	17.22	871203.37	1124203.69	17.07	-1.00	0.39	0.14	1.07	Urban
3A20	871191.36	1124204.01	17.21	871191.66	1124204.02	17.14	-0.30	-0.01	0.07	0.30	Urban
3A21	871190.92	1124191.51	17.13	871190.28	1124192.57	17.14	0.64	-1.06	-0.01	1.24	Urban
3A22	871202.45	1124189.59	17.07	871202.03	1124188.89	17.14	0.42	0.70	-0.07	0.82	Urban
3A23	871201.84	1124176.59	16.98	871202.19	1124176.43	16.97	-0.35	0.16	0.02	0.38	Urban
3A24	871190.82	1124176.45	16.98	871191.53	1124177.15	17.04	-0.71	-0.70	-0.06	0.99	Urban
3A25	871189.93	1124163.42	17.02	871188.81	1124163.24	16.91	1.12	0.18	0.11	1.14	Urban
3A26	871201.23	1124162.97	16.90	871200.95	1124162.22	16.87	0.28	0.75	0.03	0.80	Urban
3A27	871201.14	1124147.43	16.93	871202.32	1124146.90	16.84	-1.18	0.53	0.09	1.30	Urban
3A28	871189.83	1124148.32	16.93	871190.65	1124147.19	17.01	-0.82	1.13	-0.09	1.40	Urban
3A29	871189.20	1124132.30	17.20	871188.41	1124131.81	17.20	0.79	0.49	0.00	0.93	Urban
3A30	871203.51	1124132.84	17.21	871204.13	1124133.31	17.20	-0.62	-0.47	0.01	0.78	Urban
3A31	871101.73	1124464.80	16.41	871101.05	1124463.60	16.32	0.68	1.20	0.09	1.38	Urban
3A32	871091.55	1124464.87	16.37	871091.17	1124464.61	16.42	0.38	0.26	-0.05	0.46	Urban
3A33	871081.56	1124465.33	16.35	871081.07	1124463.73	16.28	0.49	1.60	0.07	1.68	Urban
3A34	871071.59	1124465.52	16.37	871071.49	1124466.75	16.22	0.10	-1.23	0.15	1.24	Urban
3A35	871061.57	1124465.91	16.32	871061.45	1124465.73	16.48	0.13	0.18	-0.16	0.22	Urban
3A36	871050.92	1124466.62	16.38	871050.36	1124467.14	16.32	0.56	-0.52	0.06	0.76	Urban
3A37	871040.63	1124466.37	16.40	871041.33	1124467.76	16.27	-0.70	-1.39	0.13	1.56	Urban
3A38	871031.17	1124466.71	16.40	871031.20	1124466.61	16.41	-0.03	0.10	-0.01	0.10	Urban
3A39	871021.11	1124467.07	16.43	871021.62	1124466.81	16.50	-0.51	0.26	-0.07	0.58	Urban
3A40	871011.04	1124467.32	16.41	871011.18	1124467.86	16.44	-0.14	-0.54	-0.03	0.55	Urban
4A1	884448.62	1108368.17	28.91	884449.38	1108367.47	28.88	-0.76	0.70	0.03	1.04	Bare-earth
4A2	884454.04	1108369.36	28.90	884453.38	1108368.94	29.01	0.66	0.42	-0.11	0.78	Bare-earth
4A3	884458.32	1108361.40	28.85	884457.94	1108361.63	28.82	0.38	-0.23	0.03	0.45	Bare-earth
4A4	884452.77	1108358.22	28.83	884451.94	1108359.40	28.72	0.83	-1.18	0.11	1.44	Bare-earth
4A5	884454.67	1108349.50	28.82	884454.99	1108348.31	28.75	-0.32	1.19	0.07	1.24	Bare-earth
4A6	884460.44	1108351.01	28.81	884461.03	1108350.51	28.62	-0.59	0.50	0.19	0.77	Bare-earth

4A7	884464.57	1108343.28	28.76	884465.62	1108342.60	28.75	-1.05	0.68	0.01	1.25	Bare-earth
4A8	884458.99	1108340.08	28.74	884459.55	1108340.30	28.82	-0.56	-0.23	-0.08	0.61	Bare-earth
4A9	884462.41	1108331.89	28.67	884462.67	1108332.76	28.55	-0.26	-0.87	0.12	0.90	Bare-earth
4A10	884468.16	1108332.72	28.67	884468.37	1108331.44	28.65	-0.21	1.28	0.02	1.30	Bare-earth
4A11	884472.10	1108324.13	28.68	884471.13	1108323.67	28.65	0.97	0.46	0.03	1.07	Bare-earth
4A12	884465.41	1108321.27	28.62	884465.16	1108321.44	28.59	0.25	-0.17	0.03	0.30	Bare-earth
4A13	884469.34	1108311.35	28.56	884469.23	1108310.87	28.55	0.11	0.48	0.01	0.49	Bare-earth
4A14	884476.67	1108311.95	28.71	884477.33	1108310.45	28.75	-0.66	1.50	-0.04	1.64	Bare-earth
4A15	884471.07	1108306.57	28.54	884472.28	1108305.92	28.62	-1.21	0.65	-0.08	1.37	Bare-earth
4A16	884475.13	1108296.34	28.54	884473.89	1108296.99	28.59	1.24	-0.65	-0.05	1.40	Bare-earth
4A17	884482.09	1108298.54	28.64	884482.42	1108297.62	28.52	-0.33	0.92	0.12	0.98	Bare-earth
4A18	884485.66	1108288.88	28.60	884485.93	1108289.45	28.49	-0.27	-0.57	0.11	0.63	Bare-earth
4A19	884480.09	1108285.80	28.46	884480.12	1108284.49	28.39	-0.03	1.31	0.07	1.31	Bare-earth
4A20	884483.45	1108275.31	28.40	884482.12	1108275.77	28.39	1.33	-0.46	0.01	1.41	Bare-earth
4A21	884424.80	1108430.48	30.45	884425.13	1108431.08	30.39	-0.33	-0.60	0.06	0.69	Urban
4A22	884424.02	1108422.10	30.73	884423.46	1108420.55	30.55	0.56	1.55	0.18	1.65	Urban
4A23	884410.28	1108421.69	30.85	884410.83	1108422.26	30.75	-0.55	-0.57	0.10	0.80	Urban
4A24	884407.06	1108431.05	30.66	884406.79	1108430.82	30.62	0.27	0.23	0.04	0.35	Urban
4A25	884394.48	1108430.74	30.71	884395.67	1108429.51	30.75	-1.19	1.23	-0.04	1.71	Urban
4A26	884394.00	1108421.71	30.89	884394.03	1108422.49	30.85	-0.03	-0.78	0.04	0.78	Urban
4A27	884379.50	1108421.95	30.93	884380.58	1108421.44	30.82	-1.08	0.51	0.11	1.19	Urban
4A28	884379.56	1108431.81	30.73	884378.18	1108430.92	30.95	1.38	0.89	-0.22	1.64	Urban
4A29	884364.69	1108431.45	30.73	884364.37	1108431.02	30.65	0.32	0.43	0.08	0.53	Urban
4A30	884363.08	1108421.89	30.96	884363.88	1108421.73	30.92	-0.80	0.16	0.04	0.81	Urban
4A31	884363.06	1108421.98	30.95	884363.88	1108421.73	30.92	-0.82	0.25	0.02	0.85	Urban
4A32	884341.94	1108421.58	30.94	884342.06	1108422.98	30.88	-0.12	-1.41	0.06	1.41	Urban
4A33	884344.13	1108431.39	30.69	884343.51	1108430.00	30.72	0.62	1.39	-0.03	1.52	Urban
4A34	884330.89	1108430.98	30.70	884331.20	1108432.10	30.78	-0.31	-1.12	-0.08	1.17	Urban
4A35	884330.10	1108421.72	30.92	884328.91	1108422.29	30.88	1.19	-0.57	0.04	1.32	Urban
4A36	884316.84	1108421.70	30.88	884317.16	1108420.49	30.92	-0.32	1.21	-0.04	1.25	Urban
4A37	884316.15	1108431.38	30.65	884316.31	1108430.62	30.59	-0.16	0.76	0.06	0.77	Urban
4A38	884303.71	1108430.46	30.64	884304.50	1108428.98	30.65	-0.79	1.48	-0.01	1.68	Urban
4A39	884301.92	1108421.64	30.80	884302.66	1108421.86	30.82	-0.74	-0.23	-0.02	0.77	Urban
4A40	884287.41	1108421.44	30.77	884287.80	1108420.55	30.72	-0.39	0.89	0.05	0.97	Urban
4A41	884191.72	1108405.72	30.20	884191.18	1108406.25	30.22	0.54	-0.53	-0.02	0.75	Bare-earth
4A42	884191.01	1108397.73	30.20	884191.18	1108399.68	30.28	-0.17	-1.95	-0.08	1.96	Bare-earth
4A43	884190.18	1108388.88	30.20	884189.14	1108388.83	30.08	1.04	0.05	0.12	1.04	Bare-earth
4A44	884190.08	1108380.59	30.11	884189.70	1108381.41	30.05	0.38	-0.82	0.06	0.91	Bare-earth
4A45	884198.86	1108382.86	30.06	884199.44	1108382.76	30.02	-0.57	0.10	0.04	0.58	Bare-earth
4A46	884203.60	1108390.37	30.19	884203.58	1108390.76	30.25	0.02	-0.39	-0.06	0.39	Bare-earth
4A47	884207.27	1108399.00	30.18	884207.68	1108398.86	30.31	-0.41	0.14	-0.13	0.43	Bare-earth
4A48	884214.98	1108402.97	30.16	884214.60	1108402.83	30.28	0.38	0.14	-0.13	0.40	Bare-earth
4A49	884216.73	1108394.97	30.21	884216.01	1108395.16	30.28	0.72	-0.19	-0.07	0.74	Bare-earth
4A50	884224.22	1108394.57	29.96	884224.90	1108394.34	30.08	-0.68	0.23	-0.12	0.72	Bare-earth
5A1	871743.50	1065219.75	4.76	871743.79	1065220.77	4.88	-0.29	-1.02	-0.12	1.06	Brush
5A2	871745.55	1065211.22	4.72	871746.29	1065210.40	4.65	-0.74	0.82	0.07	1.10	Brush
5A3	871745.71	1065202.65	4.35	871746.02	1065202.89	4.55	-0.31	-0.24	-0.20	0.40	Brush
5A4	871742.75	1065192.73	4.32	871743.56	1065193.73	4.33	-0.81	-1.00	-0.01	1.29	Brush
5A5	871730.47	1065194.68	4.34	871730.15	1065195.34	4.42	0.32	-0.66	-0.08	0.74	Brush
5A6	871728.70	1065202.79	4.49	871728.80	1065203.22	4.59	-0.10	-0.43	-0.10	0.44	Brush
5A7	871726.27	1065210.71	4.59	871727.91	1065209.12	4.62	-1.64	1.59	-0.03	2.29	Brush
5A8	871724.10	1065217.76	4.61	871724.86	1065218.34	4.69	-0.76	-0.58	-0.08	0.96	Brush
5A9	871721.87	1065224.41	4.63	871722.50	1065223.62	4.72	-0.63	0.79	-0.09	1.01	Brush

5A10	871708.94	1065226.96	4.65	871709.18	1065227.40	4.72	-0.24	-0.44	-0.07	0.50	Brush
5A11	871707.54	1065219.36	4.63	871708.26	1065218.67	4.62	-0.72	0.69	0.01	1.00	Brush
5A12	871706.30	1065211.03	4.61	871706.56	1065211.94	4.72	-0.27	-0.91	-0.11	0.95	Brush
5A13	871705.29	1065202.52	4.54	871705.38	1065203.45	4.59	-0.09	-0.93	-0.05	0.93	Brush
5A14	871703.93	1065193.85	4.46	871704.46	1065194.85	4.62	-0.53	-1.00	-0.16	1.14	Brush
5A15	871699.87	1065185.16	4.62	871699.73	1065184.78	4.72	0.14	0.38	-0.10	0.40	Brush
5A16	871866.33	1064538.48	12.45	871865.94	1064539.57	12.63	0.39	-1.09	-0.18	1.16	Bare-earth
5A17	871880.45	1064536.23	13.01	871879.72	1064535.83	12.99	0.73	0.40	0.02	0.83	Bare-earth
5A18	871871.73	1064514.99	12.78	871871.88	1064514.18	12.82	-0.15	0.81	-0.04	0.82	Bare-earth
5A19	871862.58	1064513.67	12.35	871862.13	1064513.22	12.59	0.45	0.45	-0.24	0.64	Bare-earth
5A20	871861.19	1064498.01	12.47	871861.21	1064497.77	12.63	-0.02	0.24	-0.17	0.24	Bare-earth
5A21	871873.41	1064497.59	12.82	871872.83	1064498.69	12.82	0.58	-1.10	0.00	1.25	Bare-earth
5A22	871874.66	1064485.02	13.01	871875.65	1064484.65	13.02	-0.99	0.37	-0.01	1.06	Bare-earth
5A23	871876.22	1064470.93	13.21	871875.75	1064472.15	13.25	0.47	-1.22	-0.04	1.31	Bare-earth
5A24	871863.64	1064490.50	12.63	871863.31	1064488.88	12.76	0.33	1.63	-0.13	1.66	Bare-earth
5A25	871863.23	1064476.98	12.61	871863.18	1064476.41	12.66	0.05	0.57	-0.05	0.57	Bare-earth
5A26	871862.70	1064465.79	12.69	871862.00	1064466.87	12.79	0.70	-1.08	-0.10	1.28	Bare-earth
5A27	871871.28	1064463.00	13.01	871870.27	1064463.95	12.95	1.01	-0.95	0.06	1.39	Bare-earth
5A28	871868.80	1064444.19	12.99	871869.29	1064444.75	13.09	-0.49	-0.56	-0.10	0.74	Bare-earth
5A29	871857.28	1064445.06	12.71	871857.31	1064446.33	12.82	-0.03	-1.27	-0.11	1.27	Bare-earth
5A30	871858.14	1064432.94	12.77	871858.20	1064434.22	12.89	-0.06	-1.28	-0.12	1.28	Bare-earth
5A31	871869.39	1064610.43	13.75	871869.48	1064608.83	13.77	-0.09	1.60	-0.02	1.61	Urban
5A32	871868.38	1064622.93	13.75	871867.25	1064623.89	13.64	1.13	-0.96	0.11	1.48	Urban
5A33	871858.27	1064623.84	13.67	871857.51	1064622.80	13.74	0.76	1.04	-0.07	1.29	Urban
5A34	871856.96	1064611.71	13.68	871858.36	1064610.86	13.64	-1.40	0.85	0.04	1.64	Urban
5A35	871846.56	1064611.16	13.60	871846.94	1064609.98	13.58	-0.38	1.18	0.02	1.24	Urban
5A36	871846.51	1064621.75	13.63	871845.96	1064622.05	13.64	0.55	-0.30	-0.02	0.62	Urban
5A37	871838.09	1064624.35	13.52	871838.41	1064625.26	13.54	-0.32	-0.91	-0.02	0.96	Urban
5A38	871835.18	1064611.40	13.46	871835.72	1064611.98	13.48	-0.54	-0.58	-0.02	0.79	Urban
5A39	871822.97	1064611.71	13.41	871822.37	1064613.13	13.45	0.60	-1.42	-0.04	1.54	Urban
5A40	871822.82	1064623.55	13.47	871822.86	1064622.31	13.54	-0.04	1.24	-0.07	1.24	Urban
5A41	871807.57	1064924.59	3.73	871806.69	1064925.13	3.87	0.88	-0.54	-0.14	1.03	Bare-earth
5A42	871804.60	1064912.41	3.77	871804.03	1064913.58	3.90	0.57	-1.17	-0.13	1.30	Bare-earth
5A43	871802.22	1064902.59	3.89	871802.65	1064902.27	4.13	-0.43	0.32	-0.24	0.53	Bare-earth
5A44	871790.59	1064905.05	3.56	871789.96	1064904.59	3.73	0.63	0.46	-0.17	0.78	Bare-earth
5A45	871791.63	1064913.65	3.45	871791.33	1064911.65	3.60	0.30	2.00	-0.15	2.02	Bare-earth
5A46	871793.41	1064924.18	3.69	871794.32	1064923.56	3.80	-0.91	0.62	-0.11	1.10	Bare-earth
5A47	871784.61	1064925.78	3.61	871783.59	1064926.58	3.64	1.02	-0.80	-0.03	1.29	Bare-earth
5A48	871782.66	1064916.52	3.40	871782.77	1064915.29	3.47	-0.11	1.23	-0.07	1.23	Bare-earth
5A49	871780.47	1064907.97	3.36	871781.23	1064908.14	3.54	-0.76	-0.17	-0.18	0.78	Bare-earth
5A50	871769.42	1064923.28	3.36	871769.38	1064924.18	3.34	0.04	-0.90	0.02	0.90	Bare-earth
6A1	926103.76	1044917.34	5.44	926104.12	1044918.45	5.14	-0.36	-1.11	0.30	1.16	Urban
6A2	926112.78	1044921.96	5.76	926112.39	1044921.40	5.50	0.39	0.56	0.26	0.68	Urban
6A3	926119.12	1044911.70	5.70	926119.28	1044911.62	5.44	-0.16	0.08	0.26	0.18	Urban
6A4	926127.66	1044913.58	5.69	926127.61	1044914.67	5.37	0.05	-1.09	0.32	1.09	Urban
6A5	926132.29	1044906.30	5.67	926133.22	1044906.37	5.37	-0.93	-0.07	0.30	0.94	Urban
6A6	926125.63	1044901.34	5.67	926125.44	1044900.37	5.44	0.19	0.96	0.22	0.98	Urban
6A7	926120.21	1044894.23	5.31	926120.78	1044893.58	5.04	-0.57	0.65	0.27	0.86	Urban
6A8	926127.76	1044882.74	5.26	926128.07	1044883.64	4.95	-0.31	-0.90	0.31	0.96	Urban
6A9	926134.77	1044886.64	5.64	926134.27	1044885.90	5.37	0.50	0.74	0.27	0.90	Urban
6A10	926140.96	1044875.88	5.59	926141.16	1044874.58	5.34	-0.20	1.30	0.25	1.32	Urban
6A11	925853.60	1045103.93	6.38	925853.40	1045104.27	6.08	0.20	-0.34	0.30	0.40	Bare-earth
6A12	925848.59	1045095.54	6.22	925848.44	1045094.14	6.02	0.15	1.40	0.20	1.41	Bare-earth

6A13	925840.46	1045099.72	6.21	925841.16	1045099.75	5.92	-0.70	-0.03	0.29	0.70	Bare-earth
6A14	925845.14	1045109.18	6.26	925845.23	1045109.59	6.08	-0.09	-0.41	0.18	0.43	Bare-earth
6A15	925832.81	1045117.08	6.26	925833.94	1045116.61	6.02	-1.13	0.47	0.24	1.22	Bare-earth
6A16	925827.09	1045107.61	6.23	925827.31	1045108.44	5.95	-0.22	-0.83	0.28	0.86	Bare-earth
6A17	925818.70	1045111.92	6.22	925819.64	1045111.26	5.95	-0.94	0.66	0.27	1.15	Bare-earth
6A18	925824.59	1045122.07	6.25	925825.74	1045121.86	6.02	-1.15	0.21	0.23	1.17	Bare-earth
6A19	925824.67	1045122.19	6.26	925825.74	1045121.86	6.02	-1.07	0.33	0.24	1.12	Bare-earth
6A20	925815.50	1045128.05	6.16	925814.78	1045128.91	5.89	0.72	-0.86	0.27	1.12	Bare-earth
6A21	925808.34	1045119.90	6.14	925808.15	1045120.91	5.85	0.19	-1.01	0.29	1.02	Bare-earth
6A22	925801.05	1045125.70	6.15	925801.59	1045126.75	6.02	-0.54	-1.05	0.13	1.18	Bare-earth
6A23	925806.40	1045133.25	6.15	925806.12	1045133.90	5.89	0.28	-0.65	0.26	0.70	Bare-earth
6A24	925798.94	1045138.04	6.16	925798.61	1045136.75	5.89	0.33	1.29	0.27	1.33	Bare-earth
6A25	925791.52	1045131.39	6.00	925792.01	1045131.64	5.85	-0.49	-0.25	0.15	0.55	Bare-earth
6A26	925887.98	1045129.70	7.06	925889.09	1045128.65	6.84	-1.11	1.05	0.22	1.53	Urban
6A27	925884.60	1045123.04	7.09	925884.04	1045124.09	6.77	0.56	-1.05	0.33	1.19	Urban
6A28	925881.84	1045115.44	7.14	925881.91	1045114.81	6.90	-0.07	0.63	0.24	0.63	Urban
6A29	925878.65	1045107.65	7.12	925877.48	1045107.72	6.87	1.17	-0.07	0.25	1.17	Urban
6A30	925885.75	1045104.11	7.16	925885.25	1045104.90	6.94	0.50	-0.79	0.22	0.94	Urban
6A31	925889.69	1045112.03	7.17	925889.78	1045112.28	6.90	-0.09	-0.25	0.27	0.26	Urban
6A32	925892.41	1045119.20	7.12	925892.14	1045118.61	6.94	0.27	0.59	0.18	0.65	Urban
6A33	925895.36	1045124.84	7.05	925894.60	1045125.04	6.87	0.76	-0.20	0.18	0.78	Urban
6A34	925902.31	1045121.92	7.07	925902.38	1045122.38	6.77	-0.07	-0.46	0.30	0.46	Urban
6A35	925899.55	1045114.53	7.14	925899.46	1045113.23	6.90	0.09	1.30	0.24	1.30	Urban
6A36	925896.54	1045106.95	7.20	925897.00	1045106.70	6.90	-0.46	0.25	0.30	0.53	Urban
6A37	925894.51	1045100.08	7.19	925894.21	1045099.91	6.97	0.30	0.17	0.22	0.34	Urban
6A38	925902.48	1045097.65	7.21	925903.27	1045097.52	7.00	-0.79	0.13	0.21	0.80	Urban
6A39	925906.33	1045106.05	7.16	925906.71	1045107.13	7.00	-0.38	-1.08	0.16	1.14	Urban
6A40	925907.61	1045115.01	7.05	925907.63	1045116.25	6.77	-0.02	-1.24	0.28	1.24	Urban
7A1	899449.13	1014861.99	12.06	899449.97	1014863.03	12.00	-0.84	-1.04	0.06	1.34	Urban
7A2	899441.09	1014862.62	11.89	899441.28	1014863.98	11.73	-0.19	-1.36	0.16	1.37	Urban
7A3	899432.31	1014863.47	11.90	899432.75	1014861.78	11.64	-0.44	1.69	0.26	1.74	Urban
7A4	899423.35	1014863.88	11.85	899423.40	1014864.18	11.73	-0.05	-0.30	0.12	0.31	Urban
7A6	899412.50	1014874.47	12.09	899413.65	1014874.74	11.80	-1.15	-0.27	0.29	1.18	Urban
7A7	899420.29	1014873.81	12.10	899420.15	1014871.89	11.90	0.14	1.92	0.20	1.92	Urban
7A9	899435.02	1014874.06	12.01	899434.03	1014872.97	11.67	0.98	1.09	0.34	1.47	Urban
7A10	899445.31	1014874.54	12.08	899444.62	1014874.25	11.80	0.69	0.29	0.28	0.75	Urban
7A12	899444.88	1014884.77	12.15	899446.03	1014887.18	12.03	-1.15	-2.41	0.12	2.67	Urban
7A13	899435.91	1014886.39	12.14	899435.04	1014887.08	11.96	0.87	-0.69	0.18	1.11	Urban
7A15	899415.94	1014888.50	12.10	899415.85	1014887.73	11.90	0.09	0.77	0.20	0.78	Urban
7A18	899428.64	1014902.07	12.11	899429.14	1014903.28	11.93	-0.50	-1.21	0.18	1.31	Urban
7A19	899436.78	1014902.73	12.22	899438.26	1014902.56	12.00	-1.48	0.17	0.22	1.49	Urban
7A22	899411.54	1014573.93	10.88	899413.23	1014572.58	10.85	-1.69	1.35	0.03	2.16	Brush
7A23	899415.32	1014567.94	10.94	899415.82	1014567.03	10.82	-0.50	0.91	0.12	1.04	Brush
7A25	899422.91	1014555.07	11.18	899423.23	1014556.34	10.95	-0.32	-1.27	0.23	1.31	Brush
7A26	899426.94	1014548.51	11.25	899427.40	1014548.95	10.95	-0.46	-0.44	0.30	0.64	Brush
7A27	899431.24	1014541.27	11.01	899431.47	1014539.90	10.95	-0.23	1.37	0.06	1.39	Brush
7A28	899435.24	1014533.92	10.78	899436.23	1014535.60	10.82	-0.99	-1.68	-0.04	1.95	Brush
7A29	899439.59	1014528.05	10.97	899439.51	1014527.66	11.01	0.08	0.39	-0.04	0.39	Brush
7A30	899472.48	1014549.18	11.37	899473.86	1014548.69	11.21	-1.38	0.49	0.16	1.46	Brush
7A31	899467.67	1014553.63	11.11	899468.34	1014554.70	11.05	-0.67	-1.07	0.06	1.26	Brush
7A32	899463.74	1014559.40	11.06	899463.23	1014558.99	10.98	0.51	0.41	0.08	0.65	Brush
7A33	899458.97	1014565.87	11.04	899459.22	1014566.51	10.95	-0.25	-0.64	0.09	0.69	Brush
7A34	899454.18	1014572.11	10.93	899454.27	1014571.76	10.82	-0.09	0.35	0.11	0.36	Brush

7A35	899449.47	1014578.27	10.94	899447.54	1014579.07	10.88	1.93	-0.80	0.06	2.09	Brush
7A36	899444.44	1014584.32	10.96	899444.66	1014584.19	11.01	-0.22	0.13	-0.05	0.26	Brush
7A37	899439.81	1014591.30	10.95	899439.37	1014590.72	11.18	0.44	0.58	-0.23	0.73	Brush
7A38	899459.69	1014588.92	10.87	899460.57	1014587.21	10.78	-0.88	1.71	0.09	1.92	Brush
7A39	899465.92	1014583.03	10.94	899465.33	1014583.53	10.75	0.59	-0.50	0.19	0.77	Brush
7A40	899471.03	1014575.94	11.06	899470.38	1014577.14	11.08	0.65	-1.20	-0.02	1.36	Brush
8A1	933938.58	1003454.70	20.41	933937.89	1003456.16	20.58	0.69	-1.46	-0.17	1.62	Bare-earth
8A2	933935.07	1003463.80	20.38	933935.40	1003464.00	20.55	-0.33	-0.20	-0.17	0.39	Bare-earth
8A3	933930.15	1003475.65	20.37	933931.17	1003475.42	20.49	-1.02	0.23	-0.12	1.05	Bare-earth
8A4	933925.66	1003488.50	20.29	933923.92	1003489.63	20.42	1.74	-1.13	-0.13	2.07	Bare-earth
8A5	933920.95	1003501.03	20.39	933919.82	1003501.24	20.52	1.13	-0.21	-0.13	1.15	Bare-earth
8A6	933916.12	1003513.28	20.40	933915.68	1003512.72	20.58	0.44	0.56	-0.18	0.71	Bare-earth
8A7	933911.47	1003525.56	20.42	933911.58	1003524.44	20.62	-0.11	1.12	-0.20	1.13	Bare-earth
8A8	933906.69	1003537.34	20.44	933906.01	1003537.33	20.49	0.68	0.01	-0.05	0.68	Bare-earth
8A9	933901.46	1003549.29	20.34	933902.36	1003549.01	20.45	-0.90	0.28	-0.11	0.94	Bare-earth
8A10	933896.77	1003561.48	20.25	933898.46	1003560.46	20.39	-1.69	1.02	-0.14	1.98	Bare-earth
8A11	933892.75	1003572.14	20.31	933892.88	1003571.15	20.39	-0.13	0.99	-0.08	1.00	Bare-earth
8A12	933888.14	1003583.92	20.29	933888.45	1003582.60	20.42	-0.31	1.32	-0.13	1.36	Bare-earth
8A13	933883.36	1003596.48	20.20	933882.65	1003597.53	20.22	0.71	-1.05	-0.02	1.27	Bare-earth
8A14	933878.87	1003607.79	20.16	933878.41	1003608.92	20.39	0.46	-1.13	-0.23	1.22	Bare-earth
8A15	933873.91	1003619.19	20.09	933873.39	1003619.94	20.19	0.52	-0.75	-0.10	0.91	Bare-earth
8A16	933874.48	1003407.66	21.45	933874.80	1003407.74	21.44	-0.32	-0.08	0.01	0.33	Bare-earth
8A17	933864.96	1003403.11	21.44	933865.85	1003402.45	21.50	-0.89	0.66	-0.06	1.11	Bare-earth
8A18	933861.37	1003411.39	21.27	933862.07	1003411.15	21.40	-0.70	0.24	-0.13	0.74	Bare-earth
8A19	933870.52	1003415.61	21.38	933871.10	1003416.53	21.54	-0.58	-0.92	-0.16	1.09	Bare-earth
8A20	933866.75	1003425.85	21.21	933866.04	1003427.45	21.40	0.71	-1.60	-0.19	1.75	Bare-earth
8A21	933855.44	1003421.79	21.30	933855.19	1003421.06	21.47	0.25	0.73	-0.17	0.77	Bare-earth
8A22	933849.36	1003431.27	21.34	933848.62	1003430.90	21.50	0.74	0.37	-0.16	0.83	Bare-earth
8A23	933859.81	1003436.35	21.08	933859.48	1003437.33	21.27	0.33	-0.98	-0.19	1.04	Bare-earth
8A24	933855.68	1003448.31	20.93	933855.05	1003448.68	21.14	0.63	-0.37	-0.21	0.73	Bare-earth
8A25	933844.69	1003445.86	21.30	933845.77	1003445.96	21.37	-1.08	-0.10	-0.07	1.08	Bare-earth
8A26	933810.48	1003543.94	19.73	933810.14	1003543.50	19.90	0.34	0.44	-0.17	0.56	Urban
8A27	933813.38	1003533.83	19.78	933812.86	1003535.23	19.86	0.52	-1.40	-0.08	1.49	Urban
8A28	933804.38	1003529.85	19.75	933803.87	1003529.88	19.83	0.51	-0.03	-0.08	0.51	Urban
8A29	933799.65	1003541.04	19.69	933798.69	1003540.77	19.70	0.96	0.27	-0.01	1.00	Urban
8A30	933788.91	1003536.43	19.71	933789.67	1003535.46	19.86	-0.76	0.97	-0.15	1.23	Urban
8A31	933793.51	1003527.03	19.75	933794.49	1003527.36	19.76	-0.98	-0.33	-0.01	1.04	Urban
8A32	933782.38	1003522.19	19.78	933781.56	1003523.55	19.93	0.81	-1.36	-0.15	1.58	Urban
8A33	933779.16	1003532.84	19.77	933778.74	1003531.92	19.76	0.42	0.92	0.01	1.01	Urban
8A34	933767.48	1003527.89	19.83	933767.06	1003529.06	19.93	0.42	-1.17	-0.10	1.25	Urban
8A35	933771.16	1003518.08	19.85	933770.80	1003517.18	19.96	0.36	0.90	-0.11	0.97	Urban
8A36	933524.82	1004295.90	21.73	933524.25	1004297.53	21.67	0.57	-1.63	0.06	1.72	Bare-earth
8A37	933528.40	1004287.24	21.53	933529.40	1004287.23	21.44	-1.00	0.01	0.09	1.00	Bare-earth
8A38	933531.46	1004279.16	21.50	933531.92	1004277.81	21.47	-0.46	1.35	0.03	1.43	Bare-earth
8A39	933534.08	1004271.71	21.36	933534.19	1004272.63	21.47	-0.11	-0.92	-0.11	0.93	Bare-earth
8A40	933537.09	1004262.92	21.33	933537.99	1004261.64	21.47	-0.90	1.28	-0.14	1.57	Bare-earth
8A41	933526.74	1004264.74	21.48	933525.92	1004265.05	21.83	0.82	-0.32	-0.34	0.88	Bare-earth
8A42	933523.23	1004271.66	21.51	933522.84	1004272.40	21.70	0.39	-0.74	-0.19	0.84	Bare-earth
8A43	933519.18	1004278.19	21.72	933520.34	1004277.68	21.93	-1.16	0.51	-0.21	1.26	Bare-earth
8A44	933516.02	1004286.33	21.64	933515.91	1004285.72	21.96	0.11	0.61	-0.32	0.62	Bare-earth
8A45	933511.92	1004293.88	21.84	933512.80	1004293.30	21.93	-0.88	0.58	-0.09	1.05	Bare-earth
8A46	933508.55	1004302.08	21.74	933509.16	1004301.93	21.93	-0.61	0.15	-0.19	0.63	Bare-earth
8A47	933504.99	1004309.51	21.60	933506.14	1004309.57	21.77	-1.15	-0.06	-0.17	1.15	Bare-earth

8A48	933501.53	1004315.85	21.84	933500.03	1004316.72	22.09	1.50	-0.87	-0.25	1.73	Bare-earth
8A50	933494.29	1004330.93	21.73	933495.34	1004330.11	21.93	-1.05	0.82	-0.20	1.33	Bare-earth
8A51	933491.32	1004337.83	21.75	933491.73	1004338.74	21.86	-0.41	-0.91	-0.11	1.00	Bare-earth
8A52	933487.59	1004345.77	21.78	933486.94	1004345.27	21.83	0.65	0.49	-0.05	0.82	Bare-earth
8A53	933483.96	1004353.68	21.71	933484.39	1004354.45	21.96	-0.43	-0.77	-0.25	0.88	Bare-earth
8A54	933480.05	1004362.83	21.61	933481.66	1004362.13	21.86	-1.61	0.70	-0.25	1.75	Bare-earth
8A55	933475.43	1004370.44	21.64	933474.64	1004371.32	21.90	0.79	-0.88	-0.26	1.18	Bare-earth
8A56	933473.23	1004376.07	21.76	933472.61	1004376.76	21.90	0.62	-0.69	-0.14	0.93	Bare-earth
8A58	933464.52	1004394.15	21.72	933463.81	1004395.33	21.91	0.71	-1.18	-0.19	1.38	Bare-earth
8A59	933460.61	1004402.19	21.67	933460.47	1004402.55	21.91	0.14	-0.36	-0.24	0.39	Bare-earth
8A60	933454.92	1004414.02	21.69	933454.86	1004412.23	21.94	0.06	1.79	-0.25	1.79	Bare-earth
9A1	917007.69	972105.67	13.31	917008.27	972106.26	13.38	-0.58	-0.59	-0.07	0.83	Bare-earth
9A2	917008.91	972096.41	13.39	917008.37	972094.58	13.45	0.54	1.83	-0.06	1.91	Bare-earth
9A3	916997.57	972094.00	13.35	916997.77	972094.28	13.42	-0.20	-0.28	-0.07	0.34	Bare-earth
9A4	916986.70	972092.75	13.30	916986.16	972090.87	13.45	0.54	1.88	-0.15	1.96	Bare-earth
9A5	916975.63	972091.31	13.36	916975.23	972090.41	13.38	0.40	0.90	-0.02	0.98	Bare-earth
9A6	916963.80	972090.75	13.34	916963.13	972091.46	13.35	0.67	-0.71	-0.01	0.98	Bare-earth
9A7	916950.64	972090.05	13.37	916952.20	972088.57	13.38	-1.56	1.48	-0.02	2.15	Bare-earth
9A8	916938.31	972088.56	13.33	916937.40	972088.41	13.28	0.91	0.15	0.05	0.92	Bare-earth
9A9	916925.58	972087.88	13.29	916926.12	972087.33	13.28	-0.54	0.55	0.01	0.77	Bare-earth
9A10	916912.62	972086.60	13.22	916911.72	972087.29	13.12	0.90	-0.69	0.10	1.13	Bare-earth
9A11	916900.15	972085.41	13.22	916900.66	972084.60	13.25	-0.51	0.81	-0.03	0.96	Bare-earth
9A12	916897.07	972100.48	13.22	916897.61	972101.17	13.19	-0.54	-0.69	0.03	0.87	Bare-earth
9A13	916905.27	972102.17	13.14	916906.86	972101.24	13.38	-1.59	0.93	-0.24	1.85	Bare-earth
9A14	916914.23	972102.76	13.08	916914.93	972102.62	13.22	-0.70	0.14	-0.14	0.72	Bare-earth
9A15	916925.81	972103.25	13.10	916926.54	972103.86	13.25	-0.73	-0.61	-0.15	0.95	Bare-earth
9A16	916937.25	972103.45	13.10	916938.59	972102.81	12.99	-1.34	0.64	0.11	1.49	Bare-earth
9A17	916947.51	972103.19	13.32	916947.15	972104.42	13.25	0.35	-1.23	0.06	1.28	Bare-earth
9A18	916958.15	972102.98	13.31	916959.09	972103.27	13.15	-0.94	-0.29	0.16	0.98	Bare-earth
9A19	916968.60	972103.58	13.25	916967.78	972103.01	13.25	0.82	0.57	0.00	1.00	Bare-earth
9A20	916980.08	972104.30	13.22	916978.91	972106.06	13.42	1.17	-1.77	-0.20	2.12	Bare-earth
9A21	917049.12	972188.20	13.82	917047.90	972187.46	13.94	1.22	0.74	-0.12	1.43	Bare-earth
9A22	917050.30	972196.06	13.88	917051.02	972195.69	13.81	-0.72	0.37	0.07	0.81	Bare-earth
9A23	917051.15	972204.53	13.80	917051.38	972204.91	13.46	-0.23	-0.38	0.34	0.44	Bare-earth
9A24	917052.22	972212.56	13.86	917052.86	972211.77	13.59	-0.64	0.79	0.27	1.02	Bare-earth
9A25	917053.40	972220.52	13.90	917053.97	972219.68	13.69	-0.57	0.84	0.21	1.01	Bare-earth
9A26	917054.36	972228.23	13.94	917056.73	972227.68	13.82	-2.37	0.55	0.12	2.43	Bare-earth
9A28	917055.93	972246.09	14.00	917057.25	972244.28	13.69	-1.32	1.81	0.31	2.24	Bare-earth
9A29	917056.47	972254.28	13.96	917055.25	972255.24	13.62	1.22	-0.96	0.34	1.55	Bare-earth
9A32	917041.82	972255.31	13.83	917042.88	972254.35	13.88	-1.06	0.96	-0.05	1.43	Bare-earth
9A33	917041.72	972245.76	13.85	917040.91	972244.64	13.75	0.81	1.12	0.10	1.38	Bare-earth
9A34	917040.98	972236.22	13.81	917040.78	972238.02	13.56	0.20	-1.80	0.25	1.81	Bare-earth
9A36	917039.55	972217.70	13.71	917039.11	972219.05	13.46	0.44	-1.35	0.25	1.42	Bare-earth
9A38	917039.63	972198.13	14.12	917038.45	972196.48	13.94	1.18	1.65	0.18	2.03	Bare-earth
9A39	917038.95	972187.79	14.19	917039.86	972188.02	13.94	-0.91	-0.23	0.25	0.94	Bare-earth
9A40	917038.90	972177.55	14.34	917039.83	972176.76	14.17	-0.93	0.79	0.17	1.22	Bare-earth
10A1	949041.60	971585.63	16.82	949041.28	971586.34	17.06	0.32	-0.71	-0.24	0.78	Bare-earth
10A2	949034.14	971587.60	16.66	949034.45	971588.44	16.83	-0.31	-0.84	-0.17	0.89	Bare-earth
10A3	949031.07	971579.68	16.73	949030.19	971579.68	16.83	0.88	0.00	-0.10	0.88	Bare-earth
10A4	949037.87	971575.60	16.85	949039.24	971574.47	17.06	-1.37	1.13	-0.21	1.78	Bare-earth
10A5	949036.12	971567.16	16.89	949037.08	971566.92	17.12	-0.96	0.24	-0.23	0.99	Bare-earth
10A6	949027.94	971568.82	16.85	949028.15	971567.81	16.96	-0.21	1.01	-0.11	1.03	Bare-earth
10A7	949023.48	971559.88	16.89	949024.15	971559.18	17.12	-0.67	0.70	-0.23	0.97	Bare-earth

11A22	907929.12	1034781.16	13.78	907929.84	1034779.88	13.92	-0.72	1.28	-0.14	1.47	Bare-earth
11A23	907931.89	1034788.70	13.95	907930.99	1034789.27	14.09	0.90	-0.57	-0.14	1.06	Bare-earth
11A24	907940.80	1034788.59	14.00	907940.80	1034789.63	14.25	-0.01	-1.04	-0.25	1.04	Bare-earth
11A26	907939.32	1034770.45	13.87	907939.13	1034770.40	14.02	0.19	0.05	-0.15	0.20	Bare-earth
11A27	907946.61	1034768.37	13.87	907947.13	1034767.94	14.06	-0.52	0.43	-0.19	0.68	Bare-earth
11A28	907949.97	1034773.82	13.79	907950.02	1034773.88	14.13	-0.05	-0.06	-0.34	0.08	Bare-earth
11A29	907952.76	1034781.40	13.78	907952.87	1034783.20	14.07	-0.11	-1.80	-0.29	1.81	Bare-earth
11A30	907960.28	1034783.17	14.06	907961.57	1034782.74	14.23	-1.29	0.43	-0.17	1.36	Bare-earth
11A32	907956.90	1034765.83	13.86	907956.52	1034766.11	14.10	0.38	-0.28	-0.24	0.47	Bare-earth
11A33	907963.56	1034760.52	13.84	907963.90	1034758.79	14.16	-0.34	1.73	-0.32	1.76	Bare-earth
11A36	907973.99	1034777.73	14.05	907973.48	1034776.41	14.39	0.51	1.32	-0.34	1.41	Bare-earth
11A37	907985.13	1034772.09	14.01	907984.08	1034773.26	14.20	1.05	-1.17	-0.19	1.57	Bare-earth
11A40	907973.41	1034747.64	13.81	907973.45	1034748.85	13.87	-0.04	-1.21	-0.06	1.21	Bare-earth
12A1	861676.92	1147060.62	20.21	861677.64	1147060.57	20.15	-0.72	0.05	0.06	0.72	Urban
12A2	861667.39	1147059.55	20.20	861666.78	1147058.60	20.15	0.61	0.95	0.05	1.13	Urban
12A3	861664.05	1147027.94	20.17	861663.53	1147027.53	20.09	0.52	0.41	0.08	0.66	Urban
12A4	861676.09	1147031.49	20.27	861676.46	1147031.56	20.25	-0.37	-0.07	0.02	0.37	Urban
12A5	861679.41	1147010.92	20.33	861680.07	1147010.30	20.38	-0.66	0.62	-0.05	0.91	Urban
12A6	861665.43	1147005.33	20.18	861665.11	1147005.68	20.15	0.32	-0.35	0.03	0.47	Urban
12A7	861662.55	1146994.77	20.17	861662.19	1146994.10	19.99	0.36	0.67	0.18	0.76	Urban
12A8	861680.05	1146997.40	20.34	861679.51	1146997.97	20.25	0.54	-0.57	0.09	0.78	Urban
12A9	861681.33	1146977.20	20.34	861681.48	1146976.48	20.28	-0.15	0.72	0.06	0.74	Urban
12A10	861664.78	1146970.44	20.16	861665.04	1146970.97	19.99	-0.26	-0.53	0.17	0.59	Urban
12A11	861663.49	1146959.11	20.15	861663.11	1146958.33	20.09	0.38	0.78	0.06	0.87	Urban
12A12	861679.14	1146959.93	20.29	861678.10	1146959.48	20.32	1.04	0.45	-0.03	1.13	Urban
12A13	861679.96	1146948.65	20.32	861679.67	1146950.10	20.28	0.29	-1.46	0.04	1.48	Urban
12A14	861666.83	1146947.79	20.25	861666.58	1146947.51	20.12	0.25	0.28	0.13	0.38	Urban
12A15	861665.53	1146936.61	20.17	861664.25	1146936.12	20.12	1.28	0.49	0.05	1.37	Urban
12A16	861675.70	1146939.58	20.25	861674.95	1146939.50	20.19	0.75	0.08	0.06	0.75	Urban
12A17	861683.04	1146921.79	20.39	861683.09	1146922.15	20.28	-0.05	-0.36	0.11	0.36	Urban
12A18	861664.61	1146908.08	20.14	861664.12	1146909.81	20.02	0.49	-1.73	0.12	1.80	Urban
12A19	861672.28	1146894.94	20.23	861671.96	1146895.51	20.15	0.32	-0.57	0.08	0.65	Urban
12A20	861682.82	1146896.23	20.34	861682.92	1146894.72	20.22	-0.10	1.51	0.12	1.51	Urban
12A21	861930.81	1147046.63	21.41	861930.49	1147047.18	21.47	0.32	-0.55	-0.06	0.63	Bare-earth
12A22	861921.87	1147052.37	20.98	861921.77	1147052.92	21.08	0.10	-0.55	-0.09	0.56	Bare-earth
12A23	861919.90	1147060.09	20.78	861919.93	1147060.66	20.75	-0.03	-0.57	0.03	0.57	Bare-earth
12A24	861927.31	1147060.59	20.89	861928.79	1147059.55	20.75	-1.48	1.04	0.14	1.81	Bare-earth
12A25	861933.33	1147065.05	20.98	861934.40	1147065.22	21.02	-1.07	-0.17	-0.04	1.08	Bare-earth
12A26	861928.78	1147071.23	20.91	861928.82	1147071.49	20.88	-0.04	-0.26	0.03	0.27	Bare-earth
12A27	861921.94	1147076.79	20.67	861921.24	1147077.79	20.62	0.70	-1.00	0.05	1.22	Bare-earth
12A28	861924.48	1147084.95	20.73	861925.24	1147083.73	20.79	-0.76	1.22	-0.06	1.44	Bare-earth
12A29	861931.59	1147085.09	21.16	861931.48	1147085.70	21.28	0.11	-0.61	-0.12	0.62	Bare-earth
12A30	861941.11	1147082.98	21.24	861940.20	1147083.79	21.34	0.91	-0.81	-0.10	1.22	Bare-earth
12A31	861952.40	1147081.42	21.30	861953.20	1147081.04	21.34	-0.80	0.38	-0.04	0.89	Bare-earth
12A32	861957.63	1147087.95	21.26	861957.23	1147087.07	21.34	0.40	0.88	-0.08	0.96	Bare-earth
12A33	861954.27	1147092.51	21.34	861954.18	1147092.82	21.34	0.09	-0.31	0.00	0.32	Bare-earth
12A34	861949.34	1147098.75	21.37	861950.34	1147099.05	21.28	-1.00	-0.30	0.09	1.04	Bare-earth
12A35	861941.88	1147101.96	21.34	861941.75	1147100.82	21.28	0.13	1.14	0.06	1.15	Bare-earth
12A36	861947.72	1147111.86	21.37	861947.26	1147111.48	21.44	0.46	0.38	-0.07	0.60	Bare-earth
12A37	861958.31	1147118.28	21.34	861957.20	1147118.96	21.34	1.11	-0.68	0.00	1.30	Bare-earth
12A38	861966.16	1147111.24	21.33	861967.44	1147110.73	21.38	-1.28	0.51	-0.05	1.37	Bare-earth
12A39	861970.56	1147101.97	21.38	861970.29	1147102.63	21.38	0.27	-0.66	0.00	0.71	Bare-earth
12A40	861964.89	1147095.96	21.34	861964.48	1147096.10	21.34	0.41	-0.14	0.00	0.44	Bare-earth

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