2 Qualifications

2.1 Contractor Information

Michael Terner, Executive Vice President, GISP
Applied Geographics, Inc.
24 School Street, Suite 500
Boston, MA 02108

mterner@appgeo.com; 617-447-2468

2.2 Company Capabilities

Applied Geographics, Inc. (AppGeo, www.AppGeo.com) provides a complete range of high quality Geographic Information Systems (GIS) and GIS-related Information Technology (IT) consulting services and innovative solutions.

Now in its **21st year in business**, AppGeo has completed more than 600 GIS consulting projects for a government and private-sector clients in a number of markets and industries in more than 35 states and territories.

AppGeo's mission is to empower people to put GIS to work every day through the intelligent use of geographic data and applications that improve work flows and increase services.

AppGeo is a **full-service GIS consulting** firm. AppGeo helps its clients to put GIS technology to work in all of the following ways:

- GIS strategic and business planning, needs assessment, implementation planning
- Geospatial data modeling, data development and integration
- GPS-based data collection
- Custom applications for desktop, Web and mobile platforms
- Cartography and Spatial Analysis
- Training and Technical support
- Hosting of Web applications

AppGeo maintains **expertise in GIS and GIS-related IT technologies**, including Esri and Open Source GIS software. AppGeo evaluates new technologies, and maintains its own geospatial applications code base and innovative solutions, such as MapGeo™ and GPV® web mapping applications. AppGeo is an award-winning Esri Business Partner.

In all of its work, AppGeo brings an **independent and objective view** to determine the best fit between its client's situation (goals, resources, business drivers, and legacy investments) and available GIS/IT technologies (state-of-the-art methods, best practices, software platforms, system architectures, development environments, data resources, and costs).

AppGeo **professional staff** expertise covers all aspects of GIS consulting and programming:

- PMI-certified project managers
- System architects, application designers and programmers
- Database developers, data automation specialists
- Web-mapping and Web-based data integration specialists
- Cartographers and GIS analysts
- Trainers and technical support and system administration specialists

AppGeo experience includes **all levels of government**: Federal, State, Regional, County and Municipal.

AppGeo has worked in many **key markets and sectors** giving us a breadth of knowledge and experience so that we can understand and meet your needs. We are able to apply GIS in all of the following types of sectors and subject areas:

- Homeland Security, Public Safety, Emergency Management
- Public Works, Utilities, Infrastructure and Facility Management
- Environmental Management, Resource Conservation
- Land Use Planning
- Taxation and Assessing
- Transportation
- Telecommunications and Broadband
- Economic Development, Regional Planning, Real Estate
- Educational Institutions
- Public Health and Health Care
- Non-profit and Private Sector Businesses

2.3 Related Work, Qualifications and Experience

Our experience is suited perfectly to helping the Town of Raymond. Specifically, we have maintained long-term GIS support relationships with municipalities through which we have provided a mix of onsite and offsite services covering a full range of GIS tasks, from data collection to application development, custom cartography to GIS analysis, needs assessment to system integration, technical support to training.

By way of example, the following are a small selection of municipalities with whom we have worked over a multi-year time frame through a combination of projects and technical assistance contracts. For most of these we have current implementation assistance or web-hosting support contracts in place.

In our descriptions below, we note the activities performed and highlight technical competencies thereby demonstrating the congruence of our experience and expertise with the technology platforms and types of service that are relevant for Raymond.

Acton, MA – ***2007 – present***. Support for Acton has included: GIS implementation services, integration of street level photography into an interactive web mapping application, parcel updates and realignment, ArcGIS training classes, cemetery database and management system and GIS viewer, zoning layer automation, customization of Esri ArcCatalog Metadata Editor, onsite training for parcel data editing, consulting on permitting sytems, hosting for cemetery and GIS websites (http://host.appgeo.com/ActonMA/).

Beverly, MA – ***2005 – present***. Support for Beverly over the years has included: street centerline data development, drainage data, GIS website, GIS support for pavement management system, sidewalk data development, hosting and website update to MapGeo (www.mapgeo.com/beverlyma).

East Hampton, CT – ***2007 – present***. Support for East Hampton over the years has included parcel data layer development and updates, website development and hosting, GIS to CAD data conversion, conservation map development, implementation assistance, digitizing sanitary sewer maps, stormwater and system data maintenance.

Gloucester, MA – ***2004, 2010-present***. Support for Gloucester started with Sewer and Water system mapping in 2004. More recently, AppGeo has helped the city to manage acquisition of aerial imagery and base map data layers, delivered a custom website,

installed AppGeo's GPV® web mapping application, and assisted with parcel annotation and utility data automation.

Grafton, MA – ***2003 – present***. Support for Grafton has included zoning layer automation, parcel data development and quality control, onsite training in GIS software, annual parcel updates, development of a municipal web mapping website, base map development RFP and quality control services on data deliverables, assessments of permitting workflow and systems, implementation assistance, deployment of AppGeo's MapGeo web application (http://www.mapgeo.com/graftonma/).

Lebanon, NH – *2008-present*. AppGeo has provided training and technical support to the Town, as well as designed and built a custom Web mapping site that it maintains and upgrades (http://ims.lebcity.com/LebCityAGS/).

Lincoln, RI – ***2008 – present***. Support for Lincoln over the years has included: parcel updates and atlas production, sewer data conversion to GIS, historic district overlay mapping, onsite data and software installation and support, onsite and remote training and technical support, voting and council redistricting mapping, deployment of MapGeo (http://www.mapgeo.com/lincolnri/).

Manchester-by-the-Sea, MA – *2003 – present.* Support for Manchester-by-the-Sea has included parcel automation and updates, utility geodatabase design and utility data automation, website development and enhancement, and implementation assistance and website maintenance contracts. AppGeo currently hosts the Town's website (http://host.appgeo.com/manchesterma).

North Attleborough Electric Department, MA – ***2007-2010***. AppGeo provided a steady stream of onsite support for NAED, which at various times involved a dedicated staff who spent one to one-half day per week working onsite.

North Attleborough, MA – ***2004 – present.*** Support for North Attleborough has included: ArcGIS training, support for vendor selection for topographic data updates, water system data updates, onsite technical support and training, parcel updates, QC for orthophoto and topography data, GPV and MapGeo web mapping application installation, onsite support for DPW staff.

Raynham, MA – *2003 – present.* Support for Raynham has included GIS implementation assistance consulting, custom web GIS application, parcel data conformance to the Massachusetts' standard, stormwater system data development, outfall mapping, implementation of MapGeo (www.mapgeo.com/raynhamma).

South Portland, ME – ***2007 – present***. AppGeo designed and developed and continues to maintain, update and host South Portland's Online Property Viewer and GIS mapping website (http://host.appgeo.com/SouthPortlandME/). The application uses ArcGIS Server for serving the maps.

Taunton, MA – ***2004 – present***. Support for Taunton has included water system data conversion from CAD, cemetery mapping and custom cemetery GIS website, wetlands permitting and regulation application design and development, annual parcel updates and map production, zoning maps, custom map for snow plow routing, custom application for linking City documents, scanned images, plans, as-builts, photos, etc, with geographic features, and onsite support and training.

2.4 Demonstration of Technical Competencies

ArcGIS – AppGeo is a longstanding Esri Business Partner and well-versed in Esri ArcGIS software. AppGeo is current with the latest version of ArcGIS, and attends business partner and developer events throughout the year. For each of the projects listed in the previous section, we worked with the Esri software platform I one form or another: providing training, using the software to make edits or updates, and defining and loading data using the Geodatabase, as well as using the software to make maps, perform analysis, etc. AppGeo also has extensive experience building applications on the Esri platform. By way of example, the above referenced applications for South Portland, ME, Lebanon, NH, and Acton, MA are just three examples of custom Web mapping applications that we built that utilize ArcGIS Server to deliver maps to the browser.

Open Source GIS Software – AppGeo is experienced with the entire OpenGeo suite: GeoServer, GeoServer Web Cache (GWC), and PostGIS. We have built several applications with Open Source platform technologies, including Broadband Mapping applications for Oklahoma (http://broadbandmapping.ok.gov/OKInteractiveMap.aspx) and Massachusetts (http://mapping.massbroadband.org/MAInteractiveMap.aspx), as well as AppGeo's MapGeo web mapping application, which is currently deployed in more than 15 communities (www.mapgeo.com, and see Section 4 below).

AutoCAD Map – AppGeo uses AutoCAD Map 3d 2010 to automate spatial data on selected projects, including parcel data, water, sewer, and storm data, and other data layers. For Wannacomet Water Company on Nantucket, AppGeo automated their entire water system network from scanned maps using AutoCAD. For Glastonbury, CT, AppGeo has developed a workflow that accommodates their desire to work in CAD as well as have a GIS website. AppGeo created Python scripts that allow the Town to

extract and load their CAD data to GIS after which additional reference attributes are added, and AppGeo also created scripts to transform GIS data back to CAD formats. This covered storm, sewer, and water systems data. AppGeo is currently doing parcel data layer clean up using AutoCAD for the Town.

Trimble – AppGeo owns a Trimble GeoXT, purchased in 2012. We have used this and other Trimble devices to collect location data and attributes, including work in the following municipalities:

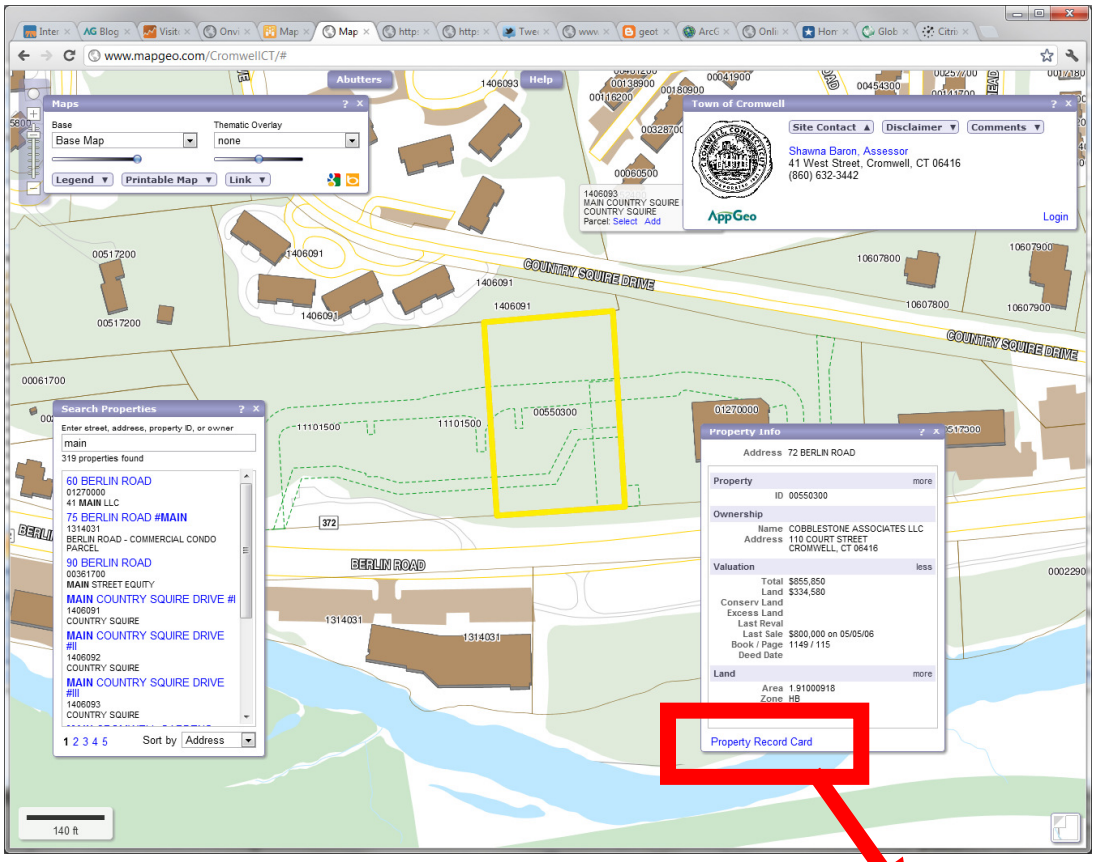
- Northborough MA – drainage outfall location mapping
- Stratford CT - drainage outfall location mapping
- Norwalk, CT - water system mapping
- Cromwell, CT - stormwater system mapping.

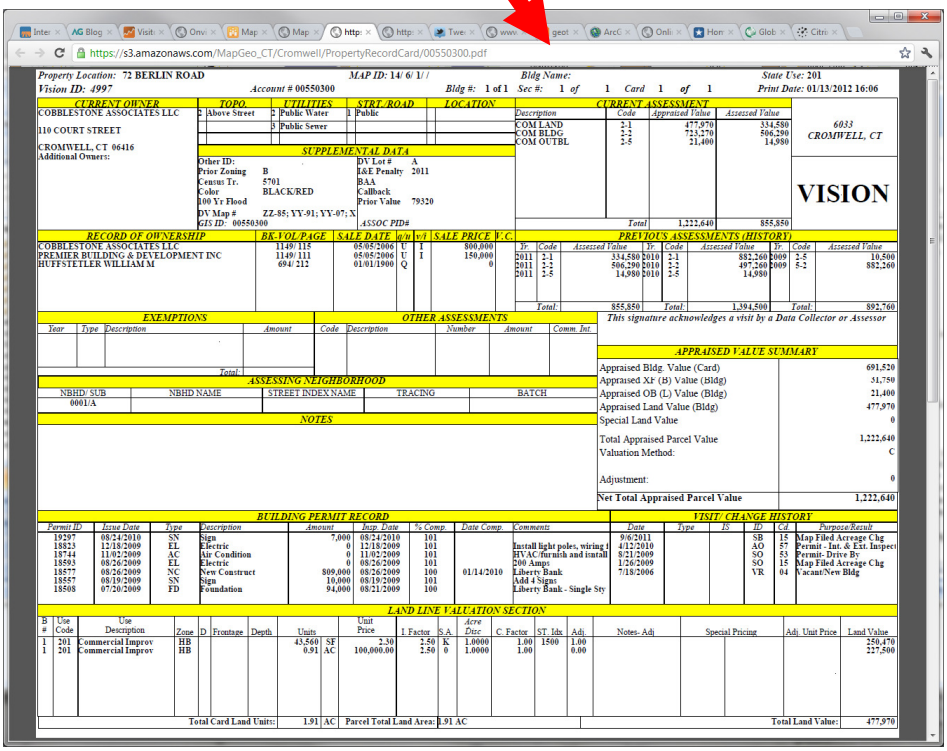
Vision Appraisal Database system – AppGeo has extensive familiarity with Vision Appraisal based on its work with municipalities that are using Vision, and based on work directly for Vision to study, advise, and develop components for mapping. In addition, AppGeo has developed MapGeo so that it can display Vision Appraisal property record cards for properties selected through the MapGeo application.

AppGeo has worked with many municipalities that use Vision software, among which are the following:

- Cumberland, ME
- Cromwell, CT
- Darien, CT
- Dartmouth, MA
- Gloucester, MA
- Groton, MA
- Millbury, MA
- Nantucket, MA
- Newton, MA
- Old Lyme, CT
- Quincy, MA
- Spencer, MA

For several of these municipalities, AppGeo has integrated GIS applications with the Vision data and property record cards as illustrated below for Cromwell, CT (www.mapgo.com/cromwellct). After a property is selected on the map, one click on the Property Record Card link delivers the Vision property record data.


www.mapgeo.com/CromwellCT/#
Maps
Base
Base Map
Thematic Overlay
none
Legend
Printable Map
Link
Abutters
Help
Town of Cromwell
Site Contact
Disclaimer
Comments
Shawna Baron, Assessor
41 West Street, Cromwell, CT 06416
(860) 632-3442
AppGeo
Login
COUNTRY SQUIRE DRIVE
BERLIN ROAD
Search Properties
Enter street, address, property ID, or owner
main
319 properties found
60 BERLIN ROAD
01270000
41 MAIN LLC
75 BERLIN ROAD #MAIN
1314031
BERLIN ROAD - COMMERCIAL CONDO PARCEL
90 BERLIN ROAD
00361700
MAIN STREET EQUITY
MAIN COUNTRY SQUIRE DRIVE #I
1406091
COUNTRY SQUIRE
MAIN COUNTRY SQUIRE DRIVE #II
1406092
COUNTRY SQUIRE
MAIN COUNTRY SQUIRE DRIVE #III
1406093
COUNTRY SQUIRE
1 2 3 4 5
Sort by Address
Property Info
Address 72 BERLIN ROAD
Property
ID 00550300
Ownership
Name COBBLESTONE ASSOCIATES LLC
Address 110 COURT STREET
CROMWELL, CT 06416
Valuation
Total $855,850
Land $334,580
Conserv Land
Excess Land
Last Reval
Last Sale $800,000 on 05/05/06
Book / Page 1149 / 115
Deed Date
Land
Area 1.91000918
Zone HB
Property Record Card
140 ft


https://s3.amazonaws.com/MapGeo_CT/Cromwell/PropertyRecordCard/00550300.pdf
Property Location: 72 BERLIN ROAD
MAP ID: 14/ 6/ 1/ /
Bldg Name:
State Use: 201
Vision ID: 4997
Account # 00550300
Bldg #: 1 of 1
Sec #: 1 of 1
Card 1 of 1
Print Date: 01/13/2012 16:06
CURRENT OWNER
COBBLESTONE ASSOCIATES LLC
110 COURT STREET
CROMWELL, CT 06416
Additional Owners:
TOPO. UTILITIES STRT./ROAD LOCATION
Above Street
Public Water
Public Sewer
Public
CURRENT ASSESSMENT
Description Code Appraised Value Assessed Value
COM LAND 2-1 477,970 334,580
COM BLDG 2-2 723,270 506,290
COM OUTBL 2-5 21,400 14,980
Total 1,222,640 855,850
6033
CROMWELL, CT
VISION
SUPPLEMENTAL DATA
Other ID:
Prior Zoning B
Census Tr. 5701
Color BLACK/RED
100 Yr Flood
DV Map # ZZ-85; YY-91; YY-07; X
GIS ID: 00550300
DV Lot # A
I&E Penalty 2011
BAA
Callback
Prior Value 79320
ASSOC PID#
RECORD OF OWNERSHIP
BK-VOL/PAGE SALE DATE SALE PRICE
COBBLESTONE ASSOCIATES LLC 1149/ 115 05/05/2006 U I 800,000
PREMIER BUILDING & DEVELOPMENT INC 1149/ 111 05/05/2006 U I 150,000
HUFFSTETLER WILLIAM M 694/ 212 01/01/1900 Q 0
PREVIOUS ASSESSMENTS (HISTORY)
Total: 855,850 Total: 1,394,500 Total: 892,760
EXEMPTIONS
OTHER ASSESSMENTS
This signature acknowledges a visit by a Data Collector or Assessor
APPRAISED VALUE SUMMARY
Appraised Bldg. Value (Card) 691,520
Appraised XF (B) Value (Bldg) 51,750
Appraised OB (L) Value (Bldg) 21,400
Appraised Land Value (Bldg) 477,970
Special Land Value 0
Total Appraised Parcel Value 1,222,640
Valuation Method: C
Adjustment: 0
Net Total Appraised Parcel Value 1,222,640
ASSESSING NEIGHBORHOOD
NBHD/ SUB NBHD NAME STREET INDEX NAME TRACING BATCH
0001/A
NOTES
BUILDING PERMIT RECORD
VISIT/ CHANGE HISTORY
LAND LINE VALUATION SECTION
Total Card Land Units: 1.91 AC
Parcel Total Land Area: 1.91 AC
Total Land Value: 477,970

Other technologies with which AppGeo is familiar and works regularly include:

- **Relational Database Management Systems** (Oracle, ArcSDE, SQLServer, PostgreSQL,PostGIS, MSAccess, MySQL, SQL-Lite).
- **Safe Software FME** - Data integration and conversion software
- **Aerial Photography and Base Map Specification**, Data Processing, QA/QC
- **Programming and applications software, environments, and tools** - .NET, AJAX, Visual Studio.NET, VB, VB.NET, C#, JavaScript, ArcGIS Server, ASP.NET, AJAX, ArcObjects, Python scripting
- **Data and imagery compression software** (Mr.SID) and tiling and caching methods

AppGeo also maintains a **secure hosting infrastructure** at its Boston Office, and we have extensive experience managing and administering the hosting of GIS applications in the **Cloud**, including all of our MapGeo websites.

2.5 Work References

Thomas Carrellas, Data Manager IT
City of South Portland
City Hall
25 Cottage Road
South Portland, ME 04106
(207) 767-7623; tcarrellas@southportland.org

Ginny Thompson, Assessor
Town of Manchester-by-the-Sea
10 Central St.
Manchester-by-the-Sea, MA 01944
(978) 526-2010; thompsong@manchester.ma.us

Mark Goodwin, Senior Planner / GIS Coordinator
City of Lebanon
51 N. Park Street
Lebanon, NH 01970
(603) 442-6135; Mark.Goodwin@lebcity.com

Paul Keane, City Engineer
Department of Public Works - Engineering Division
City Hall Annex
3 Pond Road
Gloucester, MA 01930
(978) 281-9773; pkeane@gloucester-ma.gov

2.6 Current Clients and Workload

With a staff of 30 GIS professionals (and growing), AppGeo has the capacity to manage and perform large and small projects and to maintain a portfolio of many active projects. We routinely have a portfolio of municipal projects that numbers 30-40 projects that are are of varied size, duration, and in various stages of implementation.

As described in Section 3.3, we have well-established systems and protocols for managing multiple projects and tracking progress, staff assignments, deliverables and client relationships throughout the project lifecycle.

A list of current municipal clients – awarded and/or active contracts as of this date - includes the following (this does not include web-hosting contracts nor does it include state-level projects outside of the region):

- Acton, MA
- Cape Cod Commission
- Cambridge, MA
- Carroll County, VA
- Chelmsford, MA
- Cumberland, ME
- Cumberland, RI
- East Longmeadow, MA
- Gloucester, MA
- Grafton, MA
- Groton, MA
- Lakes Region Planning Commission, NH
- Lincoln, RI
- Manchester-by-the-Sea, MA
- Milton, MA
- Nantucket, MA
- Needham, MA
- North Attleborough Electric Department, MA
- North Reading, MA
- Northborough, MA
- Pittsfield, MA
- Randolph, MA
- Raynham, MA
- Sandwich, MA
- Smithfield, RI
- Tiverton, RI
- Vernon, CT
- Westbrook, CT