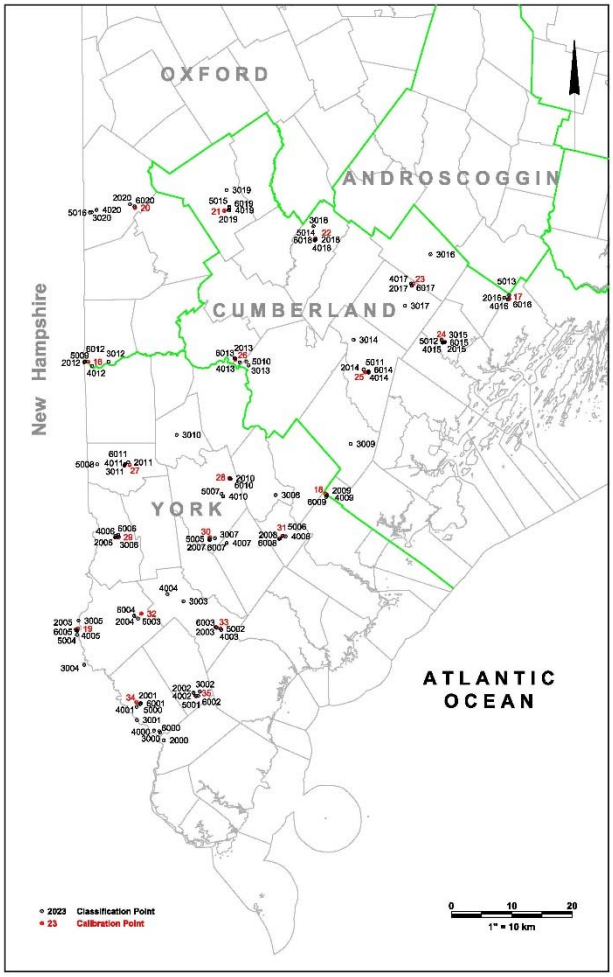
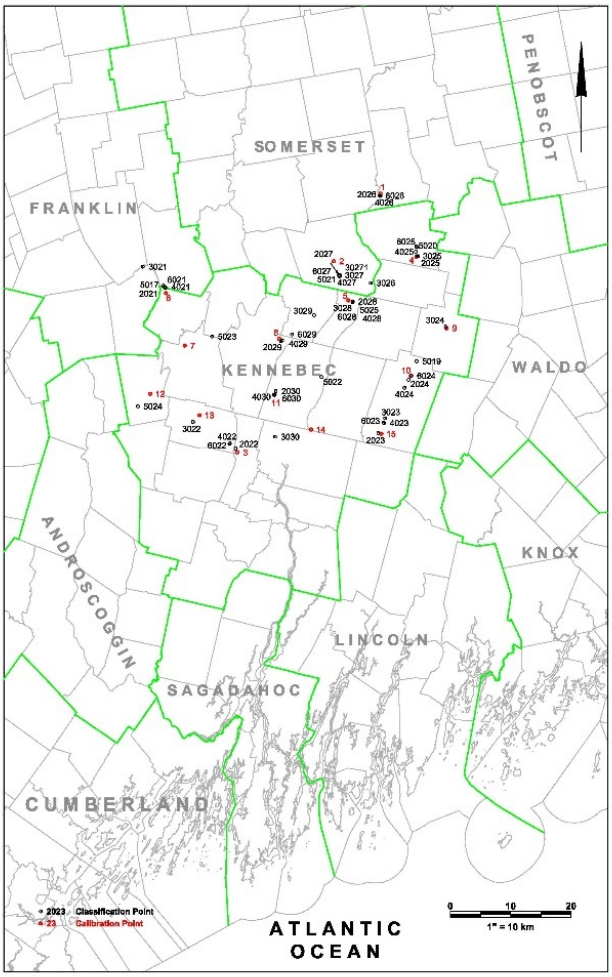
2013 USGS NRCS MAINE LIDAR PROJECT
SURVEY REPORT





CUMBERLAND, KENNEBEC & YORK COUNTIES, MAINE

CONTRACT NO. G10PC00057

TASK ORDER NO. G13PD00954

WINTER 2013/2014

WOOLPERT

DESIGN | GEOSPATIAL | INFRASTRUCTURE

2013 USGS NCRS MAINE LIDAR PROJECT SURVEY REPORT

CUMBERLAND, KENNEBEC & YORK COUNTIES, MAINE

CONTRACT NO. G10PC00057
TASK ORDER NO. G13PD00954

WINTER 2013/2014

Prepared by:

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WOOLPERT
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2013 USGS NCRS Maine LIDAR Project Survey Report:

Contract No. G10PC00057
Task Order No. G13PD00954

for:

United States Geological Survey (USGS)
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Summary of Contents

INTRODUCTION

This report contains a comprehensive outline of the Ground Control Classification and Calibration Point Survey performed by Shyka, Sheppard & Garster Land Surveyors, (SSG), that supported the 2013 USGS NRCS Maine LIDAR Project. All surveys were performed in such a way as to achieve ground control that supports LiDAR data at 9.25 cm accuracy and satisfy a Local Network accuracy of 5 centimeters at a 95% confidence level. All control points were observed using GPS and consistent with the second order horizontal and third order vertical as defined by the NGS.

PROJECT AREA

The geographic area of this work order includes the areas within the Mid and South Coast, Maine counties of Cumberland, Kennebec and York. The project covers a land area of 2,279 square miles and 2,302 sq. miles when including the buffer beyond the project tile boundary.

PURPOSE

The purpose of this survey was to establish ground control with three dimensional coordinates to support LiDAR data calibration and supplemental quality check points per land cover classification for this lidar data acquisition project.

These ground control points in conjunction with the LiDAR data will be used to develop and/or update certain geospatial data sets for use by state government agencies, other levels of government, academia, and the general public.

DATE OF SURVEY

All ground control survey field activities took place from December 3, 2013 to March 21, 2014. Difficult winter weather conditions, including heavy snow and ice accumulations, hampered field operations and forced extension of the time required to complete the survey.

GROUND CONTROL AND PHOTO IDENTIFICATION

Woolpert provided SSG with an approximate coordinate for each required ground control calibration or quality checkpoints per land cover type needed. The objective then was to find surfaces in those land cover type areas, including Bare Earth/Open Terrain, Urban, Tall Weeds/Crops, Brushland and Trees, Forested and Fully Grown, with a level slope to utilize as ground control within a given radius of the provided coordinates. Examples of suitable types of land cover area features include concrete, gravel, dirt, short grass, and light asphalt, hay fields, brush, mixed forest areas, hardwood growth areas and softwood growth areas.

GROUND CONTROL SURVEY

SSG collected 35 calibration points and 158 classification points throughout the project area. These points were located in an area that will enable effective assessment of swath-to-swath reproducibility and ground truthing accuracy.

GPS AND TERRESTRIAL SURVEY EQUIPMENT

This survey was performed using two (2) SSG-owned Leica GS15 Series GPS receivers in conjunction with simultaneous data collected multiple Continuously Operating Reference Stations (CORS) GPS receivers. A total of nineteen (19) CORS stations were utilized during this survey. Additionally, total stations (Leica Robotic and Nikon Standard) were used for terrestrial observations.

SURVEY METHOD

The survey was conducted utilizing Rapid Static observations made using 5-second sync rates and observations periods of typically 15 to 20 minutes. Existing NGS, commercial and MDOT Continuously Operating Reference Stations (CORS) were used as fixed control during the survey to allow redundant observations for each point. The use of this technique was possible due to the high density and excellent distribution of NGS, commercial and MDOT CORS in and around the project area.

Additionally, standard terrestrial data collection methods were used to collect data in forested and fully grown land cover type areas. Standard and Robotic Total were used in these areas not suitable for GPS reception. Depending on the location of those classification points and the nature of surrounding areas, other classes of points were occasionally located this way in the same terrestrial observation session.

GPS DATA ANALYSIS AND ADJUSTMENT

All GPS ground control observations were processed using Trimble Navigation's Trimble Business Center. After the post-processing of the raw data was completed, observations were subjected to rigorous loop-closure analysis; whereby, unacceptable GPS vectors were removed and field blunders, if any, were detected and eliminated. Once this process was completed, SSG performed unconstrained and constrained least-squares adjustments using Trimble Business Center and the Geoid 12A model. Both unconstrained and constrained adjustments were computed using trivial and nontrivial baselines. All terrestrial observations included redundant observations and were processed using AutoDesk Civil3D.

In this survey, there were a total of seven (7) National Geodetic Survey (NGS) CORS, eight (8) Maine Dept. of Transportation (MDOT) CORS, and four (4) commercial CORS that were included in this survey. The published points used are listed as follows:

Type	CORS Control Stations
NGS CORS STATIONS (with PID)	BARN (AJ1830) BRU7 (DO8673) MASA (DO9480) NHCO (DL9078) NHUN (DI1075) P776 (DL7764) YMTS (AJ2693)
MDOT CORS STATIONS (with PID)	MECC (DP1322) MEDX (DN9932) MEFR (DN9934) MEGO (DO5451) MEJD (DO6444) MEOW (DN9940) MESP (DO2056) MEWA (DO2058)
COMMERCIAL CORS STATIONS	BMTS KENN LMTS TMTS

DATUM REFERENCES AND COORDINATE SYSTEMS

All horizontal GPS control was based on UTM Zone 19 North, NAD83(2011) expressed in Meters. The vertical datum used for this project was based on the North American Vertical Datum of 1988 (NAVD88), Geoid 12A, also expressed in Meters. The final ground control coordinates can be found in Section 2 of this report.

QUALITY ASSURANCE

The National Geodetic Survey's Online User Positioning Service (OPUS) was utilized to determine positions for 90% of the control points surveyed to assure that there were no discrepancies in the field observation data. Close examination of the residuals showed close agreement with the analysis performed by SSG, indicating that there are no distortions in orientation or scale.

SECTION 2: GROUND CONTROL COORDINATE LISTING

This section includes a complete listing of the Final 2013 USGS NRCS Maine LIDAR Project-Cumberland, Kennebec & York Counties coordinates.

2013 USGS NCRS MAINE LIDAR PROJECT WORK ORDER #XX X
LOCATION: CUMBERLAND, KENNEBEC & YORK COUNTIES, MAINE
HORIZONTAL DATUM: NAD 83(2011)
VERTICAL DATUM: NAVD 88
COORDINATE ZONE: UTM 19 NORTH
GEOID MODEL: GEOID 12A
COORDINATE SYSTEM: GRID
UNITS: METERS
DATE: WINTER 2013/2014

Ground Control Points (GCPs):

Point ID	Northing	Easting	Elevation	Description
1	4953175.003	454056.148	56.330	Gravel Drive
2	4941976.772	446282.294	98.588	Pavement
3	4910300.132	430363.122	71.477	Gravel Road
4	4942705.990	460017.309	35.405	Pavement
5	4935499.158	448725.360	58.750	Pavement
6	4936694.128	418519.063	168.086	Gravel
7	4928004.669	421639.115	102.665	Pavement
8	4929122.083	437278.636	107.210	Gravel Road
9	4930892.457	464984.421	99.021	Pavement
10	4922971.852	459085.700	64.154	Pavement
11	4919826.755	436480.522	128.284	Gravel Drive
12	4919999.398	415913.925	129.454	Pavement
13	4916455.528	424083.555	83.892	Pavement
14	4914079.155	442536.709	51.253	Pavement
15	4913375.176	454195.826	100.736	Pavement
16	4850920.013	340572.334	118.956	Gravel D/W
17	4861334.312	410381.626	55.735	Pavement
18	4829086.351	379917.898	52.846	Pavement
19	4806734.402	338935.679	99.133	Pavement
20	4876409.430	348374.458	140.482	Pavement
21	4875921.050	363175.643	140.690	Pavement
22	4871325.982	378254.196	139.406	Pavement
23	4863835.887	394508.316	70.790	Gravel Parking
24	4854571.517	399170.273	78.385	Pavement
25	4849176.704	386532.659	76.154	Pavement

Point ID	Northing	Easting	Elevation	Description
26	4851299.099	365002.664	94.108	Pavement
27	4833831.657	347509.533	145.540	Gravel
28	4831625.662	364018.647	106.912	Pavement
29	4821881.595	345517.205	217.195	Pavement
30	4821868.345	360781.726	80.304	Pavement
31	4822076.121	372829.216	59.038	Pavement
32	4809226.128	349429.753	110.521	Pavement
33	4806906.381	361950.459	73.023	Pavement
34	4794564.481	348632.013	120.016	Pavement
35	4795578.121	358524.933	42.644	Pavement
2000	4788256.291	353163.020	34.199	Pavement
2001	4794402.071	349308.612	116.990	Pavement
2002	4796152.233	358094.498	45.620	Gravel
2003	4806957.053	361799.645	73.276	Pavement
2004	4808827.298	348260.095	117.829	Pavement
2005	4806640.880	338597.414	104.410	Pavement
2006	4821851.163	345098.044	232.108	Pavement
2007	4821414.201	360709.635	80.211	Pavement
2008	4821667.891	372417.627	60.804	Pavement
2009	4828863.986	380233.257	51.765	Pavement
2010	4831644.601	364167.046	108.824	Pavement
2011	4834287.461	347256.261	135.873	Gravel
2012	4850861.066	339953.740	121.079	Gravel
2013	4851477.523	364965.189	94.219	Gravel
2014	4849669.081	386258.584	81.132	Pavement
2015	4854109.393	399455.262	72.683	Pavement
2016	4861528.688	409546.382	47.209	Gravel
2017	4863561.031	394220.530	60.150	Pavement
2018	4871154.142	378316.138	138.039	Grass
2019	4876046.386	363902.842	139.299	Gravel
2020	4877006.277	347562.012	114.697	Pavement
2021	4937637.735	418402.711	136.352	Gravel Drive
2022	4910930.688	430078.293	104.388	Mowed Lawn
2023	4913498.172	453668.024	101.430	Pavement
2024	4922318.020	458717.942	76.450	Pavement
2025	4942795.617	460258.005	38.362	Mowed Lawn
2026	4952786.431	453987.921	48.115	Gravel Drive
2027	4939676.133	447220.503	71.840	Pavement
2028	4935305.716	449410.437	55.557	Pavement

Point ID	Northing	Easting	Elevation	Description
2029	4928731.689	437576.369	99.206	Pavement
2030	4920461.835	436713.363	147.666	Mowed Lawn
3000	4789522.349	352545.239	46.116	Pavement
3001	4791603.278	348700.731	60.485	Pavement
3002	4796312.633	359144.641	39.419	Pavement
3003	4811268.113	356418.869	86.542	Pavement
3004	4800764.558	339954.201	74.656	Pavement
3005	4808048.821	339029.090	125.140	Pavement
3006	4821904.450	345704.291	218.131	Pavement
3007	4821736.404	361616.317	82.666	Pavement
3008	4828855.760	371701.944	52.205	Pavement
3009	4837328.672	384130.294	61.608	Pavement
3010	4838814.879	355279.842	173.582	Pavement
3011	4833749.369	346630.487	147.992	Pavement
3012	4850938.679	344015.400	124.370	Pavement
3013	4850317.428	367226.862	90.528	Gravel
3014	4854550.121	384597.461	94.676	Pavement
3015	4854176.443	399727.138	65.790	Pavement
3016	4868701.102	397352.157	85.794	Gravel
3017	4860194.084	393119.415	92.642	Pavement
3018	4873349.435	377976.871	142.215	Pavement
3019	4879345.649	363565.723	123.395	Pavement
3020	4875681.109	341199.303	130.326	Pavement
3021	4941075.066	414700.273	107.430	Pavement
3022	4915357.667	422986.952	84.966	Pavement
3023	4915941.899	454819.960	75.062	Pavement
3024	4931134.691	464853.879	90.894	Concrete Slab
3025	4942825.886	460152.293	39.889	Pavement
3026	4938380.848	452448.616	38.289	Pavement
3027	4939676.468	447245.987	70.431	Gravel Drive
30271	4939687.015	447324.446	66.142	Pavement
3028	4935196.810	449437.229	55.588	Pavement
3029	4933030.881	443053.773	76.516	Pavement
3030	4912881.508	436602.665	85.734	Pavement
4000	4789859.364	351537.539	40.178	Field
4001	4793805.478	348669.685	100.384	Field
4002	4796101.529	358087.025	44.551	Field
4003	4806535.546	362692.696	70.380	Field
4004	4812463.150	353768.321	170.575	Field

Point ID	Northing	Easting	Elevation	Description
4005	4807373.928	338976.370	108.821	Field
4005A	4806416.465	338795.118	92.155	Grass
4006	4822067.974	345126.696	227.209	Field
4007	4820914.117	363577.655	115.392	Field
4008	4822011.615	373348.151	49.607	Field
4009	4828841.105	380236.357	51.312	Field
4010	4828630.818	362977.097	120.725	Field
4011	4833791.552	346659.722	147.771	Field
4012	4850230.938	341253.542	117.054	Field
4013	4850848.505	365755.335	89.794	Field
4014	4849124.094	387079.803	63.403	Field
4015	4854078.337	399373.892	74.408	Field
4016	4861239.124	410123.946	53.992	Field
4017	4863855.298	394130.379	62.737	Field
4018	4871023.864	378210.373	135.977	Field
4019	4876003.148	364020.432	140.031	Field
4020	4876058.981	342026.589	128.727	Field
4021	4937573.083	418428.248	137.643	Field
4022	4911771.698	429089.127	144.063	Field
4023	4915153.999	454640.675	70.408	Field
4024	4921013.706	458044.812	102.876	Field
4025	4943559.494	459922.403	41.729	Field
4026	4952815.936	454062.306	48.023	Field
4027	4939458.151	447286.659	64.312	Field
4028	4935250.215	449476.296	53.782	Field
4029	4928884.496	437765.258	104.422	Field
4030	4919847.783	436437.530	125.158	Field
5000	4794238.117	349194.698	113.767	High Brush
5001	4795629.513	358412.025	42.524	High Brush
5002	4806715.978	362560.782	73.033	High Brush
5003	4808409.803	348869.868	94.277	High Brush
5004	4805709.339	338775.141	92.539	High Brush
5005	4821610.206	360773.013	78.971	High Brush
5006	4822136.817	372885.171	58.535	High Brush
5007	4829054.530	362716.420	105.330	High Brush
5008	4833946.856	342121.868	191.350	High Brush
5009	4850930.196	340127.257	114.978	High Brush
5010	4850971.274	366833.502	93.782	High Brush
5011	4849337.878	387057.655	62.089	High Brush

Point ID	Northing	Easting	Elevation	Description
5012	4854499.456	399163.735	82.614	High Brush
5013	4861902.123	410385.690	65.720	High Brush
5014	4871102.903	378181.112	135.754	High Brush
5015	4876592.987	363981.260	124.825	High Brush
5016	4875637.288	340924.476	123.143	High Brush
5017	4937903.025	418074.214	108.685	High Brush
5019	4925401.969	460041.589	66.898	High Brush
5020	4944321.370	460049.836	43.181	High Brush
5021	4939662.425	447244.353	70.346	High Brush
5022	4922805.369	444278.720	53.200	High Brush
5023	4929506.997	426152.355	98.169	High Brush
5024	4917938.043	413851.536	198.841	High Brush
5025	4935280.892	449480.131	54.536	High Brush
6000	4789753.213	352411.756	44.535	Woods
6001	4794361.944	349351.009	114.469	Woods
6002	4795600.867	358867.861	37.303	Woods
6003	4806971.384	361746.633	72.031	Woods
6004	4808878.608	348250.094	118.454	Woods
6005	4806447.184	338699.330	94.552	Woods
6006	4822275.267	345608.114	217.444	Woods
6007	4821400.979	360775.260	79.610	Woods
6008	4821599.642	372284.525	62.887	Woods
6009	4828562.669	380059.696	52.157	Woods
6010	4831570.433	364209.885	106.878	Woods
6011	4833942.404	346727.595	148.960	Woods
6012	4850994.208	340141.866	118.594	Woods
6013	4851542.492	364858.698	95.380	Woods
6014	4849229.583	387095.892	64.540	Woods
6015	4854108.720	399589.999	69.614	Woods
6016	4861260.820	410186.191	52.903	Woods
6017	4863498.140	394263.091	59.201	Woods
6018	4871072.180	378132.472	136.459	Woods
6019	4876387.626	364033.941	131.031	Woods
6020	4876629.294	348310.919	133.232	Woods
6021	4937725.315	418301.969	127.811	Woods
6022	4911699.447	429043.086	142.936	Woods
6023	4915258.424	454512.098	70.403	Woods
6024	4922979.854	459148.325	63.786	Woods
6025	4944416.321	460008.383	44.302	Woods

Point ID	Northing	Easting	Elevation	Description
6026	4952827.776	453939.009	47.128	Woods
6027	4939633.979	447195.117	71.566	Woods
6028	4935140.771	449459.813	55.647	Woods
6029	4929863.173	439395.521	80.925	Woods
6030	4919852.081	436546.598	129.208	Woods

SECTION 3: GROUND CONTROL AND CHECKPOINT STATION RECOVERY INFORMATION SHEETS AND PHOTOGRAPHS

This section contains the Station Recovery Logs and photographs of each of the ground control calibration and classification points established for 2013 USGS NRCS Maine LIDAR Project- Cumberland, Kennebec & York Counties.

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 1

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4953177.0
Lon / East 454056.4
Height / Elev 50.6
WGS84 / SPC (UTM)

Date 12 /04 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather Sunny
Crew SWS

Antenna Height
(m - Internal/Rod)
(ft/m - independent)
2m (fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 9:35
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method (Static) RTK VRS

Comments
#SVs: 15
PDOP/QC: 3.8 | 2.1 | 3.7
3 | 2 | 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

GRAVEL DRIVE

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2

Project Name State of Maine Orthophotos / LiDAR

Position
Lat / North 4941976.760
Lon / East 446282.281
Height / Elev 98.620
WGS84 / SPC (UTM)

Date 12 / 04 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather Sunny
Crew SWS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 11:56
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .011/.007/.069
3 2 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

Pavement

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4910300.121
Lon / East 430363.115
Height / Elev 71.496
WGS84 / SPC / (UTM)

Date 12 /06/ 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location MANCHESTER
Weather OVC ST
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 2:33
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 015/008/013
3/2/1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

GRAVEL RD

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4942706.007
Lon / East 460017.301
Height / Elev 35.468
WGS84 / SPC (UTM)

Date 12 / 03 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CLINTON
Weather OVCST
Crew SWS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 2:07
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .617/.006/.010
3 / 2 / 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑
PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4935499.152
Lon / East 448725.341
Height / Elev 58.817
WGS84 / SPC (UTM)

Date 12/04/2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERVILLE
Weather CLEAR
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 3:51
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .013 | .007 | .011
3 | 2 | 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

PAVEMENT

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GPS Observation Log
Station Name 6

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4936634.126
Lon / East 418519.061
Height / Elev 168.203
WGS84 / SPC (UTM)

Date 12 / 05 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location VIENNA
Weather OVCST
Crew SS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2M (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) ____
End Time (local) ____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .018 | .010 | .015
3 | 2 | 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ GRAVEL

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GPS Observation Log
Station Name 7

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4928004.661
Lon / East 421639.126
Height / Elev 182.657
WGS84 / SPC (UTM)

Date 12 / 05 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location MT. VERNON
Weather OVCST / RAIN
Crew SS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 2:15
End Time (local) ____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: .027/.014/.023
3 / 2 / 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 8

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 492926.0
Lon / East 437279.8
Height / Elev 104.9
WGS84 / SPC / (UTM)

Date 12 /06/ 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BELGRADE
Weather RAIN
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 9:17
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method (Static) RTK VRS

Comments
#SVs: 14
PDOP/QC: 4.7 1.4/1.0

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

GRAVEL Road

SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 9

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4930892.457
Lon / East 464984.416
Height / Elev 99.079
WGS84 / SPC / (UTM)

Date 12 / 07 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location ALBION
Weather SUNNY
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 10:40
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: .028/.016/.022
3 / 2 / 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 10

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4922971.852
Lon / East 459085.691
Height / Elev 64.199
WGS84 / SPC (UTM)

Date 12/07/2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CHINA
Weather SUNNY
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2 m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 11:42
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .019/.012/.015
3/2/1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT W/MAG

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GPS Observation Log
Station Name //

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4919826.770
Lon / East 436480.517
Height / Elev 178.443
WGS84 / SPC (UTM)

Date 12 / 06 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather OVCST
Crew SS

Antenna Height
(m - Internal/Rod)
(ft/m - independent)
2m (fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 1:00
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: .040/.017/.036
3 / 2 / 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

GRAVEL D/W

SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 12

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4919999.407
Lon / East 415913.973
Height / Elev 129.552
WGS84 / SPC / (UTM)

Date 12 / 05 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather Rain
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 2:58
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 17
PDOP/QC: .026/.015/.022
3 / 2 / 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

PAVED ROAD

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 13

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4916455.524
Lon / East 424083.517
Height / Elev 84.003
WGS84 / SPC / (UTM)

Date 12/05/2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location READFIELD
Weather RAIN
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2M (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 4:01
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: .021/.012/.020
3/2/1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 14

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4914079.157
Lon / East 442536.691
Height / Elev 51.304
WGS84 / SPC / (UTM)

Date 12 / 06 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location VASSLETBORO
Weather OVCST
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 3:56
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 027/013/023
3 / 2 / 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 15

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4913 376.647
Lon / East 454196.4
Height / Elev 91.2
WGS84 / SPC / (UTM)

Date 12 / 07 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather Sunny
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 3:00
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method (Static) RTK VRS

Comments
#SVs: 18
PDOP/QC: 3.5/1.9/2.9
3 / 2 / 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT w/ MAG

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 16

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4850920.020
Lon / East 340572.326
Height / Elev 119.060
WGS84 / SPC (UTM)

Date 1/7/2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location PORTER
Weather WEST
Crew SS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2M (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 5:11
End Time (local) ____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: .020 .011 .017

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ GRAVEL D/W

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 17

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4861334.298
Lon / East 410381.632
Height / Elev 55.687
WGS84 / SPC / UTM

Date 1/07/2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location Durham
Weather Overcast
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 11:32
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12/GS15
Method Static / RTK VRS

Comments
#SVs: 15
PDOP/QC: .020/.010/.017 (3 / 2 / 1)

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 18

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4829086.326
Lon / East 379917.883
Height / Elev 52.914
WGS84 / SPC / (UTM)

Date 1 / 8 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather CLEAR
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2M (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 5:45
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12/GS15
Method Static RTK VRS

Comments
#SVs: 14
PDOP/QC: .011 .006 .010

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 19

Project Name State of Maine Orthophotos / LiDAR

Position
Lat / North 4806734.417
Lon / East 338935.670
Height / Elev 99.167
WGS84 / SPC (UTM)

Date 1/8/2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location LEBANON
Weather SUN
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 12:11
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 15
PDOP/QC: ~~.056 .029 .046~~ .039 .021 .033

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

09

SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 20

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4876409.450
Lon / East 3483-74.498
Height / Elev 140.621
WGS84 / SPC / UTM

Date 1 / 7 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location FRYEBURG
Weather OVCST
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 3:39
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 GS15
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: .040 .024 .032 (3 2 1)

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT - SET MAG NAIL

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 21

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4875921.046
Lon / East 363175.648
Height / Elev 140.788
WGS84 / SPC / (UTM)

Date 1/7/2018 4
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BRIDGETON
Weather OVCST
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2M (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 2:39
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: .023.010.021

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT (ICE)

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 22

Project Name State of Maine Orthophotos / LiDAR

Position	INITIAL	1:49	
Lat / North	4871326.013	325.999	
Lon / East	378254.224	254.187	
Height / Elev	139.480	139.468	
	WGS84 / SPC (UTM)	.033/.017/.028	

Date 1 / 7 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CASCO
Weather OVCST
Crew SS

Antenna Height

	(m - Internal/Rod)
	(ft/m - independent)
2m	(fixed height to ARP)
	(ft & in. - at end of obs.)

Start Time (local) 1:29
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .128 .069 .107
3 2 1

LiDAR Classification

☑ Control	☐ Tall Weeds
☐ Bare Earth	☐ Brush
☐ Urban	☐ Forested

Site Sketch - Photos ☑ PAVEMENT

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SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 23

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4863835.888
Lon / East 394508.306
Height / Elev 70.768
WGS84 / SPC (UTM)

Date 1/17/2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location ~~Fountain~~ GRAY
Weather OVCST
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 12:40
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static (RTK) VRS

Comments
#SVs: 17
PDOP/QC: .016 / .009 / .013
3 2 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ GRAVEL PARKING AREA

58 30

SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 24

Project Name State of Maine Orthophotos / LiDAR

Position
Lat / North 4854571.501
Lon / East 399170.257
Height / Elev 78.429
WGS84 / SPC / (UTM)

Date 1 / 9 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location N. YARMOUTH
Weather CLEAR
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2 m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 12:28
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .018 .010 .015
5 2 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

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SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 25

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4849176.680
Lon / East 386532.676
Height / Elev 76.198
WGS84 / SPC (UTM)

Date 1 / 9 / 2018 A
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WINDHAM
Weather SUNNY
Crew SS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 11:28
End Time (local) ____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .021 .011 .018

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 26

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4851299.101
Lon / East 365002.669
Height / Elev 94.261
WGS84 / SPC / (UTM)

Date 1 / 9 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location STEEP FALLS
Weather CLEAR
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 10:18
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 10
PDOP/QC: .024 .011 .021

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

AD. 50

SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 27

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4833831.653
Lon / East 347509.514
Height / Elev 145.414
WGS84 / SPC (UTM)

Date 1 / 18 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location NEWFIELD
Weather SUNNY
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 7:08
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: .031 .015 .027

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ GRAVEL

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GPS Observation Log
Station Name 28

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4831625.652
Lon / East 364018.648
Height / Elev 107.007 2
WGS84 / SPC / (UTM)

Date 1 / 8 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERBORO
Weather SUNNY
Crew SS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 3:11
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: .026 .013 .022

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

26-13

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 29

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4821881.517
Lon / East 345517.224
Height / Elev 217.140
WGS84 / SPC / UTM

Date 1 / 8 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location Acton
Weather Sunny
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 1:10
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 10
PDOP/QC: .040 .021 .034

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

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GPS Observation Log
Station Name 30

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4821868.323
Lon / East 300781.721
Height / Elev 90.797
WGS84 / SPC (UTM)

Date 1 / 8 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERBORO
Weather CLEAR
Crew SS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2 m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 3:57
End Time (local) ____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: .018 .010 .015

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested
PAVEMENT

Site Sketch - Photos ☑

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SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 31

Project Name State of Maine Orthophotos / LiDAR

Position
Lat / North 4822076.120
Lon / East 372829.213
Height / Elev 59.134
WGS84 / SPC (UTM)

Date 1 / 8 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location Saco
Weather CLEAR
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 4:45
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: .021 .010 .018

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

A1

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GPS Observation Log
Station Name 32

Project Name State of Maine Orthophotos / LiDAR

	(1)	(2)
Position		226.136
Lat / North	4809 226.570	429.743
Lon / East	319 429.469	110.544
Height / Elev	110.291	.033/.018/.028
	WGS84 / SPC / (UTM)	11:38

Date 1 / 18 / 2013 4
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather Sunny
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 11:25
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .238 .191 .154
(1)

LiDAR Classification

☑ Control	☐ Tall Weeds
☐ Bare Earth	☐ Brush
☐ Urban	☐ Forested

Site Sketch - Photos ☑ PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 33

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4806906.352
Lon / East 361950.439
Height / Elev 73.677
WGS84 / SPC / (UTM)

Date 1 / 8 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location SANFORD
Weather CLEAR
Crew SS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 10:26
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 / GS15
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static (RTK) VRS

Comments
#SVs: 11
PDOP/QC: 021 .10 .049

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVED W/ MAG

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GPS Observation Log
Station Name 34

Project Name State of Maine Orthophotos / LiDAR

Position
Lat / North 4794564.467
Lon / East 348632.010
Height / Elev 120.051
WGS84 / SPC (UTM)

Date 1 / 8 / 2013 4
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BERWICK
Weather CLEAR
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2 m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 8:54
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static RTK VRS

Comments
#SVs: _____
PDOP/QC: .017 .010 .014

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

PAVEMENT

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SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 35

Project Name State of Maine Orthophotos / LiDAR

Position
Lat / North 4795578.134
Lon / East 358524.951
Height / Elev 42.623
WGS84 / SPC (UTM)

Date 1 / 8 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location NORTH BERWICK
Weather SUNNY
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 9:40
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: 015.009.012

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 2000

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4788256.291
Lon / East 353163.916
Height / Elev 34.197
WGS84 / SPC / UTM

Date 3 / 5 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location S. BERWICK
Weather 19° SNOW
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 7:36
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 14
PDOP/QC: 2.009 0.005 0.008

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2001

Project Name	State of Maine Orthophotos / LiDAR	Date	3 / 4 / 2014
Position		Job No.	12-111-13L
Lat / North	4794402.071	Client	State of Maine/Woolpert
Lon / East	349308.606	Location	BERWICK
Height / Elev	117.010	Weather	10° CLOUDY
	WGS84 / SPC / UTM	Crew	GG

Antenna Height	_____	(m - Internal/Rod)	
	_____	(ft/m - independent)	
	2m	(fixed height to ARP)	
	_____	(ft & in. - at end of obs.)	

Start Time (local)	5:14
End Time (local)	
GPS Receiver	Trimble 5700 R8
Base ☐ / Rover ☐	Leica GS12 (GS15)
Antenna	Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method	Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.014 0.006 0.011

LiDAR Classification

☐ Control	☐ Tall Weeds
☑ Bare Earth	☐ Brush
☐ Urban	☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 2002

Project Name	State of Maine Orthophotos / LiDAR	Date	3 / 5 / 2013 (14)
Position		Job No.	12-111-13L
Lat / North	4796152.240	Client	State of Maine/Woolpert
Lon / East	358094.491	Location	N. BERWICK
Height / Elev	45.631	Weather	15° SNOW
	WGS84 / SPC / UTM	Crew	GG

Antenna Height

		(m - Internal/Rod)
		(ft/m - independent)
2m		(fixed height to ARP)
		(ft & in. - at end of obs.)

Start Time (local)	9:58
End Time (local)	
GPS Receiver	Trimble 5700 R8
Base ☐ / Rover ☐	Leica GS12 (GS15)
Antenna	Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method	Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.013 0.006 0.011

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested
GRAVEL

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 2003

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 480695 7.133
Lon / East 361799.648
Height / Elev 73.277
WGS84 / SPC / UTM

Date 3 / 4 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location SANFORD
Weather 10° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 9:52
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.031 0.014 0.027

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ MAG

SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 2004

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4808827.298
Lon / East 348260.081
Height / Elev 117.818
WGS84 / SPC / UTM

Date 3 / 14 / 2018 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location East Lebanon
Weather 10° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 10:38
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.033 0.014 0.030

LiDAR Classification
☑ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ MAG

SHYKA, SHEPPARD & GARSTER - Land Surveyors
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GPS Observation Log
Station Name 2005

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4806640.879
Lon / East 338597.397
Height / Elev 104.412
WGS84 / SPC / UTM

Date 3 / 4 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location MILTON NH
Weather 20° SUNNY
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 2:00
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.017 0.008 0.015

LiDAR Classification
☑ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ MAG AT DOT YARD

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2006

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 482851.154
Lon / East 3450 98.043
Height / Elev 232.135
WGS84 / SPC / UTM

Date 2 / 12 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location ACTON
Weather 20° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 4:46
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 12
PDOP/QC: 0.021 0.011 0.017

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2007

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4821414.198
Lon / East 360709.630
Height / Elev 80.222
WGS84 / SPC / UTM

Date 2 / 12 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERBORO
Weather 20° CLEAR
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2 m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 12:30
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.019 0.009 0.016

LiDAR Classification
☑ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ MAG IN PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2008

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4821667.880
Lon / East 372417.622
Height / Elev 60.804
WGS84 / SPC / UTM

Date 2 / 12 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location DAYTON
Weather 0° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 8:49
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.014 0.007 0.091

LiDAR Classification
☑ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2009

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4828863.983
Lon / East 380 233.256
Height / Elev 51.838
WGS84 / SPC / UTM

Date 2 / 12 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location Buxton
Weather -5° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 7:50
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 12
PDOP/QC: 0.009 0.004 0.007

LiDAR Classification
☑ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑
MAG IN PINE HEAD SNAPPED OFF - JUST CORE ~0.03' below surface

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2010

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4831644.586
Lon / East 364167.053
Height / Elev 108.947
WGS84 / SPC / UTM

Date 2 / 12 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERBORO (?)
Weather 12° CLEAR
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 11:03
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC:

LiDAR Classification
☑ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ MAG IN PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 201

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 483 4287.457
Lon / East 347 256.262
Height / Elev 135.968
WGS84 / SPC / UTM

Date 2 / 11 / 2013 14
Job No. 12-111-13L
Client State of Maine/Woolpert
Location NEWFIELDS
Weather 15° WINDY
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 3:15
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.022 0.009 0.021

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ GRAVEL
INTERNET COULD NOT INITIALIZE AT FIRST

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 202

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4850861.078
Lon / East ~~3365~~ 339953.744
Height / Elev 121.156
WGS84 / SPC / UTM

Date 2 / 11 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location FREEDOM NH
Weather 20° CLEAR/WINDY
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 2:14
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 11
PDOP/QC: 0.031 0.015 0.028

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2013

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 485,477.521
Lon / East 364,965.198
Height / Elev 94.290
WGS84 / SPC / UTM

Date 2 / 11 / 2013 14
Job No. 12-111-13L
Client State of Maine/Woolpert
Location MALDWIN
Weather 10° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 9:52
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: 0.021 0.011 0.018

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2014

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 484 966.108
Lon / East 386 258.584
Height / Elev 81.204
WGS84 / SPC / UTM

Date 2 / 4 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WINDHAM
Weather 25° CLEAR
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 4:45
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.011 0.006 0.010
3 2 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2015

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4854109.383
Lon / East 399455.254
Height / Elev 72.696
WGS84 / SPC / UTM

Date 2 / 4 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location N. YARMOUTH
Weather 30° CLEAR
Crew GG

Antenna Height
(m - Internal/Rod)
(ft/m - independent)
2m (fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 2:57
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.012 (3) 0.006 (2) 0.010 (1)

LiDAR Classification
☑ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2016

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 426528.677
Lon / East 409546.381
Height / Elev 47.226
WGS84 / SPC / UTM

Date 2 / 4 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location DURHAM
Weather 30° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 9:30
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 GS15
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: 0.018 (3) 0.009 (2) 0.015 (1)

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2017

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 486356.017
Lon / East 394220.516
Height / Elev 60.157
WGS84 / SPC / UTM

Date 2 / 4 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location GRAY
Weather 30° CLEAR
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 11:52
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: 0.031 0.014 0.027

LiDAR Classification
☑ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2018

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 487 1154.145
Lon / East 378316.146
Height / Elev 138.139
WGS84 / SPC / UTM

Date 2 / 10 / 2013 14
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CASCO
Weather 10° SUNNY
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 9:11
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: 0.020 (3) 0.010 (2) 0.017 (1)

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2019

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4876046.386
Lon / East 363902.849
Height / Elev 139.377
WGS84 / SPC / UTM

Date 2 / 10 / 2013 M
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BRIDGETON
Weather 20° CLOUDY
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 11:51
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: 0.023 0.011 0.021

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2020

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4877006.264
Lon / East 347562.021
Height / Elev 114.825
WGS84 / SPC / UTM

Date 2 / 10 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location FRYEBURG
Weather 20° CLOUDY
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m. (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 2:49
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.025 0.013 0.020

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ MAG

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2021

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4937637.729
Lon / East 418402.711
Height / Elev 136.482
WGS84 / SPC (UTM)

Date 12 / 05 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather OVCST
Crew SS

Antenna Height
(m - Internal/Rod)
(ft/m - independent)
2M (fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 12:51
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 12
PDOP/QC: .023/.011/.020
3 / 2 / 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

GRAVEL D/W

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2022

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4910930.701
Lon / East 430078.766
Height / Elev 104.446
WGS84 / SPC (UTM)

Date 12/06/2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location READFIELD
Weather OVCST
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2M (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 3:06
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 18
PDOP/QC: .016 | .009 | .013
3 | 2 | 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

MOWED LAWN

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2023

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4913498.179
Lon / East 453668.020
Height / Elev 101.539
WGS84 / SPC (UTM)

Date 12/07/2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather Sunny
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 3:26
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: .041/.021/.034
3 / 2 / 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2024

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4922318.044
Lon / East 458717.947
Height / Elev 76.505
WGS84 / SPC (UTM)

Date 12/07/2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CHINA
Weather SUNNY
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2M (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 12:34
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 11
PDOP/QC: .052 | .024 | .044
3 | 2 | 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2025

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4942795.620
Lon / East 460758.013
Height / Elev 38.430
WGS84 / SPC (UTM)

Date 12 / 03 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CLINTON
Weather OVCST
Crew SWS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 1:05
End Time (local) 1:20
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 14
PDOP/QC: .011 / .006 / .010
3 / 2 / 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ SHORT GRASS

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 2026

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1/23/2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CANAAN
Weather CLEAR
Crew SS + GG

Setup Info

1002	Occupied Station
1.620	hi
1001	BS Station
1.516	BS ht
1.516	FS ht

Start Time (local) 10:30
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

Bare Earth

LiDAR Classification

- ☐ Control
- ☑ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2027

Project Name State of Maine Orthophotos / LiDAR

Position
Lat / North 4939676.127
Lon / East 447220.503
Height / Elev 71.919
WGS84 / SPC / (UTM)

Date 12/04/2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather Sunny
Crew SWS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2 m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 12:36
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 10
PDOP/QC: .013/.007/.012

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT w/ MAG

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2028

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4935305.712
Lon / East 449410.425
Height / Elev 55.625
WGS84 / SPC (UTM)

Date 12 / 04 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERVILLE
Weather SUNNY
Crew SWS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2M (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 3:28
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: .019 | .010 | .016
3 2 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

OLD PAVEMENT - MAG

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 2029

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4928731.688
Lon / East 437576.371
Height / Elev 99.305
WGS84 / SPC / (UTM)

Date 12 / 06 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BELGRADE
Weather RAIN
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 10:05
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: .0730/.017/.025
3 / 2 / 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 7030

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4920461.833
Lon / East 436713.363
Height / Elev 147.753
WGS84 / SPC / (UTM)

Date 12 / 06 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather OVCST
Crew SS

Antenna Height
(m - Internal/Rod)
(ft/m - independent)
2m (fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 12:02
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .019/.011/.015
3 / 2 / 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☑ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ MOWED GRASS (LAWN)

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3000

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4789522.388 CTRL MAG
Lon / East 352545.243
Height / Elev 410.129
WGS84 / SPC / UTM

Date 3/20/14
Job No. 12-111
Client State of Maine/Woolpert
Location S. BERWICK
Weather RAIN 30°
Crew AT, GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 9:21
End Time (local) 9:37
GPS Receiver Trimble 5700 R8
Base / Rover Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.021, 0.018, 0.028

Site Sketch - Photos ☐

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3001

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4791603.275
Lon / East 348700.728
Height / Elev 60.477
WGS84 / SPC / UTM

Date 3 / 4 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location SOMERSWORTH NH
Weather 20° CLEAR
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 3:51
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.011 0.006 0.009

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3002

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 479631 2.657
Lon / East 359144.634
Height / Elev 39.428
WGS84 / SPC / UTM

Date 3 / 5 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location N. BERWICK
Weather 15° SNOW
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 11:02
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.020 0.009 0.018

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3003

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4811268.103
Lon / East 356418.867
Height / Elev 86.530
WGS84 / SPC / UTM

Date 2 / 12 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location SANFORD
Weather 25° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 7:53
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.020 0.010 0.016

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3004

Project Name	State of Maine Orthophotos / LiDAR	Date	3 / 4 / 2014
Position		Job No.	12-111-13L
Lat / North	4800764.524	Client	State of Maine/Woolpert
Lon / East	339954.180	Location	ROCHESTER NH
Height / Elev	74.603	Weather	20° SUNNY
	WGS84 / SPC / UTM	Crew	GG

Antenna Height		(m - Internal/Rod)	Start Time (local) 3:04
		(ft/m - independent)	End Time (local)
	2m	(fixed height to ARP)	GPS Receiver Trimble 5700 R8
		(ft & in. - at end of obs.)	Base ☐ / Rover ☐ Leica GS12 (GS15)

Comments
#SVs: 13
PDOP/QC: 0.025 0.013 0.021

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Antenna: Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method: Static (RTK) VRS

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3005

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4808048.823
Lon / East 339029.083
Height / Elev 125.135
WGS84 / SPC / UTM

Date 3 / 4 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location MILTON NH
Weather 15° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 12:39
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static (RTK) VRS

Comments
#SVs: 12
PDOP/QC: 0.035 0.016 0.030

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban PAVEMENT ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3006

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 482904.435
Lon / East 345704.297
Height / Elev 218.153
WGS84 / SPC / UTM

Date 2 / 12 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location ACTON
Weather 20° CLEAR
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 4:25
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.022 0.011 0.018

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑ MAG IN PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3007

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 482 1736.394
Lon / East 361616.310
Height / Elev 82.691
WGS84 / SPC / UTM

Date 7 / 12 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERBORO
Weather 25° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 1:46
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.021 0.011 6,018

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3008

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4828855.744
Lon / East 371701.944
Height / Elev 52.308
WGS84 / SPC / UTM

Date 2 / 11 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location Hollis
Weather 8° Cold
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 6:02
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 15
PDOP/QC: 0.017 0.008 0.015

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3009

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4837330.5
Lon / East 384130.2
Height / Elev 60.99
WGS84 / SPC / UTM

Date 2 / 11 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location GORHAM
Weather 5° CLEAR
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 8:35
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 16
PDOP/QC: 2.61 1.52 2.4

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑ NO CONNECTION TO NTRIP

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3010

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4838814.888
Lon / East 355279.844
Height / Elev 173.666
WGS84 / SPC / UTM

Date 2 / 11 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location LIMERICK
Weather 10° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 5:02
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.027 0.014 0.024

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3011

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4833749.370
Lon / East 346630.489
Height / Elev 148.091
WGS84 / SPC / UTM

Date 2 / 11 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location NEWFIELDS
Weather 12° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 3:51
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.019 0.008 0.017

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3012

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4850938.666
Lon / East 344015.407
Height / Elev 124.486
WGS84 / SPC / UTM

Date 2 / 11 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location Cornish
Weather 12° CLEAR WINDY
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 12:47
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.024 0.012 0.020

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3013

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4850317.420
Lon / East 367226.866
Height / Elev 90.626
WGS84 / SPC / UTM

Date 2 / 11 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location STANDISH
Weather 10° cold
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 10:54
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.022 0.011 0.019

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name ~~2017~~ 1014

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 485455O. 131
Lon / East 384597.468
Height / Elev 94.762
WGS84 / SPC / UTM

Date 2 / 4 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location N WINDHAM
Weather 30° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 4:04
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.026 0.012 0.022
3 2 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☐

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3015

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 485 4176.434
Lon / East 399727.132
Height / Elev 65.798
WGS84 / SPC / UTM

Date 2 / 4 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location N. YARMOUTH
Weather 30° CLEAR
Crew OG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 3:23
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.018 0.009 0.015
3 2 1

LiDAR Classification
☑ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3016

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4868701.089
Lon / East 397352.133
Height / Elev 85.814
WGS84 / SPC / UTM

Date 2 / 4 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location NEW GLOUCESTER
Weather 30° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 11:09
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 17
PDOP/QC: 0.018 0.010 0.015

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3D17

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4826019 4.076
Lon / East 393 119.415
Height / Elev 92.641
WGS84 / SPC / UTM

Date 2 / 4 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location GRAY
Weather 30° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 1:23
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.021 0.011 0.018

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☐

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3018

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 487 3349.428
Lon / East 377976.881
Height / Elev 142.320
WGS84 / SPC / UTM

Date 7 / 10 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location Casco
Weather 14° CLEAR
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 10:38
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 18
PDOP/QC: 0.019 (3) 0.011 (2) 0.016 (1)

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3019

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 487 9345.649
Lon / East 363565.731
Height / Elev 123.495
WGS84 / SPC / UTM

Date 2 / 10 / 2013 11
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BRIDGETON
Weather 20° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 2:00
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 12
PDOP/QC: 0.023 0.011 0.021

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3020

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4875681.114
Lon / East 341199.317
Height / Elev 130.433
WGS84 / SPC / UTM

Date 2 / 10 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location FRYEBURG
Weather 20° COLD
Crew CG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 3:30
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.019 0.009 0.016

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3021

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4941075.069
Lon / East 414700.276
Height / Elev 107.551
WGS84 / SPC (UTM)

Date 12 / 05 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location FARMINGTON
Weather OVCST + RAIN
Crew SS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2M (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 1158
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: .019/.011/.015
3 / 2 / 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3022

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4915 357.663
Lon / East 422 986.953
Height / Elev 85.063
WGS84 / SPC (UTM)

Date 12 / 05 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location READFIELD
Weather RAIN
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2 M (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 3:37
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static (RTK) VRS

Comments
#SVs: _____
PDOP/QC: _____

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3023

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4915912.8
Lon / East 454820.5
Height / Elev 65.4
WGS84 / SPC / (UTM)

Date 12/07/2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather Sunny
Crew SS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 2:31
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method (Static) RTK VRS

Comments
#SVs:
PDOP/QC: 5.3/3.1/4.3
3/2/1

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3024

Project Name State of Maine Orthophotos / LiDAR

Position
Lat / North 4931134.690
Lon / East 464853.880
Height / Elev 90.975
WGS84 / SPC (UTM)

Date 12 / 07 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location ALBION
Weather SUNNY
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 10:14
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .015/.09/.012
3/2/1

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

CONCRETE

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3025

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4947825.880
Lon / East 460152.300
Height / Elev 39.932
WGS84 / SPC / UTM

Date 12 / 03 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CLINTON
Weather OVCST
Crew SWS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2.m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 2:50
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 15
PDOP/QC: .012 .006 .010
3 2 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑ PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3026

Project Name State of Maine Orthophotos / LiDAR

Position
Lat / North 4938380.840
Lon / East 452448.615
Height / Elev 38.337
WGS84 / SPC / UTM

Date 12 / 04 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location FAIRFIELD
Weather CLEAR
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 4:28
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 15
PDOP/QC: .009 | .004 | .008
3 | 2 | 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 3027

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1 / 23 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location Norridgewock
Weather CLEAR
Crew SS + GG

Setup Info

10004	Occupied Station
1.520	hi
10003	BS Station
1.516	BS ht
1.516	FS ht

Start Time (local) 12:00
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

GRAVEL

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☑ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☐ Forested

Site Sketch - Photos ☐

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3028

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4935196.817
Lon / East 449437.237
Height / Elev 55.676
WGS84 / SPC / (UTM)

Date 12 / 04 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERVILLE
Weather SUNNY
Crew SWS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 2:57
End Time (local) ____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .015 | .008 | .012
3 | 2 | 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3029

Project Name State of Maine Orthophotos / LiDAR

Position
Lat / North 4933030.872
Lon / East 443053.767
Height / Elev 76.591
WGS84 / SPC / (UTM)

Date 17 / 05 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location OAKLAND
Weather OVCST
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 10:59
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: .015 / .008 / .013
3 / 2 / 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 3030

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4912881.503
Lon / East 436602.664
Height / Elev 85.781
WGS84 / SPC / (UTM)

Date 12/06/2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location Augusta
Weather Overcast
Crew SS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 1:53
End Time (local) ____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .016/.009/.014
3/2/1

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☑ Urban ☐ Forested

Site Sketch - Photos ☑

PAVEMENT

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4000

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4789859.364
Lon / East 351537.537
Height / Elev 40.175
WGS84 / SPC / UTM

Date 3 / 5 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BERWICK
Weather 15° SNOW
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 8:09
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 16
PDOP/QC: 0.009 0.004 0.007

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4001

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4793805.491
Lon / East 348669.686
Height / Elev 100.410
WGS84 / SPC / UTM

Date 3 / 4 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BERWICK
Weather 10° CLOUDY
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 5:41
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: 0.014 0.007 0.012

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4002

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 479610I.532
Lon / East 358087.020
Height / Elev 44.557
WGS84 / SPC / UTM

Date 3 / 5 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location N. BERWICK
Weather 15° SNOW
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 10:20
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: 0.013 0.006 0.010

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☐

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4003

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4806535.618m
Lon / East 362692.714m
Height / Elev 70.346
WGS84 / SPC / UTM

Date 3 / 4 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location SANFORD
Weather 10° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 8:58
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: 0.030 0.017 0.024

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4004

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4812463.149
Lon / East 353768.312
Height / Elev 170.591
WGS84 / SPC / UTM

Date 2 / 12 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location SANFORD
Weather 25° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 3:23
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.014 0.007 0.011

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4005

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4807373.937
Lon / East 338976.360
Height / Elev 108.835
WGS84 / SPC / UTM

Date 3 / 4 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location MILTON NH
Weather 20° SUNNY
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 2:29
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 12
PDOP/QC: 0.033 0.014 0.031

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 4005A

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 20 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location MILTON NH
Weather PTLY CLDY
Crew GG + AT

Setup Info

10092	Occupied Station
1.563	hi
2005	BS Station
1.573	BS ht
2.000	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

GRASS

LiDAR Classification

- ☐ Control
- ☑ Tall Weeds
- ☐ Bare Earth
- ☐ Brush
- ☐ Urban
- ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4006

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4822067.957
Lon / East 345126.691
Height / Elev 227.252
WGS84 / SPC / UTM

Date 2 / 12 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location ACTON
Weather 10° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 5:10
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.016 0.008 0.013

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4007

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4820914.114
Lon / East 363577.683
Height / Elev 115.470
WGS84 / SPC / UTM

Date 2 / 12 / 2013 14
Job No. 12-111-13L
Client State of Maine/Woolpert
Location LYMON
Weather 25° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 2:13
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 11
PDOP/QC: 0.039 0.018 0.035

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4008

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4822011.608
Lon / East 373348.143
Height / Elev 49.607
WGS84 / SPC / UTM

Date 7 / 12 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location DAYTON
Weather 0° CLEAR
Crew GG

Antenna Height
(m - Internal/Rod)
(ft/m - independent)
2m (fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 9:15
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: 0.013 0.007 0.011

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4009

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4828841.111
Lon / East 380236.346
Height / Elev 51.387
WGS84 / SPC / UTM

Date 2 / 12 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location Buxton
Weather -10° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2 m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 6:54
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 14
PDOP/QC: 0.012 0.007 0.009

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4010

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4827830.819
Lon / East 362977.104
Height / Elev 120.825
WGS84 / SPC / UTM

Date 2 / 12 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERBORO
Weather 8° CLEAR
Crew GG

Antenna Height
(m - Internal/Rod)
(ft/m - independent)
2 m (fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 10:32
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: 0.017 0.010 0.014

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4011

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4833791.561
Lon / East 346659.728
Height / Elev 147.857
WGS84 / SPC / UTM

Date 2 / 14 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location NEWFIELDS
Weather 12° COLD WINDY
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 4:11
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 10
PDOP/QC: 0.023 0.010 0.020

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4012

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 485023O.923
Lon / East 341253.550
Height / Elev 117.145
WGS84 / SPC / UTM

Date 2 / 11 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location ~~OSSIPEE~~ PORTER
Weather 20° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 1159
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.024 0.012 0.019

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4013

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4850848.497
Lon / East 365755.339
Height / Elev 89.865
WGS84 / SPC / UTM

Date 2 / 11 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BALDWIN
Weather 10° CLEAR
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 10:27
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 18
PDOP/QC: 0.020 0.011 0.016

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☐

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4014

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4849124.117
Lon / East 387079.811
Height / Elev 63.454
WGS84 / SPC / UTM

Date 2 / 4 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WINDHAM
Weather 20° CLEAR
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 5:08
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.011 0.006 0.009

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 4015

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 19 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location N. Yarmouth
Weather CLEAR
Crew GG + AT

Setup Info

4015	Occupied Station
1.515	hi
3015	BS Station
1.616	BS ht
1.750	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

GRASS

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4016

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 486239.105
Lon / East 410123.953
Height / Elev 53.974
WGS84 / SPC / UTM

Date 2 / 4 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location DURHAM
Weather 30° CLEAR
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 8:35
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 10
PDOP/QC: 0.016 (3) 0.003 (2) 0.014 (1)

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4017

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4863855.302
Lon / East 394130.369
Height / Elev 62.749
WGS84 / SPC / UTM

Date 2 / 4 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location GRAY
Weather 30° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 12:22
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: 0.027 0.011 0.023
3 2 1

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☐

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4018

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4871023.865
Lon / East 378210.382
Height / Elev 136.078
WGS84 / SPC / UTM

Date 2 / 10 / ~~2013~~ 14
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CASCO
Weather 10° SUNNY
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 9:42
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 17
PDOP/QC: 0.018 (3) 0.009 (2) 0.016 (1)

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4019

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 487 6003.150
Lon / East 3640 20.439
Height / Elev 140.112
WGS84 / SPC / UTM

Date 2 / 10 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BRIDGETON
Weather 18° SNOW
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 12:19
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.621 0.009 0.019

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4020

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4876061.4
Lon / East 342027.1
Height / Elev 130.4
WGS84 / SPC / UTM

Date 2 / 10 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location FRYEBURG
Weather 15° WINDY
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 4:17
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 13
PDOP/QC: 3.42 1.91 2.82

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ NO CONNECTION TO NTRIP

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4021

Project Name State of Maine Orthophotos / LiDAR

Position
Lat / North 4937573.083
Lon / East 418428.743
Height / Elev 137.744
WGS84 / SPC / (UTM)

Date 12 /05/ 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather OVCST
Crew SWS

Antenna Height
(m - Internal/Rod)
(ft/m - independent)
2m (fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 1:14
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs:
PDOP/QC: .018/.010/.015
3/2/1

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ HAY FIELD

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4022

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4911771.652
Lon / East 429089.090
Height / Elev 144.178
WGS84 / SPC / UTM

Date 1 /27 / 2015
Job No. 12-111-13L
Client State of Maine/Woolpert
Location READFIELD
Weather 30° Cloudy
Crew SS GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 12:50
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: 0.043 0.020 0.039
3 2 1

LiDAR Classification
☑ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4023

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4915 154.3 m
Lon / East 454 643.1 m
Height / Elev 65.9 m
WGS84 / SPC / UTM

Date 1 / 29 / 2015
Job No. 12-111-13L
Client State of Maine/Woolpert
Location S. CHINA
Weather 29° CLOUDY
Crew SS GG

Antenna Height
(m - Internal/Rod)
(ft/m - independent)
2m (fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 15:10
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 10
PDOP/QC: 8.5 3.3 7.9
3 2 1

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name ~~FZS~~ 4024

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4921013.714
Lon / East 458044.802
Height / Elev 102.934
WGS84 / SPC / (UTM)

Date 12 / 07 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CHINA
Weather SUNNY
Crew SS

Antenna Height
(m - Internal/Rod)
(ft/m - independent)
2m (fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 12:57
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 024/013/021
3 2 1

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

HAYFIELD

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4025

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4943559.491
Lon / East 459922.406
Height / Elev 41.779
WGS84 / SPC (UTM)

Date 12/03/2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CLINTON
Weather OVCST
Crew SWS

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 3:15
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static RTK VRS

Comments
#SVs: 17
PDOP/QC: .010/.006/.008
3 2 1

LiDAR Classification
☐ Control ☑ Tall Weeds/CROPS
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

HAY FIELD

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 4026

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1 / 23 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CANAAN
Weather CLEAR
Crew SS + GG

Setup Info

10002	Occupied Station
1.620	hi
10001	BS Station
1.516	BS ht
1.516	FS ht

Start Time (local) 10:30
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

FIELD

LiDAR Classification

- ☐ Control
- ☑ Tall Weeds
- ☐ Bare Earth
- ☐ Brush
- ☐ Urban
- ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4027

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4939458.135
Lon / East 447286.656
Height / Elev 64.383
WGS84 / SPC / (UTM)

Date 12/03/2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather Sunny
Crew SWS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 1:18
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 ~~GS15~~
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 GS15
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: 1013/.007/.011
3 / 2 / 1

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ Manfield

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 4028

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1 / 23 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERVILLE
Weather CLEAR
Crew SS + GG

Setup Info

3028	Occupied Station
1.501	hi
2028	BS Station
1.516	BS ht
1.516	FS ht

Start Time (local) 1:00
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

Low Brush

LiDAR Classification

- ☐ Control
- ☑ Tall Weeds
- ☐ Bare Earth
- ☐ Brush
- ☐ Urban
- ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 4029

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4978884.503
Lon / East 437765.758
Height / Elev 104.507
WGS84 / SPC / (UTM)

Date 12 / 06 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BELGRADE
Weather OVCST
Crew SS

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2 m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 10:27
End Time (local) _____
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: .017 / .010 / .014
3 2 1

LiDAR Classification
☐ Control ☑ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ HAYFIELD

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 4030

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1/23/2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location OAKLAND
Weather CLEAR
Crew SJ + GG

Setup Info

10006	Occupied Station
1.545	hi
10007	BS Station
1.516	BS ht
1.516	FS ht

Start Time (local) 3:00
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

Low Brush

LiDAR Classification

- ☐ Control
- ☑ Tall Weeds
- ☐ Bare Earth
- ☐ Brush
- ☐ Urban
- ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5000

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 479 4238.123
Lon / East 349194.697
Height / Elev 113.781
WGS84 / SPC / UTM

Date 3 / 4 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BERWICK
Weather 15° cloudy
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 4:50
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static RTK VRS

Comments
#SVs: 13
PDOP/QC: 0.013 0.006 0.012

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5001

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 479562 9.522
Lon / East 358 412.022
Height / Elev 42.572
WGS84 / SPC / UTM

Date 3 / 5 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location N. BERWICK
Weather 15° SNOWING
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 9:25
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.015 0.009 0.011

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5002

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4806716.053
Lon / East 3682560.769
Height / Elev 73.085
WGS84 / SPC / UTM

Date 3 / 4 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location SANFORD
Weather 10° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 9:22
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.032 0.17 0.025

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5003

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4808409.799
Lon / East 348869.866
Height / Elev 94.287
WGS84 / SPC / UTM

Date 3 / 4 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location LEBANON
Weather 15° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 11:38
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.016 0.009 0.013

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☐

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5004

Project Name	State of Maine Orthophotos / LiDAR	Date	/ / 2013
Position		Job No.	12-111-13L
Lat / North	4805709.349	Client	State of Maine/Woolpert
Lon / East	338774.971	Location	MILTON NH
Height / Elev	92.526	Weather	19° SUNNY
	WGS84 / SPC / UTM	Crew	GG

Antenna Height

	(m - Internal/Rod)
	(ft/m - independent)
2m	(fixed height to ARP)
	(ft & in. - at end of obs.)

Start Time (local)	1:34
End Time (local)	
GPS Receiver	Trimble 5700 R8
Base ☐ / Rover ☐	Leica GS12 GS15
Antenna	Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 GS15
Method	Static RTK VRS

Comments
#SVs: 15
PDOP/QC: 0.015 0.009 0.013

LiDAR Classification

☐ Control	☐ Tall Weeds
☐ Bare Earth	☑ Brush
☐ Urban	☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5005

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4821610.194
Lon / East 360773.603
Height / Elev 78.997
WGS84 / SPC / UTM

Date 2 / 12 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERBORO
Weather 20° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2 m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 12:51
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.019 0.010 0.017

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5006

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4822136.823
Lon / East 372885.178
Height / Elev 58.612
WGS84 / SPC / UTM

Date 2 / 12 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location DAYTON
Weather 2° CLEAR
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 9:42
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: 0.020 0.010 0.017

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5007

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4829054.528
Lon / East 362716.420
Height / Elev 105.439
WGS84 / SPC / UTM

Date 2 / 18 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location N. WATERBORO
Weather 18° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 11:38
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: 0.029 0.013 0.026

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5008

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4833946.869
Lon / East 342121.890
Height / Elev 191.484
WGS84 / SPC / UTM

Date 2 / 11 / 2013 (14)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WAKEFIELD
Weather 12° cold
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 4:29
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.041 0.020 0.031

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 5009

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 19 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location PORTER
Weather OVCST
Crew GG + AT

Setup Info

10082	Occupied Station
1.532	hi
10081	BS Station
1.585	BS ht
1.750	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

Brush

LiDAR Classification

- ☐ Control
- ☐ Tall Weeds
- ☐ Bare Earth
- ☑ Brush
- ☐ Urban
- ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5010

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4850971.264
Lon / East 366833.510
Height / Elev 93.867
WGS84 / SPC / UTM

Date 2 / 11 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location STANDISH
Weather 10° CLEAR
Crew G6

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 11:17
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: 0.030 0.016 0.024

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 5011

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 21 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WINDHAM
Weather SUNNY
Crew GG + AT

Setup Info

10107	Occupied Station
1.495	hi
10108	BS Station
1.594	BS ht
1.750	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

BRUSH

LiDAR Classification

- ☐ Control
- ☐ Tall Weeds
- ☐ Bare Earth
- ☐ Brush
- ☐ Urban
- ☐ ~~Forested~~

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5012

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 485499.452
Lon / East 399163.763
Height / Elev 82.580
WGS84 / SPC / UTM

Date 2 / 4 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location GRAY / N. YARMOUTH
Weather 30° CLEAR
Crew GG

Antenna Height
____ (m - Internal/Rod)
____ (ft/m - independent)
2.m (fixed height to ARP)
____ (ft & in. - at end of obs.)

Start Time (local) 2:04
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.013 0.008 0.010
3 2 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5013

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 486 1902.101
Lon / East 410385.694
Height / Elev 65.737
WGS84 / SPC / UTM

Date 2 / 4 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location DURHAM
Weather 30° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 9:05
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: 0.024 (3) 0.013 (2) 0.019 (1)

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5014

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 478 1102.898
Lon / East 3781 81.768
Height / Elev 135.767
WGS84 / SPC / UTM

Date 2 /10 /2013 (11)
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CASCO
Weather 12° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2 m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 10:05
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 16
PDOP/QC: 0.024 0.013 0.021

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5015

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4876592.987
Lon / East 363981.265
Height / Elev 124.923
WGS84 / SPC / UTM

Date 2 / 10 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BRIDGETON
Weather 20° SNOW
Crew BG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 12:46
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 13
PDOP/QC: 0.014 0.009 0.012

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5016

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4875639.4
Lon / East 340925.0
Height / Elev 122.6
WGS84 / SPC / UTM

Date 2 / 10 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location FRYEBURG
Weather 10° CLEAR / COLD
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 5:00
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static RTK VRS

Comments
#SVs: 12
PDOP/QC: 4.58 3.12 3.34

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑ NO CONNECTION TO NTRIP

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5017

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4937903.022
Lon / East 418074.220
Height / Elev 108.790
WGS84 / SPC (UTM)

Date 12 / 05 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather OVCST
Crew SS

Antenna Height
(m - Internal/Rod)
(ft/m - independent)
2m (fixed height to ARP)
(ft & in. - at end of obs.)

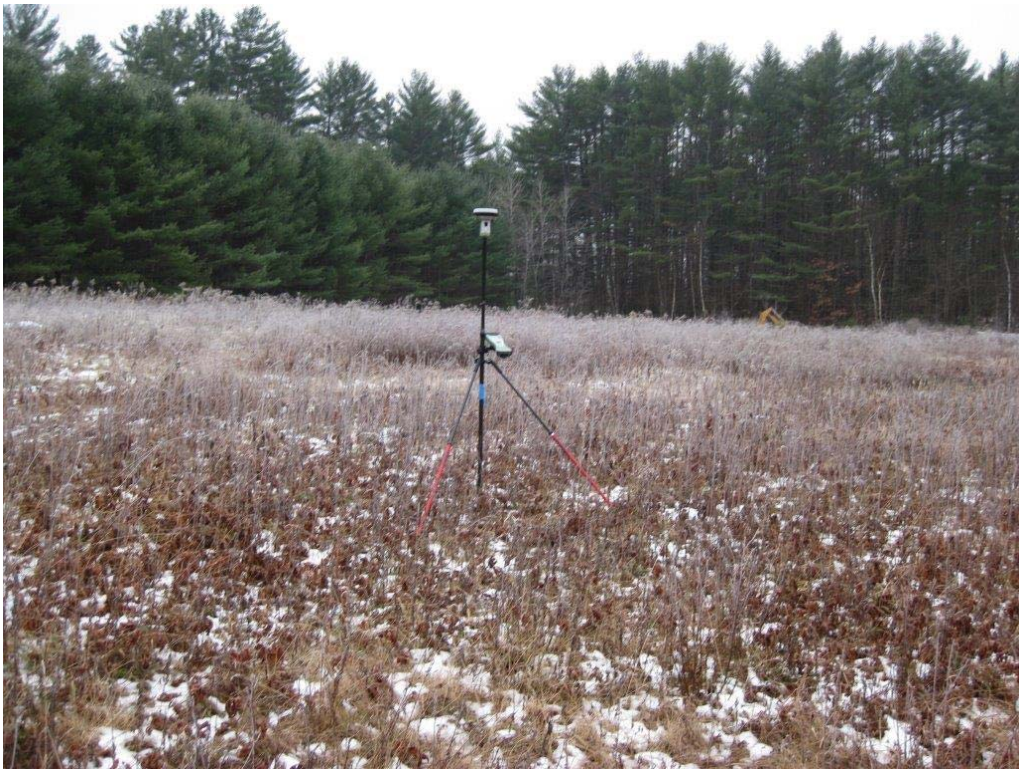
Start Time (local) 12:32
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 10
PDOP/QC: .033/.015/.030
3 / 2 / 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

TALL BRUSH



SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5019

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4925403.24
Lon / East 460043.5
Height / Elev 59.2
WGS84 / SPC / (UTM)

Date 12 / 07 / 2013
Job No. 12-111-13L
Client State of Maine/Woolpert
Location
Weather Sunny
Crew SS

Antenna Height
(m - Internal/Rod)
(ft/m - independent)
2m (fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 11:12
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method (Static) RTK VRS

Comments
#SVs: 14
PDOP/QC: 5.6 | 3.3 | 4.5
3 | 2 | 1

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

HIGH BRUSH

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 5020

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1 / 23 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location FAIRFIELD
Weather CLEAR
Crew SS + GG

Setup Info

10020	Occupied Station
1.580	hi
10021	BS Station
1.516	BS ht
1.516	FS ht

Start Time (local) 9:40
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

High Brush

LiDAR Classification

- ☐ Control
- ☐ Bare-Earth
- ☐ Urban
- ☐ Tall Weeds
- ☑ Brush
- ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 5021

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1 / 23 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location Norridgewock
Weather CLEAR
Crew SS + GG

Setup Info

10004	Occupied Station
1.520	hi
10003	BS Station
1.516	BS ht
1.516	FS ht

Start Time (local) 12:00
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

High Brush

LiDAR Classification

- ☐ Control
- ☐ Tall Weeds
- ☐ Bare Earth
- ☑ Brush
- ☐ Urban
- ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5022

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4922805.370 m
Lon / East 444278.718 m
Height / Elev 53.281
WGS84 / SPC (UTM)

Date 5 / 22 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location SIDNEY
Weather 65° SUNNY
Crew AB GG

Antenna Height 2m (m - Internal/Rod)
(ft/m - independent)
(fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 8:59
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static RTK VRS

Comments
#SVs: 14
PDOP/QC: 0.017 (1) 0.011 (2) 0.010 (3)

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5023

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4929507.000
Lon / East 426152.347
Height / Elev 98.264
WGS84 / SPC / UTM

Date 5 / 22 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location ROAD TOWN LINE
Weather 65° CLOUDY
Crew AB / GG

Antenna Height 2m (m - Internal/Rod)
(ft/m - independent)
(fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 12:37
End Time (local) 12:52
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 GS15
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 GS15
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.020 0.010 0.022
1 2 3

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 5024

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4917938.043
Lon / East 413851.534
Height / Elev 198.951
WGS84 / SPC / UTM

Date 5 / 22 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location FAYETTE
Weather 65° CLOUDY
Crew AB GG

Antenna Height 2m (m - Internal/Rod)
(ft/m - independent)
(fixed height to ARP)
(ft & in. - at end of obs.)

Start Time (local) 11:31
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☑ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP
TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 15
PDOP/QC: 0.030 (1) 0.018 (2) 0.034 (3)

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☑ Brush
☐ Urban ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 5025

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1 / 23 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERVILLE
Weather CLEAR
Crew SS + GG

Setup Info

3028	Occupied Station
1.501	hi
2028	BS Station
1.516	BS ht
1.516	FS ht

Start Time (local) 1:00
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

HIGH BRUSH

LiDAR Classification

- ☐ Control
- ☐ Tall Weeds
- ☐ Bare Earth
- ☑ Brush
- ☐ Urban
- ☐ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6000

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 20 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location S. BERWICK
Weather OVCST
Crew GG + AT

Setup Info

10088	Occupied Station
1.561	hi
3000	BS Station
1.546	BS ht
2.000	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

WOODS

LiDAR Classification

- ☐ Control
- ☐ Tall Weeds
- ☐ Bare Earth
- ☐ Brush
- ☐ Urban
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6001

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 /20/ 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BERWICK
Weather OVCST
Crew GG+AT

Setup Info

2001	Occupied Station
1.592	hi
10690	BS Station
1.552	BS ht
1.550	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

Woods

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6002

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 20 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location N. BERWICK
Weather OVCST
Crew GG + AT

Setup Info

10071	Occupied Station
1.560	hi
10086	BS Station
1.612	BS ht
2.000	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

Woods

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6003

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 /20/ 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location S. SANFORD
Weather PTLY CLDY
Crew GG + AT

Setup Info

2003	Occupied Station
1.555	hi
.33	BS Station
1.578	BS ht
1.600	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level (Leica) Nikon
Data Collector (Leica) Ranger

Comments

Woods

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6004

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3/20/2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location SANFORD
Weather Cloudy
Crew GG+AT

Setup Info

2004	Occupied Station
1.550	hi
10070	BS Station
1.635	BS ht
1.600	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

Woods

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6005

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 20 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location Milton NH
Weather Sunny
Crew GG + AT

Setup Info
10092 Occupied Station
1.563 hi
72005 BS Station
1,573 BS ht
1.900 FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments
Woods

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6006

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 20 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location SHAPLEIGH
Weather CLOUDY
Crew GG + AT

Setup Info

10094	Occupied Station
1.550	hi
3006	BS Station
1.514	BS ht
2.000	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

WOODS

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6007

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 20 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERBORO
Weather PTLY CLDY
Crew

Setup Info

6007	Occupied Station
1.560	hi
10062	BS Station
1.586	BS ht
2.000	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

WOODS

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6008

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 20 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BIDDEFORD
Weather CLDY
Crew GG + AT

Setup Info

6008	Occupied Station
1.547	hi
10099	BS Station
1.596	BS ht
1.750	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

Woods

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6009

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 21 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location Buxton
Weather Partly Cloudy
Crew GG + AT

Setup Info

2009	Occupied Station
1.530	hi
10101	BS Station
1.500	BS ht
1.750	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

Woods

LiDAR Classification

- ☐ Control
- ☐ Tall Weeds
- ☐ Bare Earth
- ☐ Brush
- ☐ Urban
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6010

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 21 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location N. WATERBORO
Weather PTLY CLDY
Crew GG + AT

Setup Info

6010	Occupied Station
1.539	hi
10103	BS Station
1.586	BS ht
1.750	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

WOODS

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6011

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3/21/2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location W. NEWFIELD
Weather CLOUDY
Crew GG, AT

Setup Info

3011	Occupied Station
1.554	hi
10105	BS Station
1.575	BS ht
1.700	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

Woods

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6012

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3/19/2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location PORTER
Weather OVCST
Crew GG + AT

Setup Info

10082	Occupied Station
1.532	hi
10081	BS Station
1.585	BS ht
1.950	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

WOODS

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6013

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 19 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BALDWIN
Weather OVCST
Crew GG + AT

Setup Info

10061	Occupied Station
1.570	hi
10084	BS Station
1.522	BS ht
2.000	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

WOODS

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6014

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 21 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WINDHAM
Weather SUNNY
Crew GG + AT

Setup Info

1.0107	Occupied Station
1.495	hi
1.0108	BS Station
1.594	BS ht
1.750	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

WOODS

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6015

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 19 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location N. YARMOUTH
Weather CLEAR
Crew GG + AT

Setup Info

6015	Occupied Station
1.515	hi
3015	BS Station
1.616	BS ht
1.850	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

WOODS

LiDAR Classification

- ☐ Control
- ☐ Tall Weeds
- ☐ Bare Earth
- ☐ Brush
- ☐ Urban
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6016

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 19 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location DURHAM
Weather CLEAR
Crew GG + AT

Setup Info

10002	Occupied Station
1.518	hi
10001	BS Station
1.523	BS ht
1.800	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments
Woods

LiDAR Classification
- ☐ Control
- ☐ Tall Weeds
- ☐ Bare Earth
- ☐ Brush
- ☐ Urban
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6017

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 /19/ 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location GRAY
Weather CLEAR/ WEST
Crew GG + AT

Setup Info

6017	Occupied Station
1.536	hi
10003	BS Station
1.565	BS ht
1.750	FS ht

Start Time (local)
End Time (local)
Total Sta (Leika) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

Woods

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6018

Project Name	State of Maine Orthophotos / LiDAR	Date	3 / 19 / 2014
Position		Job No.	12-111-13L
Lat / North		Client	State of Maine/Woolpert
Lon / East		Location	CASCO
Height / Elev		Weather	OVCST
	WGS84 / SPC / UTM	Crew	GG + AT

Setup Info

10677	Occupied Station
1.540	hi
10078	BS Station
1.488	BS ht
1.800	FS ht

Start Time (local) _____
End Time (local) _____
Total Sta Leika Nikon Sokkia
Level Leica Nikon
Data Collector Leica Ranger

Comments

Woods

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

GPS Observation Log
Station Name 6019

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North 4876387.605
Lon / East 364033.955
Height / Elev 131.124
WGS84 / SPC / UTM

Date 2 / 10 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BRIDGETON
Weather 20° CLEAR
Crew GG

Antenna Height
_____ (m - Internal/Rod)
_____ (ft/m - independent)
2m (fixed height to ARP)
_____ (ft & in. - at end of obs.)

Start Time (local) 1:12
End Time (local)
GPS Receiver Trimble 5700 R8
Base ☐ / Rover ☐ Leica GS12 (GS15)
Antenna Trimble Zephyr Zeph-w/GP TrimbleR8 Leica GS12 (GS15)
Method Static (RTK) VRS

Comments
#SVs: 14
PDOP/QC: 0.036 (3) 0.019 (2) 0.030 (1)

LiDAR Classification
☐ Control ☐ Tall Weeds
☐ Bare Earth ☐ Brush
☐ Urban ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6020

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 3 / 19 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location FRYEBURG
Weather OVCST
Crew GG + AT

Setup Info

10079	Occupied Station
1.563	hi
20	BS Station
1.510	BS ht
1.900	FS ht

Start Time (local)
End Time (local)
Total Sta (Leica) Nikon Sokkia
Level Leica Nikon
Data Collector (Leica) Ranger

Comments

Woods

LiDAR Classification

- ☐ Control
- ☐ Tall Weeds
- ☐ Bare Earth
- ☐ Brush
- ☐ Urban
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6021

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1/27/2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location NEW SHARON/VIENNA
Weather SNOW
Crew GS + GG

Setup Info

10031	Occupied Station
1.603	hi
10030	BS Station
1.516	BS ht
2.000	FS ht

Start Time (local) 11:00
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

THICK WOODS

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☐

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6022

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1/27/2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location MANCHESTER
Weather SNOW
Crew SS + GG

Setup Info

4022	Occupied Station
1.670	hi
4022A	BS Station
1.516	BS ht
2.000	FS ht

Start Time (local) 1:00
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

THICK WOODS

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6023

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1 / 27 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location South China
Weather OVCST
Crew SS & GG

Setup Info

1D016	Occupied Station
1.588	hi
4023	BS Station
2.150	BS ht
2.000	FS ht

Start Time (local) 3:30
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

Thick Woods

LiDAR Classification

- ☐ Control
- ☐ Tall Weeds
- ☐ Bare Earth
- ☐ Brush
- ☐ Urban
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name G024

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1/27/2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CHINA
Weather OVCST
Crew SS + GG

Setup Info

10	Occupied Station
1.558	hi
10008	BS Station
1.516	BS ht
1.516	FS ht

Start Time (local) 4:00
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

THICK WOODS

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6025

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1 / 23 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location FAIRFIELD
Weather CLEAR
Crew SS + GG

Setup Info

10020	Occupied Station
1.580	hi
10021	BS Station
1.516	BS ht
1.516	FS ht

Start Time (local) 9:40
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

THICK WOODS

LiDAR Classification

- ☐ Control
- ☐ Tall Weeds
- ☐ Bare Earth
- ☐ Brush
- ☐ Urban
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6026

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1/23/2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location CANAAN
Weather CLEAR
Crew SS + GG

Setup Info

10007	Occupied Station
1.620	hi
10001	BS Station
1.516	BS ht
1.750	FS ht

Start Time (local) 10:30
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

THICK WOODS

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6027

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1/23/2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location NORRIDGEWOCK
Weather CLEAR
Crew SS + GG

Setup Info

10004	Occupied Station
1.520	hi
10003	BS Station
1.516	BS ht
2.000	FS ht

Start Time (local) 12:00
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

Thick Woods

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6028

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1 / 23 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location WATERVILLE
Weather CLEAR
Crew SS + GG

Setup Info

3028	Occupied Station
1.501	hi
7028	BS Station
1.516	BS ht
2.000	FS ht

Start Time (local) 1:00
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

THICK WOODS

LiDAR Classification

- ☐ Control
- ☐ Tall Weeds
- ☐ Bare Earth
- ☐ Brush
- ☐ Urban
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6029

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1 / 23 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location OAKLAND
Weather CLEAR
Crew SS + GG

Setup Info

10006	Occupied Station
1.515	hi
10007	BS Station
1.516	BS ht
1.516	FS ht

Start Time (local) 3:00
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

THICK WOODS

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 6030

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1 / 23 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location BELGRADE
Weather CLEAR
Crew SS + GG

Setup Info

10026	Occupied Station
1.537	hi
10027	BS Station
1.516	BS ht
1.516	FS ht

Start Time (local) 4:00
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

THICK WOODS

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☐ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☑ Forested

Site Sketch - Photos ☑

SHYKA, SHEPPARD & GARSTER - Land Surveyors
6 State St, Ste. 301, Bangor, ME 04401 • (207) 942-1955

Terrestrial Obs. Log
Station Name 30271

Project Name State of Maine Orthophotos / LiDAR
Position
Lat / North
Lon / East
Height / Elev
WGS84 / SPC / UTM

Date 1 / 23 / 2014
Job No. 12-111-13L
Client State of Maine/Woolpert
Location NORRIDGEWOCK
Weather CLEAR
Crew SS + GG

Setup Info

10004	Occupied Station
1.520	hi
10003	BS Station
1.516	BS ht
1.516	FS ht

Start Time (local) 12.00
End Time (local)
Total Sta Leika (Nikon) Sokkia
Level Leica Nikon
Data Collector Leica (Ranger)

Comments

PAVEMENT

LiDAR Classification

- ☐ Control
- ☐ Bare Earth
- ☑ Urban
- ☐ Tall Weeds
- ☐ Brush
- ☐ Forested

Site Sketch - Photos ☑

SECTION 4: NGS, MDOT AND COMMERCIAL CORS CONTROL STATION DATA SHEETS

This section contains the published Continuously Operating Reference Station (CORS) control data sheets used for the 2013 USGS NRCS Maine LIDAR Project-Cumberland, Kennebec & York Counties. It contains published information from National Geodetic Survey (NGS), Maine Department of Transportation (MDOT) and a commercial CORS provider used to constrain the final adjustment for this Project.

```
AJ1830 ************************************************************************
AJ1830  CORS         -  This is a GPS Continuously Operating Reference Station.
AJ1830  DESIGNATION -  BARTLETT CORS ARP
AJ1830  CORS_ID      -  BARN
AJ1830  PID          -  AJ1830
AJ1830  STATE/COUNTY-  NH/CARROLL
AJ1830  COUNTRY      -  US
AJ1830  USGS QUAD    -  NORTH CONWAY WEST (1987)
AJ1830
AJ1830                          *CURRENT SURVEY CONTROL
AJ1830  ______________________________________________________________________
AJ1830* NAD 83(2011) POSITION- 44 05 56.68362(N) 071 09 34.39925(W)   ADJUSTED
AJ1830* NAD 83(2011) ELLIP HT-   140.793 (meters)        (08/??/11)   ADJUSTED
AJ1830* NAD 83(2011) EPOCH    -  2010.00
AJ1830* NAVD 88 ORTHO HEIGHT -          **(meters)           **(feet)
AJ1830  ______________________________________________________________________
AJ1830  NAD 83(2011) X  -  1,481,595.675 (meters)                     COMP
AJ1830  NAD 83(2011) Y  - -4,342,109.294 (meters)                     COMP
AJ1830  NAD 83(2011) Z  -  4,416,102.158 (meters)                     COMP
AJ1830  GEOID HEIGHT    -        -27.22  (meters)                     GEOID12A
AJ1830
AJ1830  FGDC Geospatial Positioning Accuracy Standards (95% confidence, cm)
AJ1830  Type                                          Horiz  Ellip  Dist(km)
AJ1830  ----------------------------------------------------------------------
AJ1830  NETWORK                                        0.82   2.59
AJ1830  ----------------------------------------------------------------------
AJ1830  NOTE: Click here for information on individual local accuracy
AJ1830  values and other accuracy information.
AJ1830
AJ1830
AJ1830.The coordinates were established by GPS observations
AJ1830.and adjusted by the National Geodetic Survey in August 2011.
AJ1830
AJ1830.NAD 83(2011) refers to NAD 83 coordinates where the reference
AJ1830.frame has been affixed to the stable North American Tectonic Plate.
AJ1830
AJ1830.The coordinates are valid at the epoch date displayed above
AJ1830.which is a decimal equivalence of Year/Month/Day.
AJ1830
AJ1830.The PID for the CORS L1 Phase Center is DN4594.
AJ1830
AJ1830.The XYZ, and position/ellipsoidal ht. are equivalent.
AJ1830
AJ1830.The ellipsoidal height was determined by GPS observations
AJ1830.and is referenced to NAD 83.
AJ1830
AJ1830. The following values were computed from the NAD 83(2011) position.
AJ1830
AJ1830;                   North         East     Units Scale Factor Converg.
AJ1830;SPC NH       -   177,774.507   340,604.386   MT  0.99998694   +0 21 10.5
AJ1830;SPC NH       -   583,248.53  1,117,466.22   sFT  0.99998694   +0 21 10.5
AJ1830
AJ1830!             -  Elev Factor  x  Scale Factor =   Combined Factor
AJ1830!SPC NH       -   0.99997792  x   0.99998694  =   0.99996486
```

```
AJ1830
AJ1830                          SUPERSEDED SURVEY CONTROL
AJ1830
AJ1830  NAD 83(CORS)-  44 05 56.68421(N)    071 09 34.40033(W) AD(2002.00) c
AJ1830  ELLIP H (03/??/02)  140.793  (m)                       GP(2002.00) c c
AJ1830  NAD 83(CORS)-  44 05 56.68421(N)    071 09 34.40034(W) AD(1997.00) c
AJ1830  ELLIP H (03/??/01)  140.792  (m)                       GP(1997.00) c c
AJ1830
AJ1830.Superseded values are not recommended for survey control.
AJ1830
AJ1830.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AJ1830.See file dsdata.txt to determine how the superseded data were derived.
AJ1830
AJ1830_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TCJ2714685144(NAD 83)
AJ1830
AJ1830_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
AJ1830
AJ1830                          STATION DESCRIPTION
AJ1830
AJ1830'DESCRIBED BY NATIONAL GEODETIC SURVEY 2011
AJ1830'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
AJ1830'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
AJ1830'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
AJ1830'   ftp://cors.ngs.noaa.gov/cors/README.txt
AJ1830'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
AJ1830'   ftp://cors.ngs.noaa.gov/cors/station_log
AJ1830'   http://geodesy.noaa.gov/CORS

DO8673 ***********************************************************************
DO8673  CORS        -  This is a GPS Continuously Operating Reference Station.
DO8673  DESIGNATION -  BRUNSWICK 7 CORS ARP
DO8673  CORS_ID     -  BRU7
DO8673  PID         -  DO8673
DO8673  STATE/COUNTY-  ME/CUMBERLAND
DO8673  COUNTRY     -  US
DO8673  USGS QUAD   -  BRUNSWICK (1980)
DO8673
DO8673                         *CURRENT SURVEY CONTROL
DO8673  ______________________________________________________________________
DO8673* NAD 83(2011) POSITION- 43 53 22.99140(N) 069 56 47.58371(W)   ADJUSTED
DO8673* NAD 83(2011) ELLIP HT-     5.435 (meters)        (07/??/13)   ADJUSTED
DO8673* NAD 83(2011) EPOCH   -  2010.00
DO8673* NAVD 88 ORTHO HEIGHT -          **(meters)          **(feet)
DO8673  ______________________________________________________________________
DO8673  NAD 83(2011) X  -  1,578,690.335 (meters)                       COMP
DO8673  NAD 83(2011) Y  - -4,324,858.676 (meters)                       COMP
DO8673  NAD 83(2011) Z  -  4,399,272.866 (meters)                       COMP
DO8673  GEOID HEIGHT    -        -25.89  (meters)                       GEOID12A
DO8673
DO8673.Formal positional accuracy estimates are not available for this CORS
DO8673.because its coordinates were determined in part using modeled
DO8673.velocities. Approximate one-sigma accuracies for latitude, longitude,
DO8673.and ellipsoid height can be obtained from the short-term time series.
DO8673.Additional information regarding modeled velocities is available on
DO8673.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DO8673
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```
DO8673.The coordinates were established by GPS observations
DO8673.and adjusted by the National Geodetic Survey in July 2013.
DO8673
DO8673.NAD 83(2011) refers to NAD 83 coordinates where the reference
DO8673.frame has been affixed to the stable North American Tectonic Plate.
DO8673
DO8673.The coordinates are valid at the epoch date displayed above
DO8673.which is a decimal equivalence of Year/Month/Day.
DO8673
DO8673.The PID for the CORS L1 Phase Center is DO8674.
DO8673
DO8673.The XYZ, and position/ellipsoidal ht. are equivalent.
DO8673
DO8673.The ellipsoidal height was determined by GPS observations
DO8673.and is referenced to NAD 83.
DO8673
DO8673. The following values were computed from the NAD 83(2011) position.
DO8673
DO8673;                    North         East     Units Scale Factor Converg.
DO8673;SPC ME W     -   117,383.954   917,686.717   MT  0.99997051   +0 09 09.4
DO8673;SPC ME W     -   385,117.19  3,010,777.17   sFT  0.99997051   +0 09 09.4
DO8673
DO8673!             -  Elev Factor  x  Scale Factor =   Combined Factor
DO8673!SPC ME W     -   0.99999915  x   0.99997051  =   0.99996966
DO8673
DO8673                          SUPERSEDED SURVEY CONTROL
DO8673
DO8673.No superseded survey control is available for this station.
DO8673
DO8673_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TDJ2397060059(NAD 83)
DO8673
DO8673_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DO8673
DO8673                          STATION DESCRIPTION
DO8673
DO8673'DESCRIBED BY NATIONAL GEODETIC SURVEY 2013
DO8673'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
DO8673'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DO8673'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DO8673'   ftp://cors.ngs.noaa.gov/cors/README.txt
DO8673'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DO8673'   ftp://cors.ngs.noaa.gov/cors/station_log
DO8673'   http://geodesy.noaa.gov/CORS

DO9480 ***********************************************************************
DO9480  CORS        -  This is a GPS Continuously Operating Reference Station.
DO9480  DESIGNATION -  SALISBURY CORS ARP
DO9480  CORS_ID     -  MASA
DO9480  PID         -  DO9480
DO9480  STATE/COUNTY-  MA/ESSEX
DO9480  COUNTRY     -  US
DO9480  USGS QUAD   -  NEWBURYPORT WEST (1979)
DO9480
DO9480                         *CURRENT SURVEY CONTROL
DO9480  ______________________________________________________________________
DO9480* NAD 83(2011) POSITION- 42 51 45.88628(N) 070 53 24.94606(W)   ADJUSTED
```

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DO9480* NAD 83(2011) ELLIP HT-   -10.294 (meters)        (10/??/13)   ADJUSTED
DO9480* NAD 83(2011) EPOCH   -  2010.00
DO9480* NAVD 88 ORTHO HEIGHT -          **(meters)           **(feet)
DO9480  ____________________________________________________________________
DO9480  NAD 83(2011) X  -  1,532,894.532 (meters)                      COMP
DO9480  NAD 83(2011) Y  - -4,424,303.438 (meters)                      COMP
DO9480  NAD 83(2011) Z  -  4,316,330.837 (meters)                      COMP
DO9480  GEOID HEIGHT    -        -26.94  (meters)                      GEOID12A
DO9480
DO9480.Formal positional accuracy estimates are not available for this CORS
DO9480.because its coordinates were determined in part using modeled
DO9480.velocities. Approximate one-sigma accuracies for latitude, longitude,
DO9480.and ellipsoid height can be obtained from the short-term time series.
DO9480.Additional information regarding modeled velocities is available on
DO9480.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DO9480
DO9480.The coordinates were established by GPS observations
DO9480.and adjusted by the National Geodetic Survey in October 2013.
DO9480
DO9480.NAD 83(2011) refers to NAD 83 coordinates where the reference
DO9480.frame has been affixed to the stable North American Tectonic Plate.
DO9480
DO9480.The coordinates are valid at the epoch date displayed above
DO9480.which is a decimal equivalence of Year/Month/Day.
DO9480
DO9480.The PID for the CORS L1 Phase Center is DO9481.
DO9480
DO9480.The XYZ, and position/ellipsoidal ht. are equivalent.
DO9480
DO9480.The ellipsoidal height was determined by GPS observations
DO9480.and is referenced to NAD 83.
DO9480
DO9480. The following values were computed from the NAD 83(2011) position.
DO9480
DO9480;                    North         East     Units Scale Factor Converg.
DO9480;SPC MA M     -   957,080.959   249,830.220   MT  1.00003132   +0 24 34.5
DO9480;SPC MA M     - 3,140,023.11    819,651.31   sFT  1.00003132   +0 24 34.5
DO9480
DO9480!             -  Elev Factor  x  Scale Factor =   Combined Factor
DO9480!SPC MA M     -   1.00000161  x   1.00003132  =   1.00003293
DO9480
DO9480                          SUPERSEDED SURVEY CONTROL
DO9480
DO9480.No superseded survey control is available for this station.
DO9480
DO9480_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TCH4558347306(NAD 83)
DO9480
DO9480_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DO9480
DO9480                          STATION DESCRIPTION
DO9480
DO9480'DESCRIBED BY NATIONAL GEODETIC SURVEY 2013
DO9480'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
DO9480'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DO9480'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DO9480'   ftp://cors.ngs.noaa.gov/cors/README.txt
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DO9480'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DO9480'   ftp://cors.ngs.noaa.gov/cors/station_log
DO9480'   http://geodesy.noaa.gov/CORS

DP1322 ***********************************************************************
DP1322  CORS        -  This is a GPS Continuously Operating Reference Station.
DP1322  DESIGNATION -  BANGOR CORS ARP
DP1322  CORS_ID     -  MECC
DP1322  PID         -  DP1322
DP1322  STATE/COUNTY-  ME/PENOBSCOT
DP1322  COUNTRY     -  US
DP1322  USGS QUAD   -  VEAZIE (1988)
DP1322
DP1322                         *CURRENT SURVEY CONTROL
DP1322  ______________________________________________________________________
DP1322* NAD 83(2011) POSITION- 44 49 33.21003(N) 068 44 38.60195(W)   ADJUSTED
DP1322* NAD 83(2011) ELLIP HT-    20.586 (meters)        (01/??/14)   ADJUSTED
DP1322* NAD 83(2011) EPOCH   -  2010.00
DP1322* NAVD 88 ORTHO HEIGHT -          **(meters)          **(feet)
DP1322  ______________________________________________________________________
DP1322  NAD 83(2011) X  -  1,642,741.356 (meters)                     COMP
DP1322  NAD 83(2011) Y  - -4,223,005.405 (meters)                     COMP
DP1322  NAD 83(2011) Z  -  4,473,660.578 (meters)                     COMP
DP1322  GEOID HEIGHT    -        -24.82  (meters)                     GEOID12A
DP1322
DP1322.Formal positional accuracy estimates are not available for this CORS
DP1322.because its coordinates were determined in part using modeled
DP1322.velocities. Approximate one-sigma accuracies for latitude, longitude,
DP1322.and ellipsoid height can be obtained from the short-term time series.
DP1322.Additional information regarding modeled velocities is available on
DP1322.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DP1322
DP1322.The coordinates were established by GPS observations
DP1322.and adjusted by the National Geodetic Survey in January 2014.
DP1322
DP1322.NAD 83(2011) refers to NAD 83 coordinates where the reference
DP1322.frame has been affixed to the stable North American Tectonic Plate.
DP1322
DP1322.The coordinates are valid at the epoch date displayed above
DP1322.which is a decimal equivalence of Year/Month/Day.
DP1322
DP1322.The PID for the CORS L1 Phase Center is DP1323.
DP1322
DP1322.The XYZ, and position/ellipsoidal ht. are equivalent.
DP1322
DP1322.The ellipsoidal height was determined by GPS observations
DP1322.and is referenced to NAD 83.
DP1322
DP1322. The following values were computed from the NAD 83(2011) position.
DP1322
DP1322;                    North         East     Units Scale Factor Converg.
DP1322;SPC ME E     -   128,825.762   280,700.690   MT  0.99990458   -0 10 19.4
DP1322;SPC ME E     -   422,655.85    920,932.18   sFT  0.99990458   -0 10 19.4
DP1322
DP1322!             -  Elev Factor  x  Scale Factor =   Combined Factor
DP1322!SPC ME E     -   0.99999677  x   0.99990458  =   0.99990135
```

```
DP1322
DP1322                          SUPERSEDED SURVEY CONTROL
DP1322
DP1322.No superseded survey control is available for this station.
DP1322
DP1322_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TEK2023363641(NAD 83)
DP1322
DP1322_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DP1322
DP1322                          STATION DESCRIPTION
DP1322
DP1322'DESCRIBED BY NATIONAL GEODETIC SURVEY 2014
DP1322'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
DP1322'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DP1322'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DP1322'   ftp://cors.ngs.noaa.gov/cors/README.txt
DP1322'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DP1322'   ftp://cors.ngs.noaa.gov/cors/station_log
DP1322'   http://geodesy.noaa.gov/CORS

DN9932 ***********************************************************************
DN9932  CORS        -  This is a GPS Continuously Operating Reference Station.
DN9932  DESIGNATION -  DEXTER CORS ARP
DN9932  CORS_ID     -  MEDX
DN9932  PID         -  DN9932
DN9932  STATE/COUNTY-  ME/PENOBSCOT
DN9932  COUNTRY     -  US
DN9932  USGS QUAD   -  DEXTER (1984)
DN9932
DN9932                         *CURRENT SURVEY CONTROL
DN9932  ______________________________________________________________________
DN9932* NAD 83(2011) POSITION- 45 01 34.90790(N) 069 17 49.08401(W)   ADJUSTED
DN9932* NAD 83(2011) ELLIP HT-   141.203 (meters)        (08/??/12)   ADJUSTED
DN9932* NAD 83(2011) EPOCH   -  2010.00
DN9932* NAVD 88 ORTHO HEIGHT -          **(meters)           **(feet)
DN9932  ______________________________________________________________________
DN9932  NAD 83(2011) X  -  1,596,381.096 (meters)                      COMP
DN9932  NAD 83(2011) Y  - -4,224,023.907 (meters)                      COMP
DN9932  NAD 83(2011) Z  -  4,489,519.511 (meters)                      COMP
DN9932  GEOID HEIGHT    -        -25.10  (meters)                      GEOID12A
DN9932
DN9932.Formal positional accuracy estimates are not available for this CORS
DN9932.because its coordinates were determined in part using modeled
DN9932.velocities. Approximate one-sigma accuracies for latitude, longitude,
DN9932.and ellipsoid height can be obtained from the short-term time series.
DN9932.Additional information regarding modeled velocities is available on
DN9932.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DN9932
DN9932.The coordinates were established by GPS observations
DN9932.and adjusted by the National Geodetic Survey in August 2012.
DN9932
DN9932.NAD 83(2011) refers to NAD 83 coordinates where the reference
DN9932.frame has been affixed to the stable North American Tectonic Plate.
DN9932
DN9932.The coordinates are valid at the epoch date displayed above
DN9932.which is a decimal equivalence of Year/Month/Day.
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```
DN9932
DN9932.The PID for the CORS L1 Phase Center is DN9933.
DN9932
DN9932.The XYZ, and position/ellipsoidal ht. are equivalent.
DN9932
DN9932.The ellipsoidal height was determined by GPS observations
DN9932.and is referenced to NAD 83.
DN9932
DN9932. The following values were computed from the NAD 83(2011) position.
DN9932
DN9932;                    North         East     Units Scale Factor Converg.
DN9932;SPC ME E     -   151,382.044   237,196.716   MT  0.99994848   -0 33 49.7
DN9932;SPC ME E     -   496,659.26    778,202.89   sFT  0.99994848   -0 33 49.7
DN9932
DN9932!             -  Elev Factor  x  Scale Factor =   Combined Factor
DN9932!SPC ME E     -   0.99997786  x   0.99994848  =   0.99992634
DN9932
DN9932                          SUPERSEDED SURVEY CONTROL
DN9932
DN9932.No superseded survey control is available for this station.
DN9932
DN9932_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TDK7660585921(NAD 83)
DN9932
DN9932_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DN9932
DN9932                          STATION DESCRIPTION
DN9932
DN9932'DESCRIBED BY NATIONAL GEODETIC SURVEY 2012
DN9932'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
DN9932'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DN9932'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DN9932'   ftp://cors.ngs.noaa.gov/cors/README.txt
DN9932'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DN9932'   ftp://cors.ngs.noaa.gov/cors/station_log
DN9932'   http://geodesy.noaa.gov/CORS

DN9934 ********************************************************************
DN9934  CORS        -  This is a GPS Continuously Operating Reference Station.
DN9934  DESIGNATION -  FARMINGTON CORS ARP
DN9934  CORS_ID     -  MEFR
DN9934  PID         -  DN9934
DN9934  STATE/COUNTY-  ME/FRANKLIN
DN9934  COUNTRY     -  US
DN9934  USGS QUAD   -  FARMINGTON (1968)
DN9934
DN9934                         *CURRENT SURVEY CONTROL
DN9934  ______________________________________________________________________
DN9934* NAD 83(2011) POSITION- 44 40 28.97450(N) 070 07 54.54215(W)   ADJUSTED
DN9934* NAD 83(2011) ELLIP HT-   131.643 (meters)        (08/??/12)   ADJUSTED
DN9934* NAD 83(2011) EPOCH   -  2010.00
DN9934* NAVD 88 ORTHO HEIGHT -          **(meters)          **(feet)
DN9934  ______________________________________________________________________
DN9934  NAD 83(2011) X  -  1,544,030.562 (meters)                      COMP
DN9934  NAD 83(2011) Y  - -4,272,749.350 (meters)                      COMP
DN9934  NAD 83(2011) Z  -  4,461,807.730 (meters)                      COMP
DN9934  GEOID HEIGHT    -        -26.12  (meters)                      GEOID12A
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DN9934
DN9934.Formal positional accuracy estimates are not available for this CORS
DN9934.because its coordinates were determined in part using modeled
DN9934.velocities. Approximate one-sigma accuracies for latitude, longitude,
DN9934.and ellipsoid height can be obtained from the short-term time series.
DN9934.Additional information regarding modeled velocities is available on
DN9934.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DN9934
DN9934.The coordinates were established by GPS observations
DN9934.and adjusted by the National Geodetic Survey in August 2012.
DN9934
DN9934.NAD 83(2011) refers to NAD 83 coordinates where the reference
DN9934.frame has been affixed to the stable North American Tectonic Plate.
DN9934
DN9934.The coordinates are valid at the epoch date displayed above
DN9934.which is a decimal equivalence of Year/Month/Day.
DN9934
DN9934.The PID for the CORS L1 Phase Center is DN9935.
DN9934
DN9934.The XYZ, and position/ellipsoidal ht. are equivalent.
DN9934
DN9934.The ellipsoidal height was determined by GPS observations
DN9934.and is referenced to NAD 83.
DN9934
DN9934. The following values were computed from the NAD 83(2011) position.
DN9934
DN9934;                    North         East     Units Scale Factor Converg.
DN9934;SPC ME W     -   204,585.000   902,763.176   MT  0.99996676   +0 01 28.2
DN9934;SPC ME W     -   671,209.29  2,961,815.52   sFT  0.99996676   +0 01 28.2
DN9934
DN9934!             -  Elev Factor  x  Scale Factor =   Combined Factor
DN9934!SPC ME W     -   0.99997936  x   0.99996676  =   0.99994612
DN9934
DN9934                          SUPERSEDED SURVEY CONTROL
DN9934
DN9934.No superseded survey control is available for this station.
DN9934
DN9934_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TDK1029247439(NAD 83)
DN9934
DN9934_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DN9934
DN9934                          STATION DESCRIPTION
DN9934
DN9934'DESCRIBED BY NATIONAL GEODETIC SURVEY 2012
DN9934'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
DN9934'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DN9934'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DN9934'   ftp://cors.ngs.noaa.gov/cors/README.txt
DN9934'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DN9934'   ftp://cors.ngs.noaa.gov/cors/station_log
DN9934'   http://geodesy.noaa.gov/CORS

DO5451 ************************************************************************
DO5451  CORS        -  This is a GPS Continuously Operating Reference Station.
DO5451  DESIGNATION -  GORHAM CORS ARP
DO5451  CORS_ID     -  MEGO
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DO5451  PID          -  DO5451
DO5451  STATE/COUNTY-  ME/CUMBERLAND
DO5451  COUNTRY      -  US
DO5451  USGS QUAD    -  GORHAM (1975)
DO5451
DO5451                         *CURRENT SURVEY CONTROL
DO5451  ______________________________________________________________________
DO5451* NAD 83(2011) POSITION- 43 40 52.06776(N) 070 27 03.72437(W)   ADJUSTED
DO5451* NAD 83(2011) ELLIP HT-    89.961 (meters)        (03/??/13)   ADJUSTED
DO5451* NAD 83(2011) EPOCH   -  2010.00
DO5451* NAVD 88 ORTHO HEIGHT -          **(meters)           **(feet)
DO5451  ______________________________________________________________________
DO5451  NAD 83(2011) X  -  1,545,936.281 (meters)                      COMP
DO5451  NAD 83(2011) Y  - -4,353,761.106 (meters)                      COMP
DO5451  NAD 83(2011) Z  -  4,382,599.631 (meters)                      COMP
DO5451  GEOID HEIGHT    -        -26.44  (meters)                      GEOID12A
DO5451
DO5451.Formal positional accuracy estimates are not available for this CORS
DO5451.because its coordinates were determined in part using modeled
DO5451.velocities. Approximate one-sigma accuracies for latitude, longitude,
DO5451.and ellipsoid height can be obtained from the short-term time series.
DO5451.Additional information regarding modeled velocities is available on
DO5451.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DO5451
DO5451.The coordinates were established by GPS observations
DO5451.and adjusted by the National Geodetic Survey in March 2013.
DO5451
DO5451.NAD 83(2011) refers to NAD 83 coordinates where the reference
DO5451.frame has been affixed to the stable North American Tectonic Plate.
DO5451
DO5451.The coordinates are valid at the epoch date displayed above
DO5451.which is a decimal equivalence of Year/Month/Day.
DO5451
DO5451.The PID for the CORS L1 Phase Center is DO5452.
DO5451
DO5451.The XYZ, and position/ellipsoidal ht. are equivalent.
DO5451
DO5451.The ellipsoidal height was determined by GPS observations
DO5451.and is referenced to NAD 83.
DO5451
DO5451. The following values were computed from the NAD 83(2011) position.
DO5451
DO5451;                    North         East     Units Scale Factor Converg.
DO5451;SPC ME W     -    94,224.454   877,070.898   MT  0.99997313   -0 11 47.0
DO5451;SPC ME W     -   309,134.73  2,877,523.44   sFT  0.99997313   -0 11 47.0
DO5451
DO5451!             -  Elev Factor  x  Scale Factor =   Combined Factor
DO5451!SPC ME W     -   0.99998589  x   0.99997313  =   0.99995902
DO5451
DO5451                          SUPERSEDED SURVEY CONTROL
DO5451
DO5451.No superseded survey control is available for this station.
DO5451
DO5451_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TCJ8304237480(NAD 83)
DO5451
DO5451_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
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DO5451
DO5451                          STATION DESCRIPTION
DO5451
DO5451'DESCRIBED BY NATIONAL GEODETIC SURVEY 2013
DO5451'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
DO5451'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DO5451'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DO5451'   ftp://cors.ngs.noaa.gov/cors/README.txt
DO5451'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DO5451'   ftp://cors.ngs.noaa.gov/cors/station_log
DO5451'   http://geodesy.noaa.gov/CORS

DO6444 ************************************************************************
DO6444  CORS        -  This is a GPS Continuously Operating Reference Station.
DO6444  DESIGNATION -  FAIRFIELD CORS ARP
DO6444  CORS_ID     -  MEJD
DO6444  PID         -  DO6444
DO6444  STATE/COUNTY-  ME/SOMERSET
DO6444  COUNTRY     -  US
DO6444  USGS QUAD   -  FAIRFIELD (1988)
DO6444
DO6444                         *CURRENT SURVEY CONTROL
DO6444  ______________________________________________________________________
DO6444* NAD 83(2011) POSITION- 44 36 29.69633(N) 069 35 59.54946(W)   ADJUSTED
DO6444* NAD 83(2011) ELLIP HT-    55.957 (meters)        (03/??/13)   ADJUSTED
DO6444* NAD 83(2011) EPOCH   -  2010.00
DO6444* NAVD 88 ORTHO HEIGHT -          **(meters)          **(feet)
DO6444  ______________________________________________________________________
DO6444  NAD 83(2011) X  -  1,585,422.612 (meters)                    COMP
DO6444  NAD 83(2011) Y  - -4,263,044.430 (meters)                    COMP
DO6444  NAD 83(2011) Z  -  4,456,499.176 (meters)                    COMP
DO6444  GEOID HEIGHT    -        -25.73  (meters)                    GEOID12A
DO6444
DO6444.Formal positional accuracy estimates are not available for this CORS
DO6444.because its coordinates were determined in part using modeled
DO6444.velocities. Approximate one-sigma accuracies for latitude, longitude,
DO6444.and ellipsoid height can be obtained from the short-term time series.
DO6444.Additional information regarding modeled velocities is available on
DO6444.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DO6444
DO6444.The coordinates were established by GPS observations
DO6444.and adjusted by the National Geodetic Survey in March 2013.
DO6444
DO6444.NAD 83(2011) refers to NAD 83 coordinates where the reference
DO6444.frame has been affixed to the stable North American Tectonic Plate.
DO6444
DO6444.The coordinates are valid at the epoch date displayed above
DO6444.which is a decimal equivalence of Year/Month/Day.
DO6444
DO6444.The PID for the CORS L1 Phase Center is DO6445.
DO6444
DO6444.The XYZ, and position/ellipsoidal ht. are equivalent.
DO6444
DO6444.The ellipsoidal height was determined by GPS observations
DO6444.and is referenced to NAD 83.
DO6444
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DO6444. The following values were computed from the NAD 83(2011) position.
DO6444
DO6444;                     North         East     Units Scale Factor Converg.
DO6444;SPC ME W     -   197,354.899   944,991.731   MT  0.99999155   +0 23 52.9
DO6444;SPC ME W     -   647,488.53  3,100,360.37   sFT  0.99999155   +0 23 52.9
DO6444
DO6444!             -  Elev Factor  x  Scale Factor =   Combined Factor
DO6444!SPC ME W     -   0.99999123  x   0.99999155  =   0.99998278
DO6444
DO6444                          SUPERSEDED SURVEY CONTROL
DO6444
DO6444.No superseded survey control is available for this station.
DO6444
DO6444_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TDK5239939608(NAD 83)
DO6444
DO6444_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DO6444
DO6444                          STATION DESCRIPTION
DO6444
DO6444'DESCRIBED BY NATIONAL GEODETIC SURVEY 2013
DO6444'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
DO6444'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DO6444'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DO6444'   ftp://cors.ngs.noaa.gov/cors/README.txt
DO6444'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DO6444'   ftp://cors.ngs.noaa.gov/cors/station_log
DO6444'   http://geodesy.noaa.gov/CORS

DN9940 ***********************************************************************
DN9940  CORS        -  This is a GPS Continuously Operating Reference Station.
DN9940  DESIGNATION -  AUGUSTA CORS ARP
DN9940  CORS_ID     -  MEOW
DN9940  PID         -  DN9940
DN9940  STATE/COUNTY-  ME/KENNEBEC
DN9940  COUNTRY     -  US
DN9940  USGS QUAD   -  TOGUS POND (1982)
DN9940
DN9940                         *CURRENT SURVEY CONTROL
DN9940  ______________________________________________________________________
DN9940* NAD 83(2011) POSITION- 44 17 45.93624(N) 069 44 43.57001(W)   ADJUSTED
DN9940* NAD 83(2011) ELLIP HT-    37.313 (meters)        (08/??/12)   ADJUSTED
DN9940* NAD 83(2011) EPOCH   -  2010.00
DN9940* NAVD 88 ORTHO HEIGHT -          **(meters)          **(feet)
DN9940  ______________________________________________________________________
DN9940  NAD 83(2011) X  -  1,582,992.217 (meters)                       COMP
DN9940  NAD 83(2011) Y  - -4,289,835.833 (meters)                       COMP
DN9940  NAD 83(2011) Z  -  4,431,725.120 (meters)                       COMP
DN9940  GEOID HEIGHT    -        -25.85  (meters)                       GEOID12A
DN9940
DN9940.Formal positional accuracy estimates are not available for this CORS
DN9940.because its coordinates were determined in part using modeled
DN9940.velocities. Approximate one-sigma accuracies for latitude, longitude,
DN9940.and ellipsoid height can be obtained from the short-term time series.
DN9940.Additional information regarding modeled velocities is available on
DN9940.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DN9940
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DN9940.The coordinates were established by GPS observations
DN9940.and adjusted by the National Geodetic Survey in August 2012.
DN9940
DN9940.NAD 83(2011) refers to NAD 83 coordinates where the reference
DN9940.frame has been affixed to the stable North American Tectonic Plate.
DN9940
DN9940.The coordinates are valid at the epoch date displayed above
DN9940.which is a decimal equivalence of Year/Month/Day.
DN9940
DN9940.The PID for the CORS L1 Phase Center is DN9941.
DN9940
DN9940.The XYZ, and position/ellipsoidal ht. are equivalent.
DN9940
DN9940.The ellipsoidal height was determined by GPS observations
DN9940.and is referenced to NAD 83.
DN9940
DN9940. The following values were computed from the NAD 83(2011) position.
DN9940
DN9940;                     North         East     Units Scale Factor Converg.
DN9940;SPC ME W     -   162,599.009   933,615.714   MT  0.99998056   +0 17 39.0
DN9940;SPC ME W     -   533,460.25  3,063,037.56   sFT  0.99998056   +0 17 39.0
DN9940
DN9940!             -  Elev Factor  x  Scale Factor =   Combined Factor
DN9940!SPC ME W     -   0.99999415  x   0.99998056  =   0.99997471
DN9940
DN9940                          SUPERSEDED SURVEY CONTROL
DN9940
DN9940.No superseded survey control is available for this station.
DN9940
DN9940_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TDK4053305030(NAD 83)
DN9940
DN9940_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DN9940
DN9940                          STATION DESCRIPTION
DN9940
DN9940'DESCRIBED BY NATIONAL GEODETIC SURVEY 2012
DN9940'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
DN9940'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DN9940'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DN9940'   ftp://cors.ngs.noaa.gov/cors/README.txt
DN9940'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DN9940'   ftp://cors.ngs.noaa.gov/cors/station_log
DN9940'   http://geodesy.noaa.gov/CORS

DO2056 ***********************************************************************
DO2056  CORS        -  This is a GPS Continuously Operating Reference Station.
DO2056  DESIGNATION -  SOUTH PARIS CORS ARP
DO2056  CORS_ID     -  MESP
DO2056  PID         -  DO2056
DO2056  STATE/COUNTY-  ME/OXFORD
DO2056  COUNTRY     -  US
DO2056  USGS QUAD   -  NORWAY (1983)
DO2056
DO2056                         *CURRENT SURVEY CONTROL
DO2056  ______________________________________________________________________
DO2056* NAD 83(2011) POSITION- 44 13 06.19617(N) 070 30 47.10740(W)   ADJUSTED
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DO2056* NAD 83(2011) ELLIP HT-   105.463 (meters)        (11/??/12)   ADJUSTED
DO2056* NAD 83(2011) EPOCH   -  2010.00
DO2056* NAVD 88 ORTHO HEIGHT -          **(meters)           **(feet)
DO2056  ____________________________________________________________________
DO2056  NAD 83(2011) X  -  1,527,403.070 (meters)                    COMP
DO2056  NAD 83(2011) Y  - -4,316,385.829 (meters)                    COMP
DO2056  NAD 83(2011) Z  -  4,425,588.513 (meters)                    COMP
DO2056  GEOID HEIGHT    -        -26.74  (meters)                    GEOID12A
DO2056
DO2056.Formal positional accuracy estimates are not available for this CORS
DO2056.because its coordinates were determined in part using modeled
DO2056.velocities. Approximate one-sigma accuracies for latitude, longitude,
DO2056.and ellipsoid height can be obtained from the short-term time series.
DO2056.Additional information regarding modeled velocities is available on
DO2056.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DO2056
DO2056.The coordinates were established by GPS observations
DO2056.and adjusted by the National Geodetic Survey in November 2012.
DO2056
DO2056.NAD 83(2011) refers to NAD 83 coordinates where the reference
DO2056.frame has been affixed to the stable North American Tectonic Plate.
DO2056
DO2056.The coordinates are valid at the epoch date displayed above
DO2056.which is a decimal equivalence of Year/Month/Day.
DO2056
DO2056.The PID for the CORS L1 Phase Center is DO2057.
DO2056
DO2056.The XYZ, and position/ellipsoidal ht. are equivalent.
DO2056
DO2056.The ellipsoidal height was determined by GPS observations
DO2056.and is referenced to NAD 83.
DO2056
DO2056. The following values were computed from the NAD 83(2011) position.
DO2056
DO2056;                    North         East     Units Scale Factor Converg.
DO2056;SPC ME W     -   153,936.930   872,318.109   MT  0.99997609   -0 14 29.7
DO2056;SPC ME W     -   505,041.41  2,861,930.33   sFT  0.99997609   -0 14 29.7
DO2056
DO2056!             -  Elev Factor  x  Scale Factor =   Combined Factor
DO2056!SPC ME W     -   0.99998346  x   0.99997609  =   0.99995955
DO2056
DO2056                          SUPERSEDED SURVEY CONTROL
DO2056
DO2056.No superseded survey control is available for this station.
DO2056
DO2056_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TCJ7913597242(NAD 83)
DO2056
DO2056_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DO2056
DO2056                          STATION DESCRIPTION
DO2056
DO2056'DESCRIBED BY NATIONAL GEODETIC SURVEY 2012
DO2056'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
DO2056'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DO2056'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DO2056'   ftp://cors.ngs.noaa.gov/cors/README.txt
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DO2056'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DO2056'   ftp://cors.ngs.noaa.gov/cors/station_log
DO2056'   http://geodesy.noaa.gov/CORS

DO2058 ***********************************************************************
DO2058  CORS        -  This is a GPS Continuously Operating Reference Station.
DO2058  DESIGNATION -  WALDO CORS ARP
DO2058  CORS_ID     -  MEWA
DO2058  PID         -  DO2058
DO2058  STATE/COUNTY-  ME/WALDO
DO2058  COUNTRY     -  US
DO2058  USGS QUAD   -  BELFAST (1979)
DO2058
DO2058                        *CURRENT SURVEY CONTROL
DO2058  ______________________________________________________________________
DO2058* NAD 83(2011) POSITION- 44 27 15.19284(N) 069 05 49.48920(W)   ADJUSTED
DO2058* NAD 83(2011) ELLIP HT-    50.696 (meters)        (11/??/12)   ADJUSTED
DO2058* NAD 83(2011) EPOCH   -  2010.00
DO2058* NAVD 88 ORTHO HEIGHT -          **(meters)          **(feet)
DO2058  ______________________________________________________________________
DO2058  NAD 83(2011) X  -  1,627,052.453 (meters)                    COMP
DO2058  NAD 83(2011) Y  - -4,260,177.781 (meters)                    COMP
DO2058  NAD 83(2011) Z  -  4,444,293.880 (meters)                    COMP
DO2058  GEOID HEIGHT    -        -25.21  (meters)                    GEOID12A
DO2058
DO2058.Formal positional accuracy estimates are not available for this CORS
DO2058.because its coordinates were determined in part using modeled
DO2058.velocities. Approximate one-sigma accuracies for latitude, longitude,
DO2058.and ellipsoid height can be obtained from the short-term time series.
DO2058.Additional information regarding modeled velocities is available on
DO2058.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DO2058
DO2058.The coordinates were established by GPS observations
DO2058.and adjusted by the National Geodetic Survey in November 2012.
DO2058
DO2058.NAD 83(2011) refers to NAD 83 coordinates where the reference
DO2058.frame has been affixed to the stable North American Tectonic Plate.
DO2058
DO2058.The coordinates are valid at the epoch date displayed above
DO2058.which is a decimal equivalence of Year/Month/Day.
DO2058
DO2058.The PID for the CORS L1 Phase Center is DO2059.
DO2058
DO2058.The XYZ, and position/ellipsoidal ht. are equivalent.
DO2058
DO2058.The ellipsoidal height was determined by GPS observations
DO2058.and is referenced to NAD 83.
DO2058
DO2058. The following values were computed from the NAD 83(2011) position.
DO2058
DO2058;                    North         East     Units Scale Factor Converg.
DO2058;SPC ME E     -    87,672.424   252,482.055   MT  0.99992776   -0 25 05.4
DO2058;SPC ME E     -   287,638.61    828,351.54   sFT  0.99992776   -0 25 05.4
DO2058
DO2058!             -  Elev Factor  x  Scale Factor =   Combined Factor
DO2058!SPC ME E     -   0.99999205  x   0.99992776  =   0.99991981
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DO2058
DO2058                          SUPERSEDED SURVEY CONTROL
DO2058
DO2058.No superseded survey control is available for this station.
DO2058
DO2058_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TDK9227622328(NAD 83)
DO2058
DO2058_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DO2058
DO2058                          STATION DESCRIPTION
DO2058
DO2058'DESCRIBED BY NATIONAL GEODETIC SURVEY 2012
DO2058'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
DO2058'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DO2058'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DO2058'   ftp://cors.ngs.noaa.gov/cors/README.txt
DO2058'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DO2058'   ftp://cors.ngs.noaa.gov/cors/station_log
DO2058'   http://geodesy.noaa.gov/CORS

DL9078 ***********************************************************************
DL9078  CORS        -  This is a GPS Continuously Operating Reference Station.
DL9078  DESIGNATION -  NHDOT CONCORD CORS ARP
DL9078  CORS_ID     -  NHCO
DL9078  PID         -  DL9078
DL9078  STATE/COUNTY-  NH/MERRIMACK
DL9078  COUNTRY     -  US
DL9078  USGS QUAD   -  CONCORD (1985)
DL9078
DL9078                         *CURRENT SURVEY CONTROL
DL9078  ______________________________________________________________________
DL9078* NAD 83(2011) POSITION- 43 12 46.19587(N) 071 31 11.47551(W)   ADJUSTED
DL9078* NAD 83(2011) ELLIP HT-    89.430 (meters)        (08/??/11)   ADJUSTED
DL9078* NAD 83(2011) EPOCH   -  2010.00
DL9078* NAVD 88 ORTHO HEIGHT -          **(meters)           **(feet)
DL9078  ______________________________________________________________________
DL9078  NAD 83(2011) X  -  1,475,796.252 (meters)                      COMP
DL9078  NAD 83(2011) Y  - -4,415,774.653 (meters)                      COMP
DL9078  NAD 83(2011) Z  -  4,344,825.533 (meters)                      COMP
DL9078  GEOID HEIGHT    -        -27.44  (meters)                      GEOID12A
DL9078
DL9078.Formal positional accuracy estimates are not available for this CORS
DL9078.because its coordinates were determined in part using modeled
DL9078.velocities. Approximate one-sigma accuracies for latitude, longitude,
DL9078.and ellipsoid height can be obtained from the short-term time series.
DL9078.Additional information regarding modeled velocities is available on
DL9078.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DL9078
DL9078.The coordinates were established by GPS observations
DL9078.and adjusted by the National Geodetic Survey in August 2011.
DL9078
DL9078.NAD 83(2011) refers to NAD 83 coordinates where the reference
DL9078.frame has been affixed to the stable North American Tectonic Plate.
DL9078
DL9078.The coordinates are valid at the epoch date displayed above
DL9078.which is a decimal equivalence of Year/Month/Day.
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DL9078
DL9078.The PID for the CORS L1 Phase Center is DL9079.
DL9078
DL9078.The XYZ, and position/ellipsoidal ht. are equivalent.
DL9078
DL9078.The ellipsoidal height was determined by GPS observations
DL9078.and is referenced to NAD 83.
DL9078
DL9078. The following values were computed from the NAD 83(2011) position.
DL9078
DL9078;                    North         East     Units Scale Factor Converg.
DL9078;SPC NH       -    79,196.310   311,929.423   MT  0.99996842   +0 06 01.9
DL9078;SPC NH       -   259,829.89  1,023,388.45   sFT  0.99996842   +0 06 01.9
DL9078
DL9078!             -  Elev Factor  x  Scale Factor =   Combined Factor
DL9078!SPC NH       -   0.99998598  x   0.99996842  =   0.99995440
DL9078
DL9078                          SUPERSEDED SURVEY CONTROL
DL9078
DL9078  NAD 83(CORS)-  43 12 46.19624(N)    071 31 11.47660(W) AD(2002.00) c
DL9078  ELLIP H (06/??/10)   89.423  (m)                       GP(2002.00) c c
DL9078
DL9078.Superseded values are not recommended for survey control.
DL9078
DL9078.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
DL9078.See file dsdata.txt to determine how the superseded data were derived.
DL9078
DL9078_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TBH9531687532(NAD 83)
DL9078
DL9078_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DL9078
DL9078                          STATION DESCRIPTION
DL9078
DL9078'DESCRIBED BY NATIONAL GEODETIC SURVEY 2011
DL9078'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
DL9078'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DL9078'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DL9078'   ftp://cors.ngs.noaa.gov/cors/README.txt
DL9078'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DL9078'   ftp://cors.ngs.noaa.gov/cors/station_log
DL9078'   http://geodesy.noaa.gov/CORS

DI1075 *****************************************************************
DI1075  CORS        -  This is a GPS Continuously Operating Reference Station.
DI1075  DESIGNATION -  U NEW HAMPSHIRE CORS ARP
DI1075  CORS_ID     -  NHUN
DI1075  PID         -  DI1075
DI1075  STATE/COUNTY-  NH/STRAFFORD
DI1075  COUNTRY     -  US
DI1075  USGS QUAD   -  DOVER WEST (1993)
DI1075
DI1075                         *CURRENT SURVEY CONTROL
DI1075  ______________________________________________________________________
DI1075* NAD 83(2011) POSITION- 43 08 33.17927(N) 070 57 06.86279(W)   ADJUSTED
DI1075* NAD 83(2011) ELLIP HT-     9.116 (meters)        (08/??/11)   ADJUSTED
DI1075* NAD 83(2011) EPOCH   -  2010.00
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DI1075* NAVD 88 ORTHO HEIGHT -          **(meters)           **(feet)
DI1075  ____________________________________________________________________
DI1075  NAD 83(2011) X  -  1,521,219.256 (meters)                      COMP
DI1075  NAD 83(2011) Y  - -4,405,923.961 (meters)                      COMP
DI1075  NAD 83(2011) Z  -  4,339,076.588 (meters)                      COMP
DI1075  GEOID HEIGHT    -        -26.86  (meters)                      GEOID12A
DI1075
DI1075.Formal positional accuracy estimates are not available for this CORS
DI1075.because its coordinates were determined in part using modeled
DI1075.velocities. Approximate one-sigma accuracies for latitude, longitude,
DI1075.and ellipsoid height can be obtained from the short-term time series.
DI1075.Additional information regarding modeled velocities is available on
DI1075.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DI1075
DI1075.The coordinates were established by GPS observations
DI1075.and adjusted by the National Geodetic Survey in August 2011.
DI1075
DI1075.NAD 83(2011) refers to NAD 83 coordinates where the reference
DI1075.frame has been affixed to the stable North American Tectonic Plate.
DI1075
DI1075.The coordinates are valid at the epoch date displayed above
DI1075.which is a decimal equivalence of Year/Month/Day.
DI1075
DI1075.The PID for the CORS L1 Phase Center is DO7248.
DI1075
DI1075.The XYZ, and position/ellipsoidal ht. are equivalent.
DI1075
DI1075.The ellipsoidal height was determined by GPS observations
DI1075.and is referenced to NAD 83.
DI1075
DI1075. The following values were computed from the NAD 83(2011) position.
DI1075
DI1075;                    North         East     Units Scale Factor Converg.
DI1075;SPC NH       -    71,626.013   358,145.498   MT  1.00000824   +0 29 19.6
DI1075;SPC NH       -   234,993.01  1,175,015.69   sFT  1.00000824   +0 29 19.6
DI1075
DI1075!             -  Elev Factor  x  Scale Factor =   Combined Factor
DI1075!SPC NH       -   0.99999857  x   1.00000824  =   1.00000681
DI1075
DI1075                          SUPERSEDED SURVEY CONTROL
DI1075
DI1075  NAD 83(CORS)-  43 08 33.17949(N)    070 57 06.86330(W) AD(2002.00) c
DI1075  ELLIP H (08/??/06)    9.109  (m)                      GP(2002.00) c c
DI1075
DI1075.Superseded values are not recommended for survey control.
DI1075
DI1075.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
DI1075.See file dsdata.txt to determine how the superseded data were derived.
DI1075
DI1075_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TCH4126978494(NAD 83)
DI1075
DI1075_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DI1075
DI1075                          STATION DESCRIPTION
DI1075
DI1075'DESCRIBED BY NATIONAL GEODETIC SURVEY 2011
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DI1075'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
DI1075'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DI1075'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DI1075'   ftp://cors.ngs.noaa.gov/cors/README.txt
DI1075'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DI1075'   ftp://cors.ngs.noaa.gov/cors/station_log
DI1075'   http://geodesy.noaa.gov/CORS

DL7764 ***********************************************************************
DL7764  CORS        -  This is a GPS Continuously Operating Reference Station.
DL7764  DESIGNATION -  GUNSTOCKMRNH2008 CORS ARP
DL7764  CORS_ID     -  P776
DL7764  PID         -  DL7764
DL7764  STATE/COUNTY-  NH/BELKNAP
DL7764  COUNTRY     -  US
DL7764  USGS QUAD   -  LACONIA (1987)
DL7764
DL7764                         *CURRENT SURVEY CONTROL
DL7764  ______________________________________________________________________
DL7764* NAD 83(2011) POSITION- 43 32 35.72074(N) 071 22 42.78910(W)   ADJUSTED
DL7764* NAD 83(2011) ELLIP HT-   478.115 (meters)        (08/??/11)   ADJUSTED
DL7764* NAD 83(2011) EPOCH   -  2010.00
DL7764* NAVD 88 ORTHO HEIGHT -          **(meters)           **(feet)
DL7764  ______________________________________________________________________
DL7764  NAD 83(2011) X  -  1,478,720.906 (meters)                    COMP
DL7764  NAD 83(2011) Y  - -4,388,495.429 (meters)                    COMP
DL7764  NAD 83(2011) Z  -  4,371,775.924 (meters)                    COMP
DL7764  GEOID HEIGHT    -        -27.16  (meters)                    GEOID12A
DL7764
DL7764.Formal positional accuracy estimates are not available for this CORS
DL7764.because its coordinates were determined in part using modeled
DL7764.velocities. Approximate one-sigma accuracies for latitude, longitude,
DL7764.and ellipsoid height can be obtained from the short-term time series.
DL7764.Additional information regarding modeled velocities is available on
DL7764.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
DL7764
DL7764.The coordinates were established by GPS observations
DL7764.and adjusted by the National Geodetic Survey in August 2011.
DL7764
DL7764.NAD 83(2011) refers to NAD 83 coordinates where the reference
DL7764.frame has been affixed to the stable North American Tectonic Plate.
DL7764
DL7764.The coordinates are valid at the epoch date displayed above
DL7764.which is a decimal equivalence of Year/Month/Day.
DL7764
DL7764.The PID for the CORS L1 Phase Center is DL7765.
DL7764
DL7764.The XYZ, and position/ellipsoidal ht. are equivalent.
DL7764
DL7764.The ellipsoidal height was determined by GPS observations
DL7764.and is referenced to NAD 83.
DL7764
DL7764. The following values were computed from the NAD 83(2011) position.
DL7764
DL7764;                    North         East     Units Scale Factor Converg.
DL7764;SPC NH       -   115,935.046   323,284.302   MT  0.99997333   +0 11 54.5
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DL7764;SPC NH       -   380,363.56  1,060,641.91   sFT  0.99997333   +0 11 54.5
DL7764
DL7764!             -  Elev Factor  x  Scale Factor =   Combined Factor
DL7764!SPC NH       -   0.99992503  x   0.99997333  =   0.99989836
DL7764
DL7764                          SUPERSEDED SURVEY CONTROL
DL7764
DL7764  NAD 83(CORS)-  43 32 35.72115(N)    071 22 42.78998(W) AD(2002.00) c
DL7764  ELLIP H (05/??/10)  478.109  (m)                      GP(2002.00) c c
DL7764
DL7764.Superseded values are not recommended for survey control.
DL7764
DL7764.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
DL7764.See file dsdata.txt to determine how the superseded data were derived.
DL7764
DL7764_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TCJ0784123893(NAD 83)
DL7764
DL7764_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
DL7764
DL7764                          STATION DESCRIPTION
DL7764
DL7764'DESCRIBED BY NATIONAL GEODETIC SURVEY 2011
DL7764'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
DL7764'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
DL7764'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
DL7764'   ftp://cors.ngs.noaa.gov/cors/README.txt
DL7764'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
DL7764'   ftp://cors.ngs.noaa.gov/cors/station_log
DL7764'   http://geodesy.noaa.gov/CORS

AJ2693 ***********************************************************************
AJ2693  CORS        -  This is a GPS Continuously Operating Reference Station.
AJ2693  DESIGNATION -  MTS YARMOUTH COOP CORS ARP
AJ2693  CORS_ID     -  YMTS
AJ2693  PID         -  AJ2693
AJ2693  STATE/COUNTY-  ME/CUMBERLAND
AJ2693  COUNTRY     -  US
AJ2693  USGS QUAD   -  YARMOUTH (1975)
AJ2693
AJ2693                        *CURRENT SURVEY CONTROL
AJ2693  ______________________________________________________________________
AJ2693* NAD 83(2011) POSITION- 43 47 54.60868(N) 070 11 20.29744(W)   ADJUSTED
AJ2693* NAD 83(2011) ELLIP HT-    14.066 (meters)        (08/??/11)   ADJUSTED
AJ2693* NAD 83(2011) EPOCH   -  2010.00
AJ2693* NAVD 88 ORTHO HEIGHT -          **(meters)          **(feet)
AJ2693  ______________________________________________________________________
AJ2693  NAD 83(2011) X  -  1,562,759.145 (meters)                     COMP
AJ2693  NAD 83(2011) Y  - -4,338,110.364 (meters)                     COMP
AJ2693  NAD 83(2011) Z  -  4,391,969.129 (meters)                     COMP
AJ2693  GEOID HEIGHT    -        -26.16  (meters)                     GEOID12A
AJ2693
AJ2693.Formal positional accuracy estimates are not available for this CORS
AJ2693.because its coordinates were determined in part using modeled
AJ2693.velocities. Approximate one-sigma accuracies for latitude, longitude,
AJ2693.and ellipsoid height can be obtained from the short-term time series.
AJ2693.Additional information regarding modeled velocities is available on
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AJ2693.the CORS Coordinates and Multi-Year CORS Solution FAQ web pages.
AJ2693
AJ2693.The coordinates were established by GPS observations
AJ2693.and adjusted by the National Geodetic Survey in August 2011.
AJ2693
AJ2693.NAD 83(2011) refers to NAD 83 coordinates where the reference
AJ2693.frame has been affixed to the stable North American Tectonic Plate.
AJ2693
AJ2693.The coordinates are valid at the epoch date displayed above
AJ2693.which is a decimal equivalence of Year/Month/Day.
AJ2693
AJ2693.The PID for the CORS L1 Phase Center is DI2105.
AJ2693
AJ2693.The XYZ, and position/ellipsoidal ht. are equivalent.
AJ2693
AJ2693.The ellipsoidal height was determined by GPS observations
AJ2693.and is referenced to NAD 83.
AJ2693
AJ2693. The following values were computed from the NAD 83(2011) position.
AJ2693
AJ2693;                    North         East     Units Scale Factor Converg.
AJ2693;SPC ME W     -   107,225.886   898,205.030   MT  0.99996671   -0 00 55.6
AJ2693;SPC ME W     -   351,790.26  2,946,861.00   sFT  0.99996671   -0 00 55.6
AJ2693
AJ2693!             -  Elev Factor  x  Scale Factor =   Combined Factor
AJ2693!SPC ME W     -   0.99999779  x   0.99996671  =   0.99996450
AJ2693
AJ2693                          SUPERSEDED SURVEY CONTROL
AJ2693
AJ2693  NAD 83(CORS)-  43 47 54.61001(N)    070 11 20.29876(W) AD(2002.00) c
AJ2693  NAD 83(CORS)-  43 47 54.61001(N)    070 11 20.29876(W) AD(2002.00) c
AJ2693  ELLIP H (03/??/02)   14.077  (m)                       GP(2002.00) c c
AJ2693  ELLIP H (03/??/02)   14.077  (m)                       GP(2002.00) c c
AJ2693
AJ2693.Superseded values are not recommended for survey control.
AJ2693
AJ2693.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AJ2693.See file dsdata.txt to determine how the superseded data were derived.
AJ2693
AJ2693_U.S. NATIONAL GRID SPATIAL ADDRESS: 19TDJ0435250180(NAD 83)
AJ2693
AJ2693_MARKER: STATION IS THE ANTENNA REFERENCE POINT OF THE GPS ANTENNA
AJ2693_MARK LOGO: NONE
AJ2693_MAGNETIC: O = OTHER; SEE DESCRIPTION
AJ2693
AJ2693                          STATION DESCRIPTION
AJ2693
AJ2693'DESCRIBED BY NATIONAL GEODETIC SURVEY 2011
AJ2693'STATION IS A GPS CORS.  LATEST INFORMATION INCLUDING POSITIONS AND
AJ2693'VELOCITIES ARE AVAILABLE IN THE COORDINATE AND LOG FILES ACCESSIBLE
AJ2693'BY ANONYMOUS FTP OR THE WORLDWIDE WEB.
AJ2693'   ftp://cors.ngs.noaa.gov/cors/README.txt
AJ2693'   ftp://cors.ngs.noaa.gov/cors/coord/coord_08
AJ2693'   ftp://cors.ngs.noaa.gov/cors/station_log
AJ2693'   http://geodesy.noaa.gov/CORS
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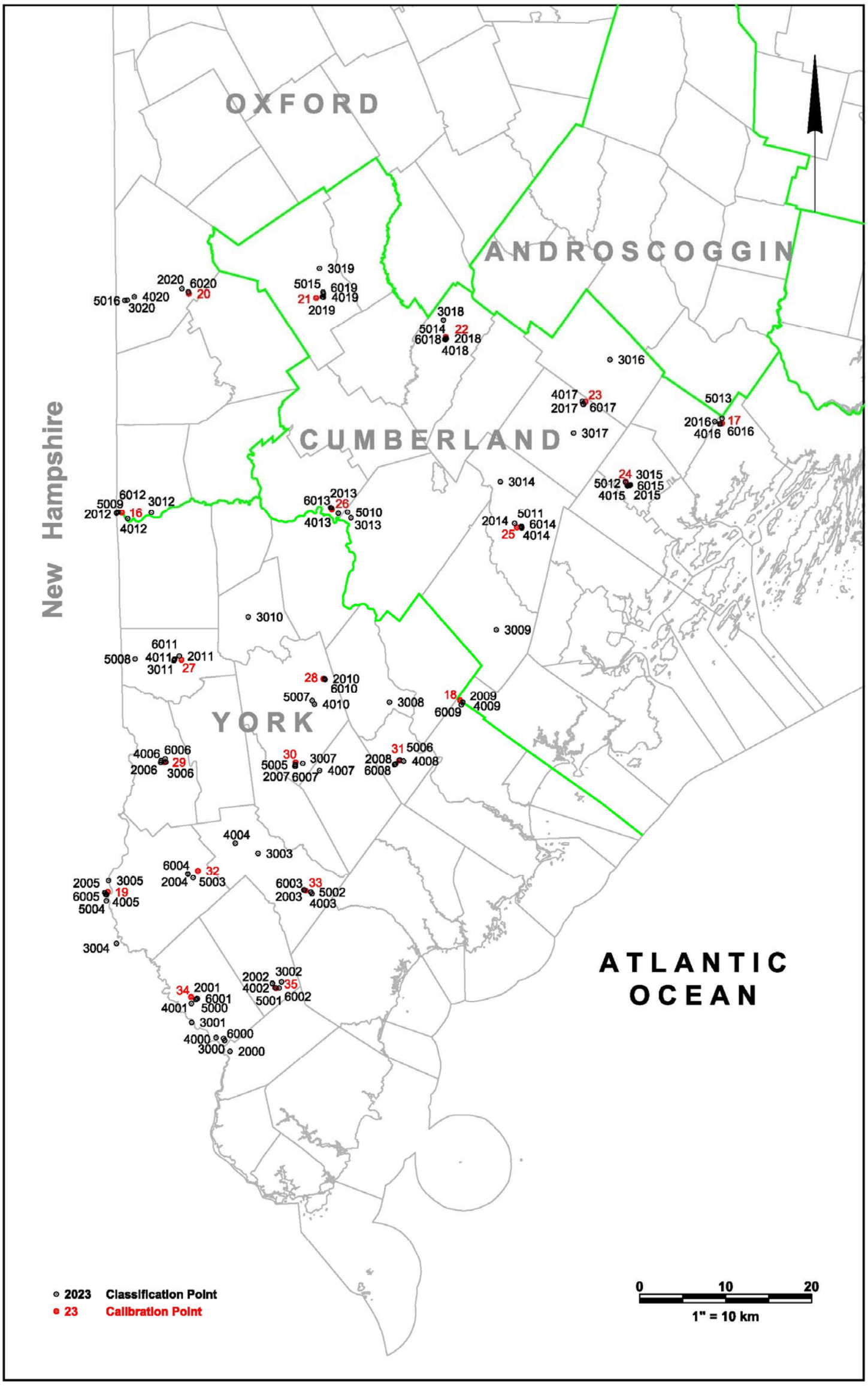
Additional Commercial CORS used for RTK and Rapid Static solutions. Stations operated by or in conjunction with, and Data served by, Maine Technical Source, Yarmouth, Maine. (Confirmed using NGS OPUS solutions.)

SITE	Latitude	Longitude	El. Height
BMTS	43° 14'05.59468" N	70d48'35.14784" W	21.928 m
KENN	43° 23'25.00657" N	70d35'49.77857" W	30.714 m
LMTS	44° 04'01.50563" N	70d11'20.29030" W	66.528 m
TMTS	43° 27'50.81581" N	71d33'31.85207" W	141.805 m

SECTION 5: CALIBRATION AND CLASSIFICATION CONTROL POINT DIAGRAMS

This section contains a map of the ground control and check point stations for the 2013 USGS NRCS Maine LIDAR Project-Cumberland, Kennebec & York Counties.

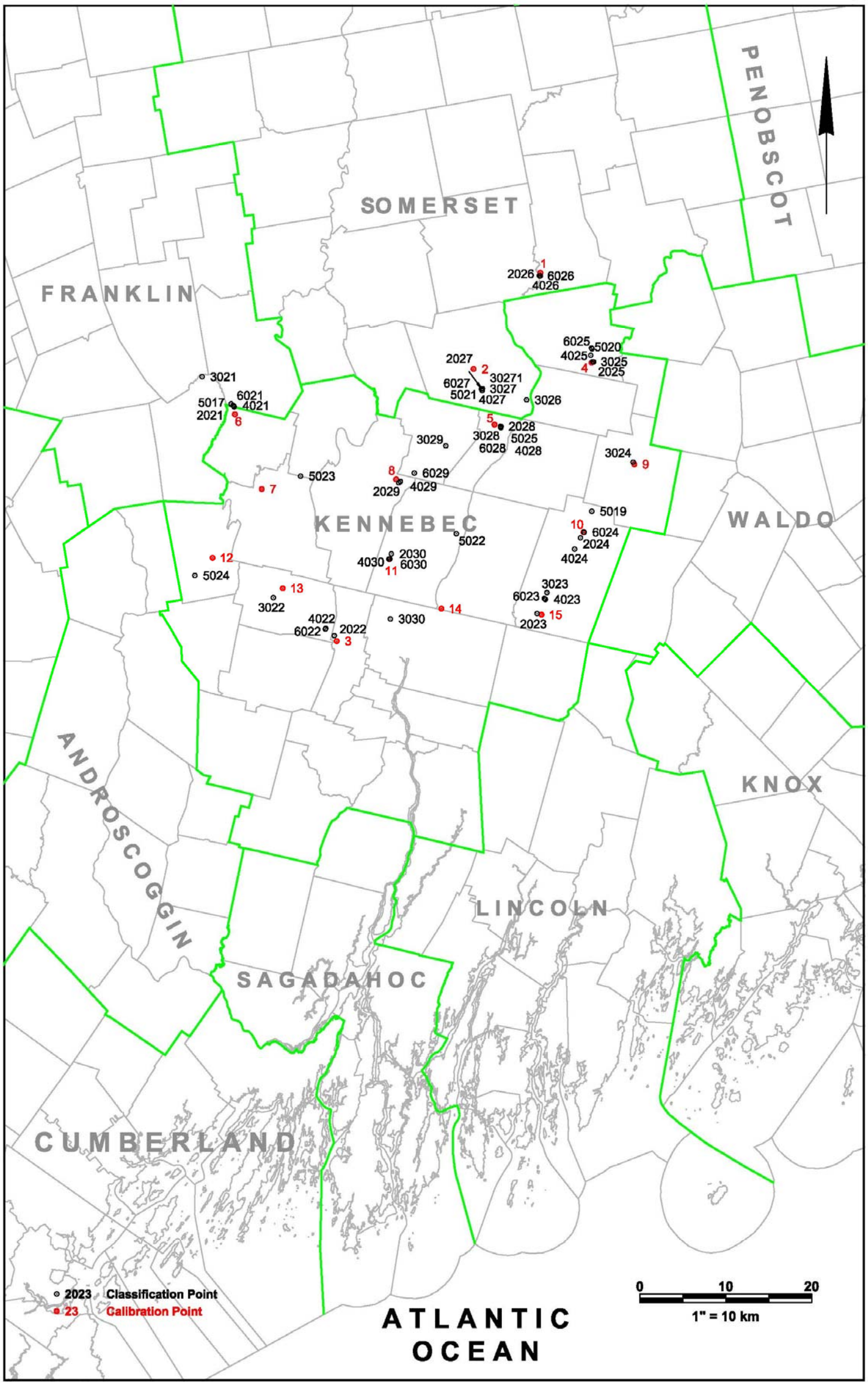


SHYKA, SHEPPARD & GARSTER
Land Surveyors

2013 USGS NCRS MAINE LIDAR PROJECT
Cumberland, Kennebec & York Counties, ME
Winter 2013/2014

Horizontal & Vertical Control
NAD83, UTM ZONE 19N
NAVD88/GEOID12A
(meters)

WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE



SHYKA, SHEPPARD & GARSTER
Land Surveyors

2013 USGS NCRS MAINE LIDAR PROJECT
Cumberland, Kennebec & York Counties, ME
Winter 2013/2014

Horizontal & Vertical Control
NAD83, UTM ZONE 19N
NAVD88/GEOID12A
(meters)

WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE