



Real Property Tax Committee

Tuesday, July 2, 2024 2:30PM

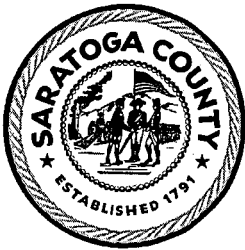
40 McMaster Street, Ballston Spa, NY

Chair: Eric Connolly

Members: JD Arnold, Jesse Fish, Sandra Winney VC, Cynthia Young

Agenda

- I. Welcome and Attendance
- II. Approval of the minutes of the April 3, 2024 meeting
- III. 2024 1st Quarter Report – Julie Bosley, County Auditor
- IV. Authorizing an agreement with LiRo GIS, Inc. d/b/a LiRo-Hill to perform GIS conversion services – Anna Stanko, Real Property Tax
- V. Other Business
- VI. Adjournment



SARATOGA COUNTY AGENDA ITEM REQUEST

TO: Steve Bulger, County Administrator
Ridge Harris, Deputy County Administrator
George Conway, County Attorney
Therese Connolly, Clerk of the Board
Stephanie Hodgson, Director of Budget

CC: John Warmt, Director of Purchasing
Jason Kemper, Director of Planning and Economic Development
Bridget Rider, Deputy Clerk of the Board
Matt Rose, Management Analyst
Audra Hedden, County Administrator's Office
Samantha Kupferman, County Attorney's Office

DEPARTMENT: County Auditor

DATE: 06/24/2024

COMMITTEE: Real Property Tax

This column must be completed
prior to submission of the request.

County Attorney's Office
Consulted **Yes**

1. Is a Resolution Required:

No, Other

2. Proposed Resolution Title:

N/A

3. Specific Details on what the resolution will authorize:

N/A

4. Is a Budget Amendment needed: YES or NO
If yes, budget lines and impact must be provided.
Any budget amendments must have equal and offsetting entries.

County Administrator's Office
Consulted Yes

Please see attachments for impacted budget lines.
(Use ONLY when more than four lines are impacted.)

Revenue

Account Number	Account Name	Amount
----------------	--------------	--------

Expense

Account Number	Account Name	Amount
----------------	--------------	--------

Fund Balance (if applicable): (Increase = additional revenue, Decrease = additional expenses)

Amount:

5. Identify Budget Impact (Required):

No Budget Impact

- a. G/L line impacted
- b. Budget year impacted
- c. Details

6. Are there Amendments to the Compensation Schedule?

YES or NO (If yes, provide details)

a. Is a new position being created? Y N

Effective date

Salary and grade

b. Is a new employee being hired? Y N

Effective date of employment

Salary and grade

Appointed position:

Term

c. Is this a reclassification? Y N

Is this position currently vacant? Y N

Is this position in the current year compensation plan? Y N

7. Does this item require the awarding of a contract: Y N

a. Type of Solicitation

b. Specification # (BID/RFP/RFQ/OTHER CONTRACT #)

c. If a sole source, appropriate documentation, including an updated letter, has been submitted and approved by Purchasing Department? Y N N/A

d. Vendor information (including contact name):

e. Is the vendor/contractor an LLC, PLLC, or partnership:

f. State of vendor/contractor organization:

g. Commencement date of contract term:

h. Termination of contract date:

i. Contract renewal date and term:

k. Is this a renewal agreement: Y N

l. Vendor/Contractor comment/remarks:

Human Resources Consulted
No

Purchasing Office Consulted

County Administrator's Office
Consulted

8. Is a grant being accepted: YES or NO

- a. Source of grant funding:
- b. Agency granting funds:
- c. Amount of grant:
- d. Purpose grant will be used for:
- e. Equipment and/or services being purchased with the grant:
- f. Time period grant covers:
- g. Amount of county matching funds:
- h. Administrative fee to County:

9. Supporting Documentation:

- Marked-up previous resolution
- No Markup, per consultation with County Attorney
- Information summary memo
- Copy of proposal or estimate
- Copy of grant award notification and information
- Other Auditors Quarterly Report

10. Remarks:

Attached is the Auditors Quarterly Report for Review by the Committee. The report provides a breakdown of the corrections and refunds that were processed by the Auditors Office during the first quarter of 2024.



**OFFICE OF THE
COUNTY AUDITOR**

518.884.4745

SARATOGACOUNTYNY.GOV

40 MC MASTER ST, BALLSTON SPA, NY 12020

TO: Real Property Tax Committee
Supervisor Eric Connolly, Chairman

FROM: Julie Bosley, Deputy Chief Auditor

DATE: June 24, 2024

RE: Q1 2024 Adjustments to Real Property Tax Assessments

Attached are the adjustments to the Real Property Tax assessments processed and approved by the Auditor's office during the first quarter of 2024. A summary of this quarter's approvals is provided below:

Saratoga County Real Property Tax Adjustments, Not to Exceed \$2,500 – Q1 2024			
	Corrections	Refunds	Total
January	\$2,987.51	\$0.00	\$2,987.51
February	\$0.00	\$261.28	\$261.28
March	\$0.00	\$815.96	\$815.96
Q1 Total	\$2,987.51	\$1,077.24	\$4,064.75

Of the amounts stated above, there are 9 corrections totaling \$2,987.51. Additionally, there are 17 refunds totaling \$4,064.75.

2024 1st Quarter Auditor's Report

Corrections to Tax Roll

January						
Town	SBL#	Name	Original Tax	Corrected Tax	Difference	Reason
Halfmoon	284.-4-17.3	Camille & Dennis Jr. Ayotte	\$ 1,148.36	\$ 1,119.46	\$ 28.90	The NYS software system failed to apply two Vol Fire exemptions on a parcel towards the qualifying special districts. The system only recognized one exemption.
Clifton Park	258.12-1-24	Anna & Scott Castelli	\$ 1,463.12	\$ 1,424.97	\$ 38.15	The NYS program will not process RPTL466-a correctly for Special Districts when there is more than one exemption on the parcel.
Halfmoon	273.-2-92	Mary V Horner	\$ 4,674.73	\$ 4,387.69	\$ 287.04	The parcel should only have been charged for 1 unit in the consolidated water district
Stillwater	218.20-1-43.2	Thomas J Hill	\$ 6,931.00	\$ 5,381.00	\$ 1,550.00	The number of units charged to the Sewer collector fee district (CF028) was incorrect. This parcel should have been charged for 2 units on the sewer collector fee line.
Clifton Park	288.-2-35.1	Maryanne & Robert Mackey Jr.	\$ 938.71	\$ 900.46	\$ 38.25	Tax program will not process RPTL466-a correctly for Special Districts when there is more than one exemption on the parcel.
Hadley	26.20-1-7.2	Brenda & Robert Ryan	\$ 1,253.92	\$ 841.30	\$ 412.62	The Town of Hadley passed a Local Law amending the sliding scale of the Sr Aged Exemption prior to taxable status date. The assessor failed to apply the Exemption to the
Milton	190.24-1-19	Karlene F. Slayers	\$ 1,045.21	\$ 787.24	\$ 257.97	Property owner entitled to Senior Aged All exemption.
Ballston	249.67-1-28	Saratoga County Sewer District	\$ 315.88	\$ 5.38	\$ 310.50	Per Saratoga County Sewer the sewer unit should be deleted from this parcel.
Clifton Park	265.17-2-17	David & Kalen Stores	\$ 2,092.41	\$ 2,028.33	\$ 64.08	NYS program will not process RPTL466-a correctly for Special Districts when there is more than one exemption on the parcel.
January 2024 Totals			\$ 19,863.34	\$ 16,875.83	\$ 2,987.51	

February						
Town	SBL#	Name	Original Tax	Corrected Tax	Difference	Reason
February Totals			\$ -	\$ -	\$ -	

March						
Town	SBL#	Name	Original Tax	Corrected Tax	Difference	Reason
March Totals			\$ -	\$ -	\$ -	

Quarter One Corrections Totals \$ 19,863.34 \$ 16,875.83 \$ 2,987.51

2024 1st Quarter Auditor's Report

Refunds to Tax Roll

January

Town	SBL#	Name	Original Tax	Corrected Tax	Refund	Reason
January Totals			\$ -	\$ -	\$ -	

February

Town	SBL#	Name	Original Tax	Corrected Tax	Refund	Reason
Hadley	27.18-4-28	Katherine M. Austin	\$ 809.81	\$ 548.53	\$ 261.28	Clerical Error - Town of Hadley passed a local law amending the sliding scale of the Sr. Aged Exemption prior to taxable status date. The assessor failed to apply the exemption to the town portion of the tax bill.
February Totals			\$ 809.81	\$ 548.53	\$ 261.28	

March

Town	SBL#	Name	Original Tax	Corrected Tax	Refund	Reason
Waterford	285.15-1-25	Aaron Tayntor, Jessica Frenyea	\$ 1,872.41	\$ 1,775.04	\$ 97.37	The Veteran's exemption was submitted but was never processed. The Veteran's code that should be applied is 41130 with a 25% or 16,800 exemption amount.
Corinth	58.-2-2	Village of Corinth, West Mountain Rd	\$ 250.28	\$ 151.30	\$ 98.98	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	58.-2-3	Village of Corinth, West Mountain Rd Rear	\$ 187.08	\$ 113.09	\$ 73.99	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	58.-2-4	Village of Corinth, West Mountain Rd Rear	\$ 3.59	\$ 2.17	\$ 1.42	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	58.-2-5	Village of Corinth, West Mountain Rd Rear	\$ 39.50	\$ 23.88	\$ 15.62	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	58.-2-6	Village of Corinth, West Mountain Rd Rear	\$ 100.54	\$ 60.78	\$ 39.76	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	59.-1-25	Village of Corinth, Co Rt 10	\$ 188.17	\$ 113.75	\$ 74.42	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	59.-1-26	Village of Corinth, Co Rt 10	\$ 176.31	\$ 106.58	\$ 69.73	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	59.-2-69.21	Village of Corinth, Wood Road Rear	\$ 45.97	\$ 27.79	\$ 18.18	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	72.-1-8	Village of Corinth, Co. Rt 10	\$ 217.61	\$ 131.55	\$ 86.06	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	72.-1-9	Village of Corinth, Co. Rt 10	\$ 62.84	\$ 37.99	\$ 24.85	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	72.-1-10	Village of Corinth, Co. Rt 10	\$ 87.97	\$ 53.18	\$ 34.79	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	72.-1-11	Village of Corinth, Co. Rt 10	\$ 73.97	\$ 44.71	\$ 29.26	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	72.-1-12	Village of Corinth, Co. Rt 10	\$ 103.42	\$ 62.52	\$ 40.90	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	73.-1-1	Village of Corinth, Co. Rt 10	\$ 151.18	\$ 91.39	\$ 59.79	Based on the Stipulation of the settlement, the fire district is also exempted.
Corinth	73.-2-55	Village of Corinth, Rt 9N Rear	\$ 128.55	\$ 77.71	\$ 50.84	Based on the Stipulation of the settlement, the fire district is also exempted.
March Totals			\$ 3,689.39	\$ 2,873.43	\$ 815.96	

Quarter One Refunds Totals

\$ 4,499.20 \$ 3,421.96 \$ 1,077.24



SARATOGA COUNTY AGENDA ITEM REQUEST

TO: Steve Bulger, County Administrator
Ridge Harris, Deputy County Administrator
George Conway, County Attorney
Therese Connolly, Clerk of the Board
Stephanie Hodgson, Director of Budget

CC: John Warnt, Director of Purchasing
Jason Kemper, Director of Planning and Economic Development
Bridget Rider, Deputy Clerk of the Board
Matt Rose, Management Analyst
Audra Hedden, County Administrator's Office
Samantha Kupferman, County Attorney's Office

DEPARTMENT: Real Property Tax Service Agency




DATE: 6/11/2024

COMMITTEE: Real Property Tax



1. Is a Resolution Required:

Yes, Contract Approval 

2. Proposed Resolution Title:

Authorizing an Agreement with LiRo GIS, Inc. to Perform GIS Conversion Services

3. Specific Details on what the resolution will authorize:

This resolution will authorize the county to enter into a contract for \$39,432.84 with LiRo GIS, Inc. to convert/upgrade current GIS files to ArcPro format.

This column must be completed prior to submission of the request.

County Attorney's Office
Consulted Yes

4. Is a Budget Amendment needed: YES or NO
If yes, budget lines and impact must be provided.
Any budget amendments must have equal and offsetting entries.

County Administrator's Office
Consulted Yes

- Please see attachments for impacted budget lines.
(Use ONLY when more than four lines are impacted.)

Revenue

Account Number	Account Name	Amount
----------------	--------------	--------

Expense

Account Number	Account Name	Amount
----------------	--------------	--------

Fund Balance (if applicable): (Increase = additional revenue, Decrease = additional expenses)

Amount:

5. Identify Budget Impact (**Required**):

No Budget Impact. Funds are included in the Department Budget

- a. G/L line impacted **A.18.000.8190**
- b. Budget year impacted **2024**
- c. Details
\$105,000 was budgeted in this line for the 2024 budget

6. Are there Amendments to the Compensation Schedule?

YES or NO (If yes, provide details)

a. Is a new position being created? Y N

Effective date

Salary and grade

b. Is a new employee being hired? Y N

Effective date of employment

Salary and grade

Appointed position:

Term

c. Is this a reclassification? Y N

Is this position currently vacant? Y N

Is this position in the current year compensation plan? Y N

Human Resources Consulted

7. Does this item require the awarding of a contract: Y N

a. Type of Solicitation RFP

b. Specification # (BID/RFP/RFQ/OTHER CONTRACT #)
24-RFP-RPGSC-1

c. If a sole source, appropriate documentation, including an updated letter, has been submitted and approved by Purchasing Department? Y N N/A

d. Vendor information (including contact name):

LiRo GIS, Inc.
Richard Annitto

e. Is the vendor/contractor an LLC, PLLC, or partnership:

f. State of vendor/contractor organization: **New York**

g. Commencement date of contract term: **July 2024**

h. Termination of contract date:

i. Contract renewal date and term:

k. Is this a renewal agreement: Y N

l. Vendor/Contractor comment/remarks:

Purchasing Office Consulted

County Administrator's Office
Consulted

8. Is a grant being accepted: YES or NO

- a. Source of grant funding:
- b. Agency granting funds:
- c. Amount of grant:
- d. Purpose grant will be used for:
- e. Equipment and/or services being purchased with the grant:
- f. Time period grant covers:
- g. Amount of county matching funds:
- h. Administrative fee to County:

9. Supporting Documentation:

- Marked-up previous resolution
- No Markup, per consultation with County Attorney
- Information summary memo
- Copy of proposal or estimate
- Copy of grant award notification and information
- Other proposed resolution

10. Remarks:



BOARD OF SUPERVISORS

07/16/2024

RESOLUTION Draft 1 – 2024

Introduced by Real Property Tax: Supervisors Connolly, Arnold, Fish, Winney and Young

AUTHORIZING AN AGREEMENT WITH LIRO GIS, INC., D/B/A LIRO-HILL, TO PERFORM GIS CONVERSION SERVICES

WHEREAS, the current ESRI software, ArcMap, which is used by the Real Property Tax Service Agency to maintain municipal Geographic Information Systems (GIS) tax maps and files, will be retired in March 2026; and

WHEREAS, competitive proposals were solicited to provide GIS conversion services (24-RFP-RPGCS-1); and

WHEREAS, LiRo GIS, Inc., d/b/a LiRo-Hill, is a Silver-Tier ESRI business partner that supports ESRI GIS solutions, as well as provides conversion services, technical support, and training; and

WHEREAS, LiRo-Hill is one of the largest GIS Consulting and Implementation firms in the Northeast, with over 40 years of experience providing government organizations with a broad range of Information Technology Solutions; and

WHEREAS, LiRo-Hill has created GIS and tax mapping solutions of varying complexity for clients at all levels of state and local government; and

WHEREAS, our Director of Real Property and the Real Property Committee have recommended that the County enter into an agreement with LiRo GIS, Inc. in an amount not to exceed \$39,432.82, as well as any necessary change orders not to exceed an additional \$3,943.28; now, therefore, be it

RESOLVED, that the Chair of the Board is authorized to execute an agreement with LiRo GIS, Inc., d/b/a LiRo-Hill, of Syosset, New York for the conversion from ESRI's ArcMap to ESRI's ArcPro, including technical and training support, in an amount not to exceed \$39,432.82, as well as any necessary change orders not to exceed an additional \$3,943.28; and be it further

RESOLVED, that the form and content of such agreement is subject to the approval of the County Attorney.

BUDGET IMPACT STATEMENT: No budget impact. Funds are included in the department budget.

PROPOSAL



SARATOGA COUNTY NEW YORK

GIS Conversion Services 24-RFP-RPGCS-1
Saratoga County Department of Central Services
Saratoga County, NY



LiRo GIS, Inc.
A LiRo-Hill Company



April 5, 2024

John Warmt
Director of Purchasing
Saratoga County Department of Central Services
50 West High Street
Ballston Spa, NY 12020

RE: GIS Conversion Services | 24-RFP-RPGCS-1

Dear Mr. Warmt,

LiRo GIS, Inc., d/b/a LiRo-Hill, is submitting this proposal. Effective as of January 27, 2024, Global Infrastructure Solutions Inc. (GISI), the parent company of LiRo GIS, Inc. and Hill International, Inc. consolidated a portion of the highly experienced staff of both LiRo and Hill to create a larger, more efficient and cost-effective team to serve clients in the Northeast.

LiRo GIS, Inc. (LiRo-Hill) is pleased to submit our proposal to Saratoga County to perform the GIS Conversion services described in this RFP. LiRo-Hill is one of the largest GIS consulting and implementation firms in the Northeast, with over 40 years of experience providing government and private sector organizations with a broad range of information technology solutions in such areas as:

- Parcel Data Management and Tax Mapping
- Real Property GIS
- Public Safety GIS
- Urban GIS
- Complex Address Data Models
- Web-based, desktop and mobile applications
- Infrastructure asset management
- Staff augmentation

LiRo-Hill has created GIS and tax mapping solutions of varying complexity for clients at all levels of state and local government, including Oneida County, NYC Department of Finance, Town of Mt. Pleasant, and Rockland County. Our permanent staff of over 35 GIS and IT professionals includes certified GIS professionals (GISP), certified project managers (PMPs), licensed surveyors, business and systems analysts, application developers, IT infrastructure specialists, and GIS analysts, specialists, and technicians.

LiRo-Hill personnel have been instrumental in implementing Esri tax mapping technology to clients including Suffolk County, the City of New York, Sullivan County, the City of Yonkers and many Towns in Westchester County. LiRo-Hill has been involved in the development of over 2 million tax parcels in New York State.

If you require any additional information or have any questions about the enclosed materials, please feel free to contact me at annitto@liro-hill.com or (516) 746-2350.

Sincerely,
LiRo GIS, Inc.

Richard Annitto, GISP
Vice President



TABLE OF CONTENTS

Cover Letter

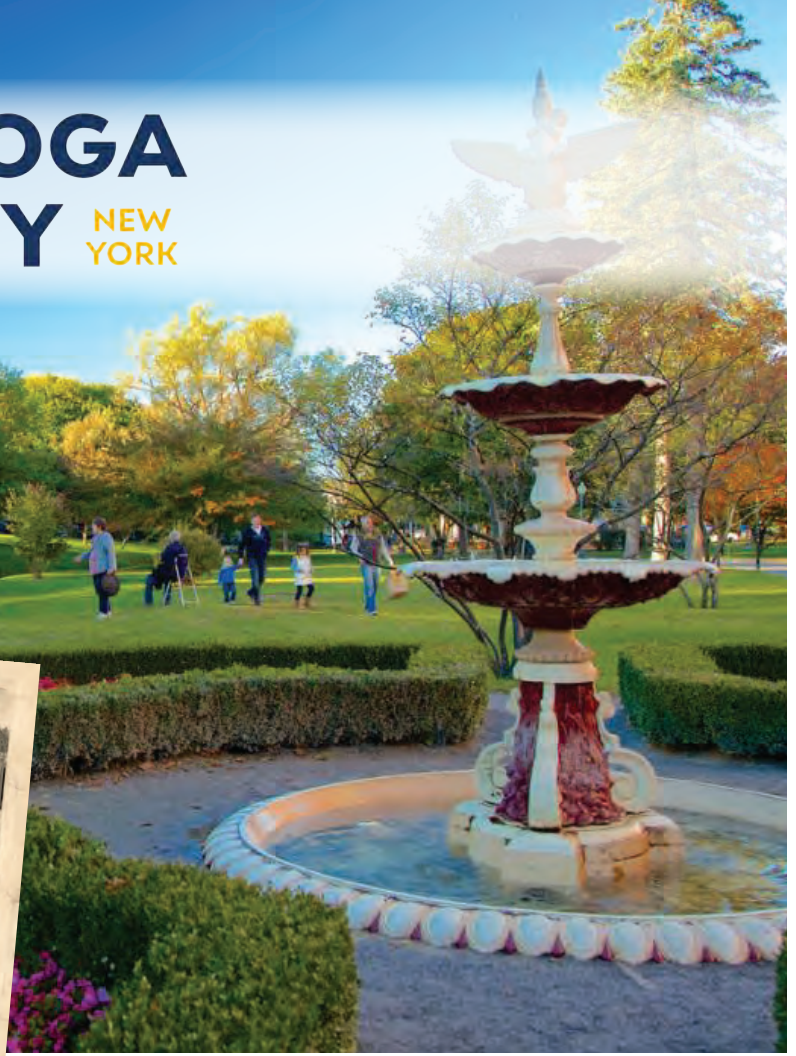
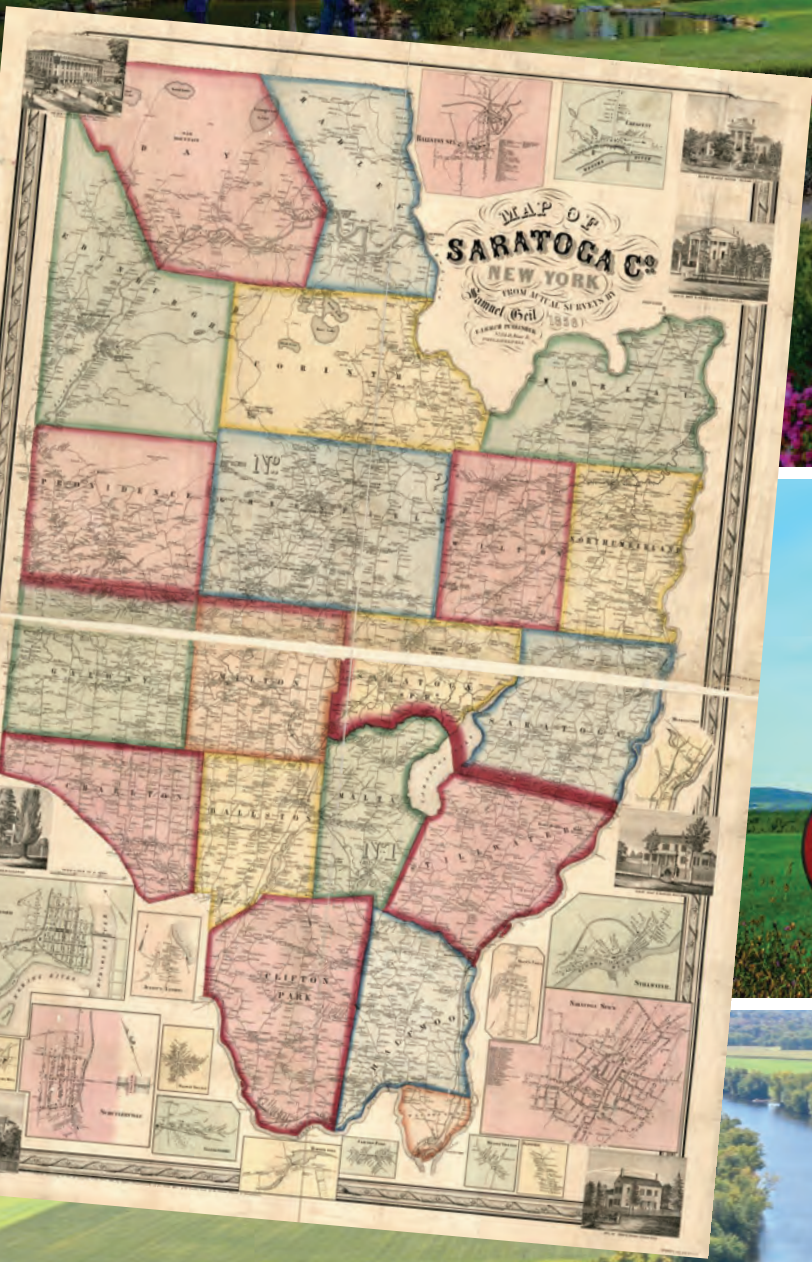
- 1. Firm Profile**
- 2. Understanding and Approach**
- 3. Staffing**
- 4. Similar Project Experiences**
- 5. Cost Proposal**
- 6. Required Forms**



SARATOGA COUNTY

NEW YORK

1. Firm Profile



LiRo GIS, Inc.
A LiRo-Hill Company



FIRM PROFILE

LiRo GIS, Inc. (LiRo-Hill), a division of LiRo-Hill, is one of the largest public sector-focused IT and GIS consulting firms in the region. LiRo-Hill has grown from a small construction management firm into a multidisciplinary organization with approximately 1,100 employees, including certified GIS professionals (GISP), licensed land surveyors, certified project managers (PMPs), IT professionals, business and systems analysts, application developers, GIS analysts, specialists and technicians, licensed professional engineers, registered architects and landscape architects, schedulers, estimators and inspectors.

The LiRo-Hill GIS practice began in 1982 and serves public and private clients throughout the nation. LiRo-Hill has been developing GIS databases, deploying desktop and web-based GIS applications, and performing GPS based field data collection for over 30 years. These applications have served the land records community, the public works and asset management work force, and public safety agencies across the nation.

This significant work effort has helped us develop the most experienced and talented tax mapping team in the Northeast and have become a **Silver Level Esri Business Partner**. We are growing as the marketplace changes. LiRo-Hill is responsible for the development of over two million tax parcels in the State of New York.

We now provide a mix of traditional services including:

- Land records research
- Tax map maintenance (using Esri, AutoCAD or Microstation)
- Tax map generation (paper, mylar, PDF, PDF/A, TIFF)
- Onsite updating of hardcopy tax map books

Our talented team now tackles a wide range of other tax map-related services including:

- Migrate legacy ArcMap tax mapping solutions to ArcGIS Pro
- Converting existing digital tax mapping to Esri's parcel fabric
- Training county or municipal tax mapper professionals to maintain their own digital tax maps
- Providing as-needed technical mentoring and support
- Re-engineering tax map maintenance workflows to save time and improve data quality
- Developing custom tax map maintenance solutions for government staff to use
- Creating interactive Web map-based GIS applications for intranet and public use
- Supporting grievance management and revaluations with GIS analysis

With offices in Rochester, Buffalo, New York City, Long Island, Boston, New Jersey, Pennsylvania, and Connecticut, LiRo-Hill has become one most respected GIS consulting firms in the Northeast, enjoying a solid

Legal Name of Organization:

LiRo GIS, Inc.

D/B/A:

LiRo-Hill

Corporate Form:

Corporation

State of Incorporation:

New York

Legal Name of Parent Entity:

RT Asset Holdings, LLC.

Principal Place of Business:

235 East Jericho Turnpike
Mineola, NY 11501

Headquarters:

3 Aerial Way
Syosset, NY 11791



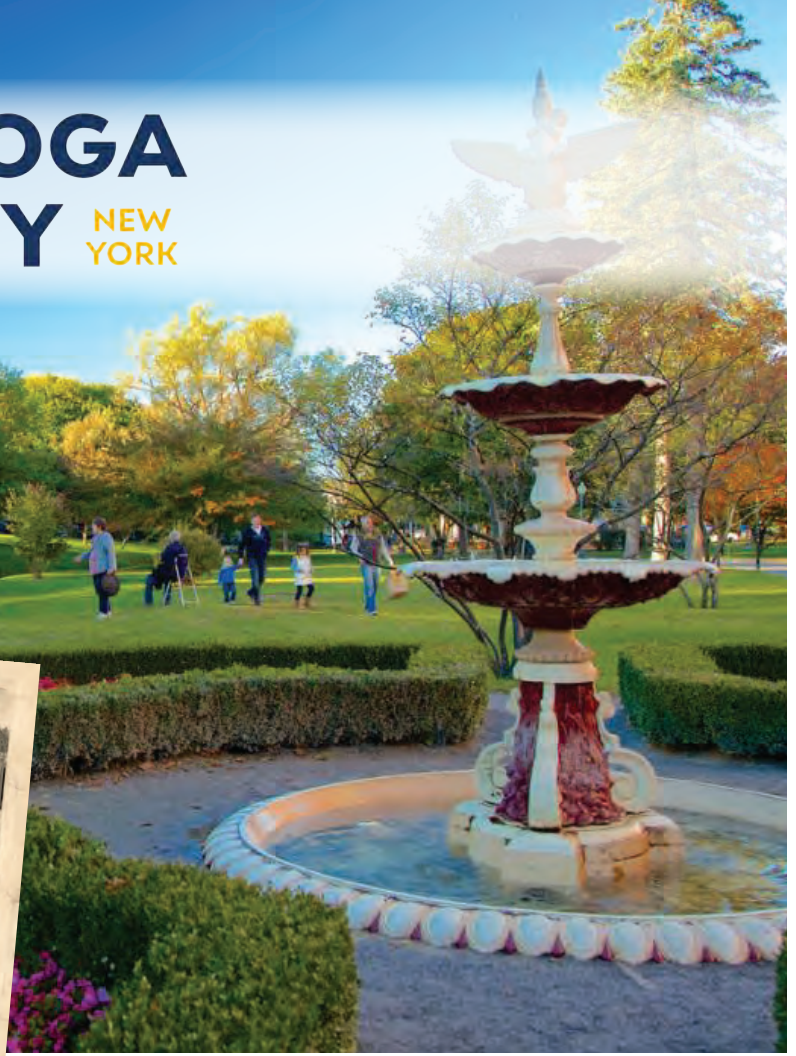
reputation among our clients, vendors, consultants, and financial communities. Repeat business from an extensive list of public agencies and local municipalities with a steady need for our services accounts for 95% of our sales.

LiRo-Hill team members deliver quality GIS solutions to our clients. Over time, we have become one of the leading spatial information technology consulting firms in the Northeast U.S. LiRo-Hill's services encompass full lifecycle consulting and management, ranging from needs assessment, requirements definition and system design through acquisition assistance, implementation, training, and ongoing support.



SARATOGA COUNTY NEW YORK

2. Understanding and Approach



LiRo GIS, Inc.
A LiRo-Hill Company



PROJECT UNDERSTANDING AND APPROACH

Overview

The County has requested the following services:

- Convert the current ArcGIS for Desktop map documents (*.mxd) into ArcGIS Pro projects (*.aprx). The County maintains ~102,000 lots, organized into 22 Esri Geodatabases, which represent 19 towns, 2 cities and 9 villages (the villages are currently maintained within their respective town geodatabases). Each municipality has multiple MXDs (one for parcel maintenance, one for printing the tax maps and another for printing the index maps).
- The County will provide a pilot geodatabase, which will be a Town that includes a village. The parcel data will be converted to the latest Esri Geodatabase format. It is assumed that the latest version of ArcGIS Pro is being used. An ArcGIS Pro Map Series will be created, and the pilot Geodatabase will be used to create sample tax maps in PDF format. These maps will undergo an internal review and forwarded to the County for review and approval. The County expects to take two weeks to review and comments on the proposed tax maps.
- Provide a way to convert the SBL from print key values into a 26-digit expanded SBL, and automatically update northing, easting and acreage values as features are modified.
- Convert available ortho-imagery for the years 2001, 2004, 2007, 2011, 2014, 2017, 2020, 2021 & 2023 when available from raster datasets to mosaic datasets for each municipality.
- A minimum of two days of training for an Introduction to ArcPro class and two additional days of training for Tax Mapping in ArcPro in accordance with NYS Tax Mapping Rules and guidelines.
- A minimum of 16 hours of technical support (beyond the training classes) for tax map maintenance questions and issues

LiRo-Hill has recently completed the exact ArcMap to ArcGIS Pro conversion for the New York City Department of Finance, Rockland County, and will complete Oneida County shortly. We understand the process, requirements, and steps very well.

Conversion of ArcMap Documents

The RFP states that there are three (3) mxds for each municipality; one for maintenance, a second for tax map printing, and a third for printing the index maps. LiRo-Hill recommends that the County consider combining the maintenance and tax map printing mxds into a single ArcGIS Pro project (aprx) for each municipality. This will reduce the number of projects and streamline maintenance. The index map mxd will be converted into its own aprx for each municipality (see below for exploring a single County-wide aprx – it may be possible to have a single aprx for each Town).

Each Village will be in its applicable Town aprx. **Figure 1** is an example in Oneida County; the Town of Whitestown with multiple villages – all in the same aprx.

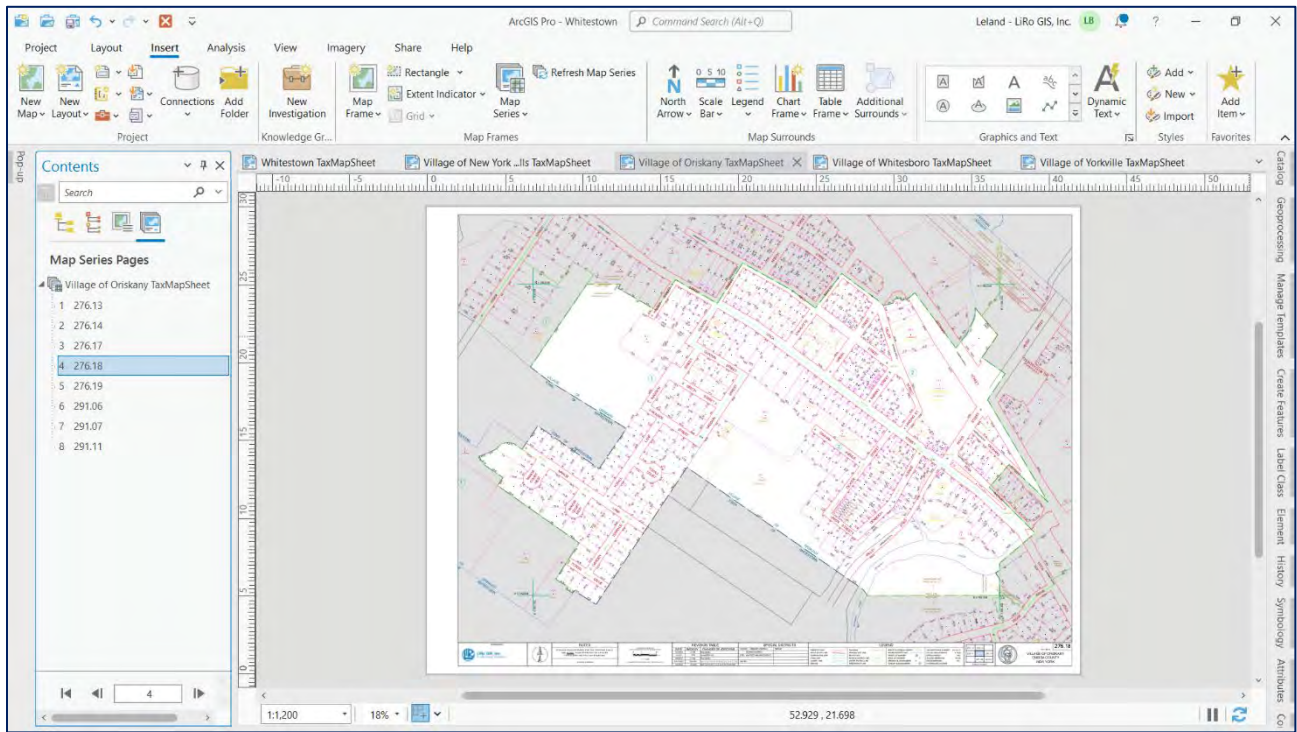


Figure 1

The steps that will be used to convert the mxds into Pro projects are the following (note: these steps may be modified once that data is received, and the pilot is underway).

1. Upgrade the Geodatabase to the most recent version. The current County Geodatabase model will be migrated, including the tax_map_topology. An issue was encountered in Oneida which also exists in Saratoga – an upgrade is needed to support annotation and tic marks. This was observed in the Town of Moreau sample data that was sent (note red exclamation in **Figure 2**). Note that once the annotation is upgraded, ArcMap will no longer be able to read the data.

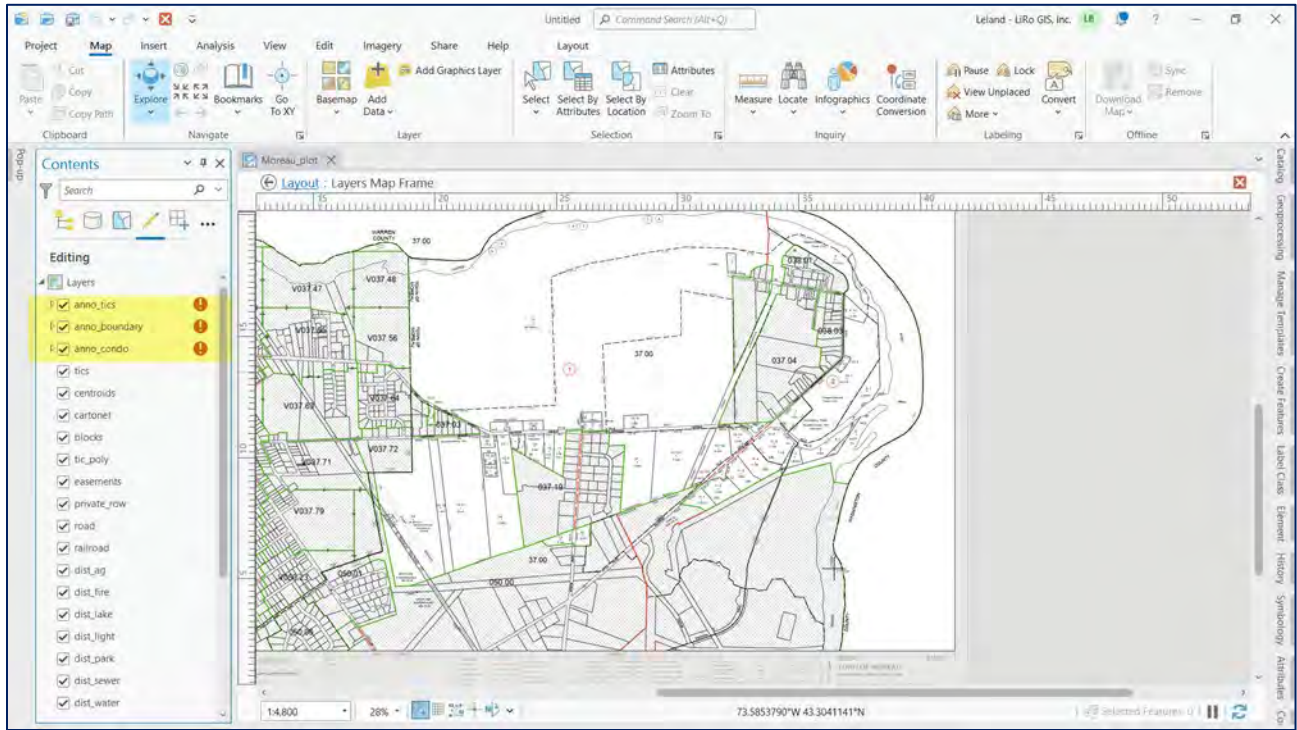


Figure 2

2. Using the ArcGIS Pro Import Map command, import the mxds.
3. Fix the scale bar
4. Fix the scale text
5. Create globalID for each parcel record. These are needed to create and configure Attribute Rules in the Geodatabases.
6. Create attribute rules for editing and configure in each geodatabase. The rules will be saved so that if they need to be removed for any reason (e.g., for some reason ArcMap may be needed to read the data), they can be re-applied.
7. Possibly automate the Special District values in legend. These are currently all text. If they exist in a table, then the Map Series can automate the population of the legend for the Special Districts.
8. Automate the Sheet Index, which is currently text and linework. The Feature Class for the index should be used.
9. Automate the date printed, the municipality and the sheet number.
10. Work with the County to cleanup the Annotation (can also be a component of the training).
11. For the index maps, explore the possibility of a single geodatabase and aprx for the entire County and pointing to each Town geodatabase.

The same sheet index and scales will be used that are currently used for the tax map printing. The data for the Town of Moreau was used to build a prototype Map Series. A few steps were taken, like removing the



manual definition queries to filter annotation by section number and replacing the static text with dynamic text (Figure 3). Based on the successful creation of the Map Series for the Town of Moreau, a PDF tax map was created (Figure 4). A more legible 11" x17" copy of the prototype is included in the hard copy submittal. Figure 5 illustrates the Villages in the Town; these will be on a separate tab in the aprx.

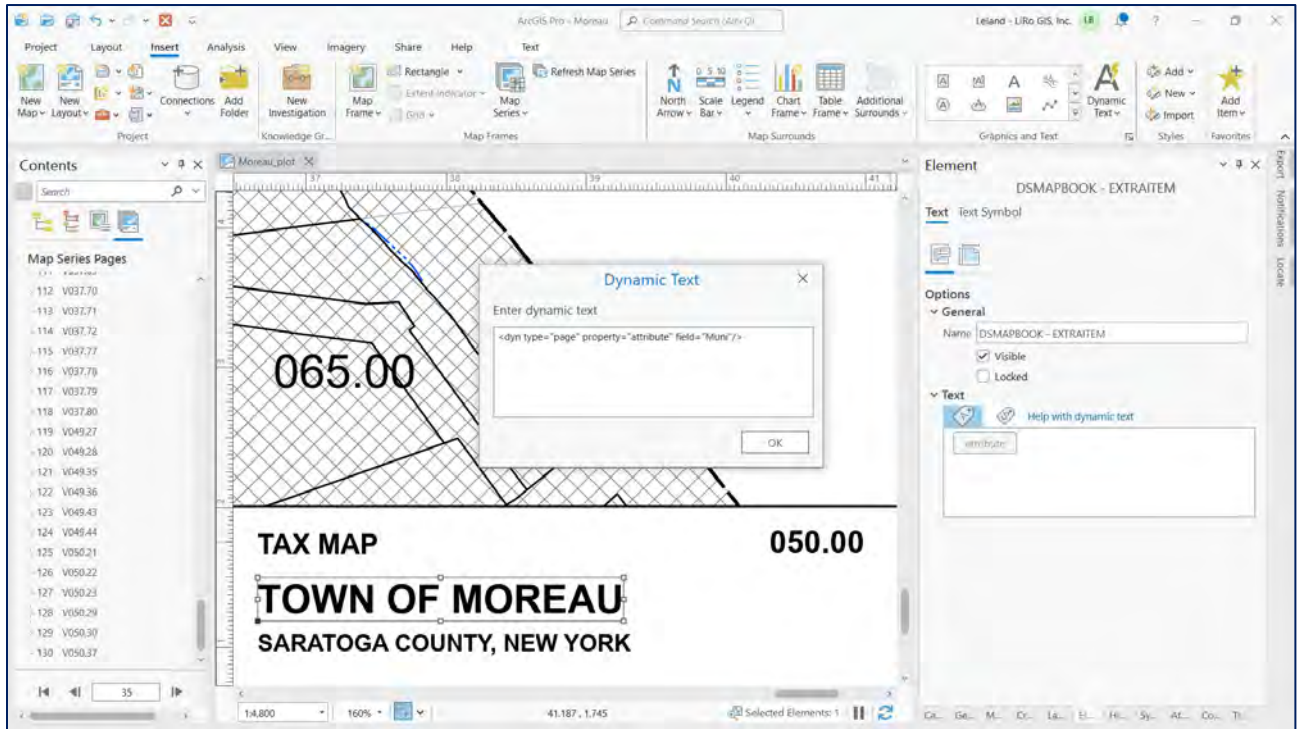


Figure 3

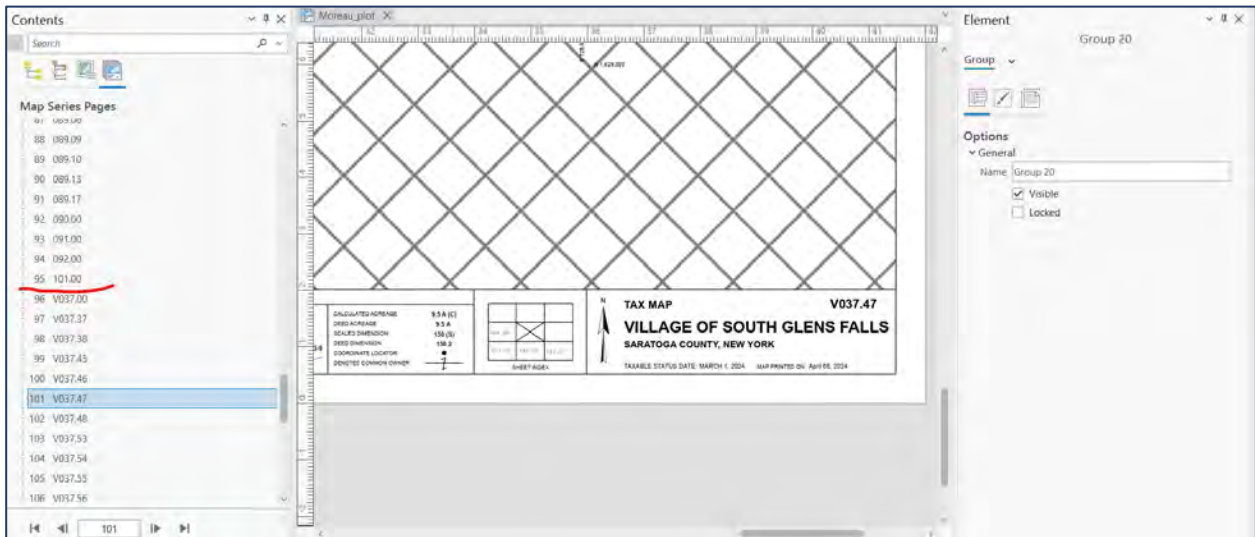


Figure 5

Convert Available Ortho-Imagery from Raster Datasets to Mosaic Datasets

LiRo-Hill will create a mosaic dataset for each municipality and year (e.g. Halfmoon 2020). The ArcGIS Pro Mosaic Dataset toolset will be used to create the Mosaic Dataset.

Convert the SBL from Print Key Values into a 26-Digit Expanded SBL

LiRo-Hill intends to automate the conversion of the SBL. The first step is to understand the conversion rules and then to develop and deliver and document a script (Python or Arcade) to automate the conversion.

An Attribute Rule will be created to automatically update northing, easting and acreage values as features are modified.

Training and Support

One of the proposal review factors is “*Creativity and approach to training components*”. This is an area where we believe that LiRo-Hill excels, and our approach will provide significant value to the County. LiRo-Hill is constantly engaging with our customers to provide training and mentoring services. Kristine Blanco, who is serving as the Project Manager, will be the primary trainer and support analyst. Kristine has conducted hundreds of training and mentoring sessions and is the lead trainer and support analyst for our NYC Department of Finance Replacement DTM project, which is based on ArcGIS Pro and produces tax maps using ArcGIS Pro Map series.

The County is requesting a minimum of two days of training for an Introduction to ArcGIS Pro. The approach that LiRo-Hill proposes is the following:

- We believe that remote sessions, via Microsoft Teams and Class View, is superior to onsite training for multiple reasons. First, people can work at their own desks and during the training they will experience the same behavior and performance that they will experience when they are doing



production work. Secondly, LiRo-Hill will be able to add subject matter experts to the training almost instantaneously to answer questions or to help resolve a complex tax map edit. Finally, remote training provides maximum flexibility to the County. For example, if an urgent issue arises at the County and the training must be cut short, it not an issue. Also, the duration of the training can be adjusted.

- LiRo-Hill proposes that only 8 hours be allocated to the Introduction to ArcGIS Pro and it should be focused on the tools that the tax mappers will use. The additional 8 hours will be allocated to editing, maintaining, and printing tax maps class. We strongly suggest that the County personnel first take the free Esri ArcGIS Pro classes:
 - <https://www.esri.com/training/catalog/6010a37d03ffb92c80d3d2d1/migrating-to-arcgis-pro-from-arcmap/> (1 hour)
 - <https://www.esri.com/training/catalog/5cad02469b1f4010cad9ac46/arcgis-pro-basics/> (50 minutes)
- Each user would have the pilot Town Geodatabase on their machines for the Introduction to ArcGIS Pro as well as the tax map training. No “generic” training data will be used.
- We are proposing three (3) days for the tax map editing and maintenance training (2days plus the additional day from Introduction to ArcGIS Pro). Prior to the training, LiRo-Hill will conduct a session with the tax mappers to understand their current workflows and the most used editing tools. In this training, the goal will be to replicate daily tasks such as mergers and apportionments using “real-world” examples, if possible – i.e. RPS 5217 transactions that are pending for the Town. One of the primary focuses will be using the ArcGIS Pro COTS editing tools. LiRo-Hill has deployed and uses these in many NYS municipalities. As per the RFP, slide deck(s) and recordings of both training classes will be supplied to the County for future reference.

Kristine will also be the lead in supplying the requested 16 hours of technical support (beyond the training classes) for tax map maintenance questions and issues to be used during or after the project is complete.

Sample Tax Maps

Three (3) sample tax maps that are the result of the ArcMap to ArcGIS Pro conversion process have been included. Both Oneida and Rockland counties and the New York City Department of Finance use an ArcGIS Pro map series created by LiRo-Hill from original ArcMap map documents to produce their tax maps. **Figure 1** is a tax map of the Village of Pomona in the Town of Ramapo, New York (Rockland County). **Figure 2** is a tax map for the Town of Kirkland, New York (Oneida County). **Figure 3** is a tax map of Block 33 in the Borough of Queens.

Both the Rockland and Oneida County maps are produced at a size of 42” x 30“. The NYC map is produced at a size of 11” x 17“. The hard copy submittal of LiRo-Hill’s response contains 11” x 17” versions of the maps.

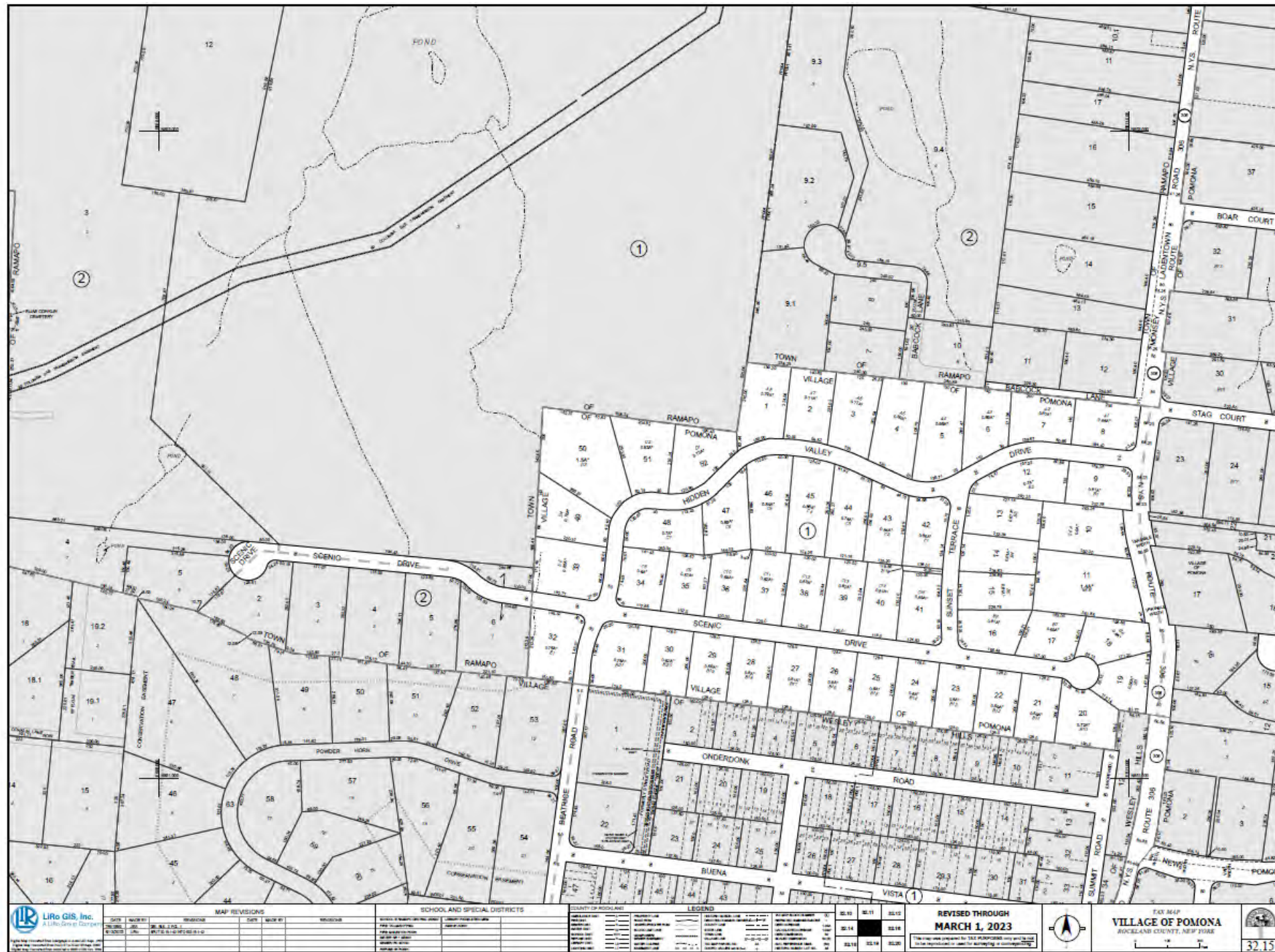


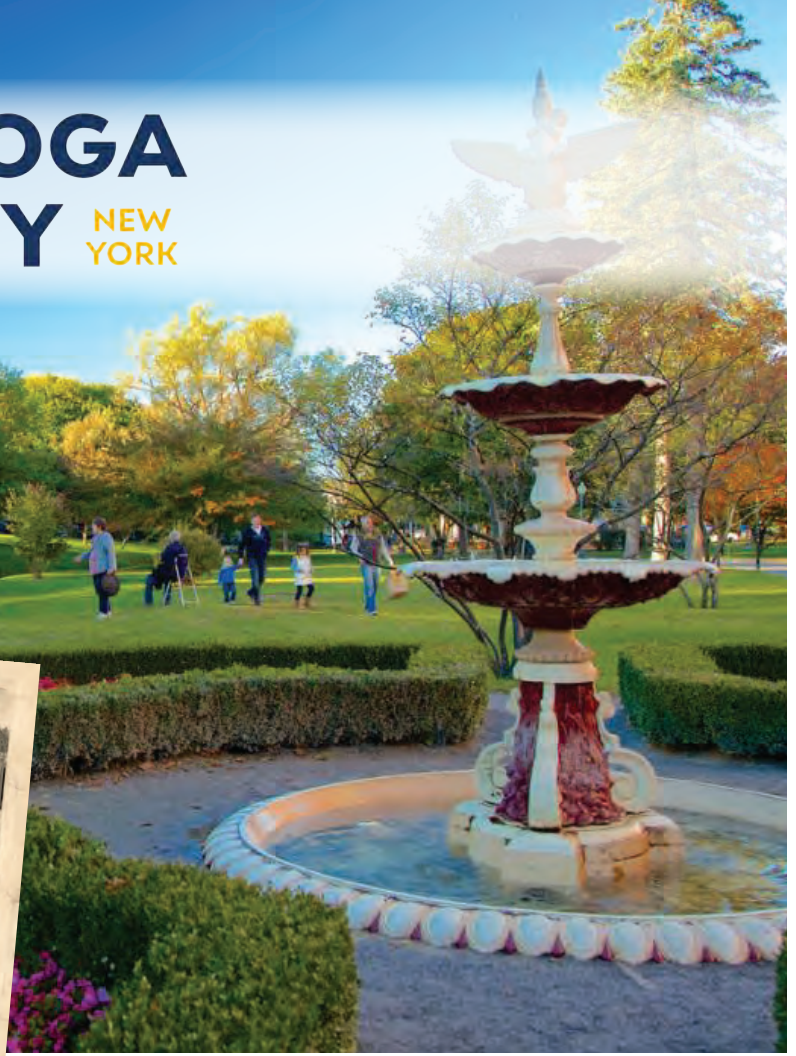
Figure 6



SARATOGA COUNTY

NEW YORK

3. Staffing



LiRo GIS, Inc.
A LiRo-Hill Company



STAFFING

The LiRo-Hill team has been carefully assembled and organized to provide a high-quality work product to Oneida County. Our entire team has extensive experience working with the County's GIS and has the required thorough, in-depth knowledge to hit the ground running, with no ramp-up time required.

Richard Anitto, Principal-in-Charge, heads LiRo-Hill's GIS and Survey Division. With a wide range of competencies in geospatial information and location services, as well as advanced technology solutions and architecture, he has an exceptional ability to accurately translate client requirements into functioning solutions. He has been a leader in the GIS community in the NY metropolitan area for more than three decades and is a certified Geographic Information System professional. Throughout his 37-year career, he has played a major role in significant public and private GIS projects, and developed LiRo-Hill's GIS practice in the areas of public safety, land records, survey/GIS integration, and asset management.

Kristine Blanco, Project Manager, is a member of the company's GIS Group and is a skilled GIS analyst and trainer. She also serves the role of project manager, meeting with the customer, managing budgets and ensuring successful project delivery. Ms. Blanco is fluent in desktop GIS and spatial database technology. Her technical skills include Development (XML, ArcXML, HTML); GIS Environment (ArcGIS Suite, ArcGIS for Server, ArcSDE); RDBMS (Oracle, SQL Server, Microsoft Access); Hosting Environments (Oracle, IIS); Operating Systems (Windows Server Family, XP); Structured Analysis/Design (Microsoft Visio); and Office Automation (Microsoft Office Suite, Crystal Reports).

Leland Bailey, Tax Map Subject Matter Expert, has 44 years of experience in GIS design, data development, and implementation. Since 2002, he has served as the GIS Group Team Leader, directing a staff of 20 professionals. Mr. Bailey has management responsibility for all services related to GIS design, data development and implementation, including the firm's Esri Solutions Group, and is intimately familiar with complex, large-scale GIS implementations (use of spatial database products, internet map servers, desktop GIS spatial analysis, mapping, editing, and Relational Database Security models). In addition to his comprehensive Esri skills, Mr. Bailey is fluent in the AutoDesk software suite, including AutoCAD 2012.

Jeremy Manor, GIS Technician, has eight years of experience in GIS and has experience with ArcGIS, ArcGIS Online, Google Maps, Google Earth, Adobe, TIGER and CAD. Mr. Manor served on the project team for the Oneida County Tax Mapping, where he converted CAD data to GIS for each municipality; and created and edited parcels, tax sections, tax blocks, special districts, and the legends for the tax maps. He is a recent graduate of the University of Connecticut. His technical skills include ArcGIS, ArcGIS Online, Google Maps and Google Earth, TIGER and Microsoft Office Suite.

Key Staff Resumes are provided on the following pages.



Richard Annitto, GISP

Principal-in-Charge

Education

B.A., Geography, University of Connecticut

M.S., Geographic Information System, University of Connecticut

Certifications

Certified Geographic Information Systems Professional

PROFESSIONAL PROFILE

Mr. Annitto has a wide range of competencies in Information Technology solutions and architecture, giving him an exceptional ability to accurately translate client requirements into functioning solutions. Although his formal training is in Geographic Information Systems, he is equally capable in the analysis, design, and implementation of many state-of-the-art information technology solutions. His project experience includes geographic information systems, data warehousing, web-based applications, local and wide area networks, and legacy system conversions. Mr. Annitto's technical background and project experience began in 1987.

EXPERIENCE

Oneida County Department of Finance, Tax Map Migration and Tax Map Maintenance, NY, Principal - In 2016, LiRo-Hill staff migrated the County's 105,000 parcels from AutoCAD format to Esri Geodatabase and provided the required linkage to the State of New York's RP-5217 Real Property Transfer Report/Sales Reporting data for applicable parcels. In Oneida County, the County is responsible for the maintenance of tax map while the local jurisdictions are responsible for assessment. The migration required the development of an Esri Data Model and a mapping of AutoCAD data types and geometry to Esri Geodatabase geometry and domains. The data for 26 Towns, 3 cities, and 18 villages separate villages (and AutoCAD drawings) was migrated into a single, comprehensive parcel database for the entire County. Editing occurs in a Working File Geodatabase, structured by Town and edits are posted to the main Geodatabase. Tax maps are generated using ArcGIS Pro Map series.

Since 2019, LiRo-Hill has maintained the County's digital tax maps in Esri Geodatabase format and provides regular updates and a revised Esri Geodatabase. The County transmits documents (i.e. NYS RPS 5217 and deeds) that support the work to be completed. LiRo-Hill interacts with the County's Clerk's site as required.

Oneida County Department of Finance – Mr. Annitto is the account manager for the County's tax map migration and maintenance projects. He oversees the projects and communicates with the County's Real Property Director.

New York City Department of Finance Replacement, Next Generation Digital Tax Map System, Principal/Project Manager, NY - LiRo is working with the NYC Department of Finance to replace their current Digital Tax Map (DTM) system with the Replacement DTM that meets the requirements of DOF and creates a blueprint for the future vision of DOF. LiRo is providing a carefully crafted, integrated set of services, cloud computing, Infrastructure as a Service (IaaS), next generation GIS desktop software and data model enhancements. In addition, it includes integration with state-of-the-art Building Information Model (BIM) technology, which will have immediate and long-term benefits for DOF. The Replacement DTM went into production on 12/1/2023. The system tightly integrates Microsoft Azure, ArcGIS Enterprise, and ArcGIS Online and ArcGIS Pro. The system is 100% service based.

New York City Department of Finance, Account Manager – Mr. Annitto was the account manager on the system integration project to Digitize Surveyor Tax Maps. Mr. Annitto has been working on the Tax Map Conversion Specification, Data Model, long term Esri maintenance issues, client liaison, and prime contract coordination. This work was being done as part of a subcontract to BearingPoint.

Town of Mount Pleasant, Tax Map Maintenance, NY, Principal - LiRo is providing maintenance of the Town's Digital Tax Map, which is maintained using AutoCAD. On an as-needed basis, LiRo re-plots the Tax Map and exports the CAD data to an Esri-compatible format for use by Town staff who have Esri's ArcGIS Desktop software (e.g. in the Engineering Department).

Rockland County Department of Planning, Annual Maintenance of Digital Tax Maps, NY,



Richard Annitto, GISP

Principal-in-Charge

Principal - LiRo is providing professional services for digital tax mapping maintenance for the County of Rockland Department of Planning. Tasks include maintaining the existing digital tax map vector information, maintaining an existing digital tax map database and generating thousands of tax maps. The County uses ESRI ArcGIS 10.5. The current digital tax map data exists as a county-wide layer in an ESRI Enterprise Geodatabase format.

Suffolk County Real Property Tax Service Agency – Mr. Annitto is the account manager that supports the County’s tax map maintenance program and its Internet based platform for public and subscription based services. The system maintains more than 450,000 tax lots in Suffolk County and is a major source of County revenue in terms of verification and economic development.

Town of Brookhaven, Tax System Migration – Mr. Annitto is the project manager for the Town’s effort to migrate its “tax system” from a mainframe-based system to a web-based system. This project involved modules for relevy, banks, tax bill printing and an advanced grid-based query system to eliminate the needs for custom reporting and custom program development.

Nassau County GIS, Project Manager - Since 1990, Mr. Annitto has worked to implement one of the most advanced municipal GIS environments in the United States. As part of his work activities, he has supervised and conducted User Needs Assessment interviews, authored portions of the aerial photography and photogrammetric compilation specifications, co-designed the Accelerated Basemap, authored portions of regular GIS newsletters, developed Conceptual Design specifications, and participated in all phases of Project Oversight. Mr. Annitto also supervised the initial implementation of over 341 GIS seats in nine departments and 31 sites. Products used included Oracle 7.x, Esri’s Spatial Database Engine (ArcSDE) product, Windows NT and HP/UX, and Esri’s ArcView product. Since that time, Mr. Annitto has overseen two (2) upgrades to the system architecture, which has resulted in an Oracle 10g RAC solution that support high availability and disaster recovery. This scenario includes delivery of services to desktop, intranet, and internet clients (My Nassau Property).

AT&T, ArcGIS Online Webmap Development and Franchise Maintenance, NY, Principal - LiRo provided AT&T with a comprehensive Esri ArcGIS Online WebMap, to visualize and analysis where AT&T owned fiber optic cables are present on New York City streets. The data is accurately mapped and supports the AT&T NYC OTI franchise agreement. To create an ArcGIS Online WebMap that mirrored AT&T’s GMO/GeoLink database, LiRo identified centerline street measurements where AT&T owned fiber optic cable assets are present along the highway right-of-way of New York City DOT streets in all five boroughs. The ArcGIS Online WebMap distinguishes between aerial and underground and is accompanied by measurement data with street names and measurements. Access to the ArcGIS Online WebMap is restricted and not open to the public.

Nassau Community College, Campus Utility Mapping & Document Archiving Services, Principal-in-Charge – LiRo GIS is working with the College’s Department of Design and Construction to create an accurate GIS model of the core utility networks on the campus (electric, stormwater, gas, sanitary sewer, telecom, potable water, and hot/cold water system). The project has two major phases: 1) Create a record plan version of the utility networks based upon existing scanned plans, 2) Based upon the record plan GIS model, identify areas where utilities are missing or incomplete and perform utility mark outs and subsurface investigation. As part of the project, new aerial imagery was developed, and the Campus Basemap was updated. In addition, LiRo will scan and index over 10,000 record plans stored in College archives.



Kristine Blanco

Project Manager

Education

B.A., Geography, State University of
New York at Geneseo

M.A., Geography with GIS
Certification, University of
Connecticut

PROFESSIONAL PROFILE

Ms. Blanco is a member of company's GIS Group and is a skilled GIS analyst and trainer. She also serves the role of project manager, meeting with the customer, managing budgets and ensuring successful project delivery. Ms. Blanco is fluent in desktop GIS and spatial database technology. Her technical skills include Development (XML, ArcXML, HTML); GIS Environment (ArcGIS Suite, ArcGIS for Server, ArcSDE); RDBMS (Oracle, SQL Server, Microsoft Access); Hosting Environments (Oracle, IIS); Operating Systems (Windows Server Family, XP); Structured Analysis/Design (Microsoft Visio); and Office Automation (Microsoft Office Suite, Crystal Reports).

EXPERIENCE

New York City Department of Finance, Digitization of Tax Maps, NY, GIS Specialist - LiRo is working with the NYC Department of Finance to replace their current Digital Tax Map (DTM) system with the Replacement DTM that meets the requirements of DOF and creates a blueprint for the future vision of DOF. LiRo is providing a carefully crafted, integrated set of services, cloud computing, Infrastructure as a Service (IaaS), next generation GIS desktop software and data model enhancements. In addition, it includes integration with state-of-the-art Building Information Model (BIM) technology, which will have immediate and long-term benefits for DOF. The Replacement DTM went into production on 12/1/2023. The system tightly integrates Microsoft Azure, ArcGIS Enterprise, and ArcGIS Online and ArcGIS Pro. The system is 100% service based.

Rockland County Department of Planning, Annual Maintenance of Digital Tax Maps, NY, GIS Analyst - LiRo is providing professional services for digital tax mapping maintenance for the County of Rockland Department of Planning. Tasks include maintaining the existing digital tax map vector information, maintaining an existing digital tax map database and generating thousands of tax maps. The County uses ESRI ArcGIS 10.5. The current digital tax map data exists as a county-wide layer in an ESRI Enterprise Geodatabase format.

City of New Rochelle – Ms. Blanco supported the City's GIS users starting in the year 2000. She has worked on Tax Map maintenance and has provided training using the Esri software. In 2011, she started working with the City as a Project Manager and worked with the City to update their zoning maps.

Suffolk County Real Property Tax Service Agency, Tax Map Maintenance Application, Tax Map Updates, GIS Analyst – Ms. Blanco plays the lead role in supporting the County's Tax Map and Maintenance Application (TMMA) and the users in an on-site role and remote role as required. Ms. Blanco was part of the team that originally migrated the County's Microstation Design File (DGN) environment to Esri's ArcGIS environment. The AREIS online viewer is supported by Ms. Blanco as well. She has also played a role in migrating the County's Real Property GIS data into the Parcel Fabric. In addition to the data migration, she has also conducted many training and mentoring sessions to aid the real property staff with the transition to the parcel fabric.

Cortland County, Parcel Fabric Training – Ms. Blanco provided WebEx training for Tax Mapper staff in the basics of ArcGIS Desktop and Parcel Fabric. This class involved the use of County GIS data and covered GIS functions that RPTS staff are expected to use in their daily activities.

City of Yonkers, Assessment Tax Mapping – Ms. Blanco worked on a team that created a parcel fabric from existing GIS data.

Nassau Community College, Campus Utility Mapping & Document Archiving Services, GIS Technician – LiRo GIS is working with the College's Department of Design and Construction to create an accurate GIS model of the core utility networks on the campus (electric, stormwater, gas, sanitary sewer, telecom, potable water, and hot/cold water system). The project has two major phases: 1) Create a record plan version of the utility networks based upon existing scanned plans, 2) Based upon the record plan GIS model, identify areas where utilities are missing or incomplete and perform utility mark outs and subsurface investigation. As part of the project, new aerial imagery was developed, and the Campus Basemap was updated. In addition, LiRo will scan and index over 10,000 record plans stored in College archives.



Kristine Blanco

Project Manager

Long Island Regional Planning Council, Long Island Waterfront Uses and Zoning, GIS Analyst, NY – LiRo is currently building a GIS based inventory of waterfront uses for marinas and commercial fishing in Nassau and Suffolk Counties on Long Island. The inventory will examine how each of the waterfront uses are currently zoned. The project includes an analysis and survey of waterfront areas/land parcels that currently exist as active commercial and municipally owned marinas and as commercial fishing facilities. LiRo will deliver data in Esri format, which is the GIS standard for both Nassau and Suffolk Counties.

AT&T, ArcGIS Online Webmap Development and Franchise Maintenance, GIS Analyst, NY - LiRo provided AT&T with a comprehensive Esri ArcGIS Online WebMap, to visualize and analysis where AT&T owned fiber optic cables are present on New York City streets. The data is accurately mapped and supports the AT&T NYC OTI franchise agreement. To create an ArcGIS Online WebMap that mirrored AT&T's GMO/GeoLink database, LiRo identified centerline street measurements where AT&T owned fiber optic cable assets are present along the highway right-of-way of New York City DOT streets in all five boroughs. The ArcGIS Online WebMap distinguishes between aerial and underground and is accompanied by measurement data with street names and measurements. Access to the ArcGIS Online WebMap is restricted and not open to the public.

City of Yonkers Water Digitization - LiRo is providing the City of Yonkers services for scanning all water bureau documents, such as sections maps and as-built drawings, and creating a system to retrieve these documents in the field. The work includes spatially representing and retrieving documents using a mapping interface; updating water system records (approximately 1,150 sheets ranging in size from 30" X 20" and larger), as well as updating approximately 40 pipeline/system improvement projects on the sections sheets; and doing field work to confirm conflicting or missing information.

Town of Oyster Bay Department of Public Works, Single Stream Routing for Public Works - Phase 1 was the development of the required data to support the long-term routing effort. LiRo worked iteratively with Sanitation, Recycling, and Public Works staff and conducted multiple work sessions and map reviews to ensure that all customers served are in the correct Sanitation Districts and Recycling Zones.

LiRo developed and delivered the following Esri Geodatabase layers:

- Sanitation District Boundaries
- Recycling (SORT) Zones
- Service Point Locations
- Town Facility Locations

Suffolk County Department of Public Works Feasibility Study Wastewater Mgmt - LiRo was a subconsultant to Raftelis Financial Consultants supporting the countywide water quality management district feasibility study and implementation plan. LiRo prepared a high level cost estimate of the long-term infrastructure repair and replacement needs for the sewer districts, which included collection system piping, pump stations, and sewage treatment plants. LiRo also provided GIS services, such as mapping sewer districts, collection of treatment plant/collection system data, and producing assessed value information by sewer district.

Suffolk County, Sewer Capacity Study, GIS Analyst – Ms. Blanco visited the Suffolk County Department of Public Works (DPW) and the Department of Health to collect and compile the plans needed for the project. She utilized DPW's Plan Viewer to search for scanned images by Sewer Agency, Sewer Project or Sewer District and worked with DOH to identify all of the plans that could not be obtained from DPW. Internally, Ms. Blanco set up a spreadsheet to organize all of the data that was collected.



Leland Bailey

Tax Map Subject Matter Expert

Education

A.A.S., Construction Technology,
SUNY - Farmingdale

PROFESSIONAL PROFILE

Mr. Bailey has 44 years of experience in GIS design, data development, and implementation. Since 2002, he has served as the GIS Group Team Leader, directing a staff of 20 professionals. Mr. Bailey has management responsibility for all services related to GIS design, data development and implementation, including the firm's Esri Solutions Group, and is intimately familiar with complex, large-scale GIS implementations (use of spatial database products, internet map servers, desktop GIS spatial analysis, mapping, editing, and Relational Database Security models).

EXPERIENCE

Oneida County Department of Finance, Tax Map Migration and Tax Map Maintenance, NY, GIS Analyst - In 2016, LiRo-Hill staff migrated the County's 105,000 parcels from AutoCAD format to Esri Geodatabase and provided the required linkage to the State of New York's RP-5217 Real Property Transfer Report/Sales Reporting data for applicable parcels. In Oneida County, the County is responsible for the maintenance of tax map while the local jurisdictions are responsible for assessment. The migration required the development of an Esri Data Model and a mapping of AutoCAD data types and geometry to Esri Geodatabase geometry and domains. The data for 26 Towns, 3 cities, and 18 villages separate villages (and AutoCAD drawings) was migrated into a single, comprehensive parcel database for the entire County. Editing occurs in a Working File Geodatabase, structured by Town and edits are posted to the main Geodatabase. Tax maps are generated using ArcGIS Pro Map series.

Since 2019, LiRo-Hill has maintained the County's digital tax maps in Esri Geodatabase format and provides regular updates and a revised Esri Geodatabase. The County transmits documents (i.e. NYS RPS 5217 and deeds) that support the work to be completed. LiRo-Hill interacts with the County's Clerk's site as required.

Oneida County Tax Map Migration to Esri Format – Mr. Bailey supervised the migration of the County's tax maps from AutoCAD to Esri Geodatabase format. Mr. Bailey created the conversion script to transform the AutoCAD data and was responsible for the creation of the County's tax maps using Esri's Data Driven Pages.

New York City Department of Finance, Digitization of Tax Maps, GIS Analyst – LiRo is working with the NYC Department of Finance to replace their current Digital Tax Map (DTM) system with the Replacement DTM that meets the requirements of DOF and creates a blueprint for the future vision of DOF. LiRo is providing a carefully crafted, integrated set of services, cloud computing, Infrastructure as a Service (IaaS), next generation GIS desktop software and data model enhancements. In addition, it includes integration with state-of-the-art Building Information Model (BIM) technology, which will have immediate and long-term benefits for DOF. The Replacement DTM went into production on 12/1/2023. The system tightly integrates Microsoft Azure, ArcGIS Enterprise, and ArcGIS Online and ArcGIS Pro. The system is 100% service based.

Town of Mount Pleasant, Tax Map Maintenance, NY, GIS Analyst - LiRo is providing maintenance of the Town's Digital Tax Map, which is maintained using AutoCAD. On an as-needed basis, LiRo re-plots the Tax Map and exports the CAD data to an Esri-compatible format for use by Town staff who have Esri's ArcGIS Desktop software (e.g. in the Engineering Department).

Rockland County Department of Planning, Annual Maintenance of Digital Tax Maps, NY, GIS Analyst - LiRo is providing professional services for digital tax mapping maintenance for the County of Rockland Department of Planning. Tasks include maintaining the existing digital tax map vector information, maintaining an existing digital tax map database and generating thousands of tax maps. The County uses ESRI ArcGIS 10.5. The current digital tax map data exists as a county-wide layer in an ESRI Enterprise Geodatabase format.



Leland Bailey

Tax Map Subject Matter Expert

Suffolk County RPTSA Migration to Parcel Fabric - Mr. Bailey performed a requirements matrix and fit gap analysis, developed strategy for running parallel with maintenance, data migration plan, production implementation plan, quality assurance and quality control procedure plan, defect/error/issue management plan and provided training and documentation for parcel maintenance, tax map book production, tax map products and administration.

City of Yonkers Migration to Parcel Fabric – Mr. Bailey gathered all existing and relevant data and map templates and defined target Parcel Fabric data model and conversion specifications. He migrated existing Esri geodatabase data to the Esri LGIM, Parcel Fabric data standard and converted map templates to use Esri's Data Driven Pages to generate the Esri map templates. Mr. Bailey performed an internal quality control review of the converted data and map templates and fix any deficiencies found and created a Parcelkey link to the Real Property System database. Lastly, Mr. Bailey provided the following areas of training and documentation: Parcel Maintenance; Tax Map Products; and Administration.

MTA-Metro North GIS for Railroad Property Management - Mr. Bailey participated in weekly project status conference calls and on-site monthly meetings to coordinate with the Project stakeholders. He coordinated and integrated the digital data products developed by the company and our subcontractors into the specified deliverables from the following list of data gathering requirements: obtain GIS tax parcel data; geo-reference all relevant Metro-North service territory Valuation Maps in preparation for digitizing property boundary data; digitize relevant property boundary data from val maps to GIS; digitize relevant surveys and conveyancing exhibits; digitize relevant easement exhibits; validate, Harmonize, Resolve, and Correct Property Boundary Data as Necessary; create GIS Shapes Corresponding to Yardi Property ID; Geo-reference Available Subterranean GCT Drawings; Digitize Relevant Room Shape, Doors, and Passageway Data, and lastly Validate Harmonize, Resolve, and Correct GCT Room and Passageway Data as Necessary.

Nassau County, Department of Assessment, Tax Map and System Support, GIS Analyst – Mr. Bailey provided tax map maintenance support through a combination of on-site and off-site support activities which included:

- Maintenance of the Oracle lot centroid and tax map DWF table, which supports the County's Land Record Assessment Viewer
- PVCS user support for the check-in and check-out of AutoCAD tax maps
- ArcMap user support to maintain Lots and Parcels in the County-wide GIS
- AutoCAD user support to edit and maintain the County's Tax Map drawings

Suffolk County, Real Property Tax Conversion – Mr. Bailey provided support and assistance in the migration of the County's Oracle 10g ArcSDE Tax Map installation to a new Oracle 11g server environment.

Nassau County Department of Assessment, GIS Analyst – Mr. Bailey is part of the Team that provides a complete program of contract oversight and quality control of the tax mapping compilation contractor. Work items include:

- Using Oracle InterMedia and Java, designed a storage methodology for more than 1 million property photographs and PDF documents.
- Needs and workflow analysis
- Software design and implementation
- Conduct group and individual training seminars for custom software
- Deploy and maintain version control system for digital tax mapping
- Integrating digitized AutoCAD drawings into ArcSDE



Jeremy Manor

GIS Technician

Education

B.A., Geography, University of Connecticut

B.A., Sociology, University of Connecticut

Certifications

OSHA 10 Certified

PROFESSIONAL PROFILE

Mr. Manor has eight years of experience in GIS and is experienced with ArcGIS, ArcGIS Online, Google Maps, Google Earth, Adobe, TIGER and CAD. His technical skills include GIS Environment (ArcGIS, ArcGIS Online, Google Maps and Google Earth, TIGER) and Office Automation (Microsoft Office Suite).

EXPERIENCE

Oneida County Tax Map Maintenance, NY, GIS Analyst – In 2016, LiRo-Hill staff migrated the County's 105,000 parcels from AutoCAD format to Esri Geodatabase and provided the required linkage to the State of New York's RP-5217 Real Property Transfer Report/Sales Reporting data for applicable parcels. In Oneida County, the County is responsible for the maintenance of tax map while the local jurisdictions are responsible for assessment. The migration required the development of an Esri Data Model and a mapping of AutoCAD data types and geometry to Esri Geodatabase geometry and domains. The data for 26 Towns, 3 cities, and 18 villages separate villages (and AutoCAD drawings) was migrated into a single, comprehensive parcel database for the entire County. Editing occurs in a Working File Geodatabase, structured by Town and edits are posted to the main Geodatabase. Tax maps are generated using ArcGIS Pro Map series.

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New York City Department of Finance Replacement, Next Generation Digital Tax Map System, GIS Analyst, NY - LiRo is working with the NYC Department of Finance to replace their current Digital Tax Map (DTM) system with the Replacement DTM that meets the requirements of DOF and creates a blueprint for the future vision of DOF. LiRo is providing a carefully crafted, integrated set of services, cloud computing, Infrastructure as a Service (IaaS), next generation GIS desktop software and data model enhancements. In addition, it includes integration with state-of-the-art Building Information Model (BIM) technology, which will have immediate and long-term benefits for DOF. The Replacement DTM went into production on 12/1/2023. The system tightly integrates Microsoft Azure, ArcGIS Enterprise, and ArcGIS Online and ArcGIS Pro. The system is 100% service based.

Town of Mount Pleasant Tax Mapping, NY, GIS Analyst – Mr. Manor is providing tax map updates to the Town of Mt. Pleasant by editing tax map data in GIS and CAD.

Rockland County Department of Planning, Annual Maintenance of Digital Tax Maps, NY, GIS Technician - LiRo is providing professional services for digital tax mapping maintenance for the County of Rockland Department of Planning. Tasks include maintaining the existing digital tax map vector information, maintaining an existing digital tax map database and generating thousands of tax maps. The County uses ESRI ArcGIS 10.5. The current digital tax map data exists as a county-wide layer in an ESRI Enterprise Geodatabase format.

Nassau Community College, Campus Utility Mapping and Document Archiving, NY - LiRo GIS is working with the College's Department of Design and Construction to create an accurate GIS model of the core utility networks on the campus (electric, stormwater, gas, sanitary sewer, telecom, potable water, and hot/cold water system). The project has two major phases: 1) Create a record plan version of the utility networks based upon existing scanned plans, 2) Based upon the record plan GIS model, identify areas where utilities are missing or incomplete and perform utility mark outs and subsurface investigation. As part of the project, new aerial imagery was developed, and the Campus Basemap was updated. In addition, LiRo will scan and index over 10,000 record plans stored in College archives.



Jeremy Manor

GIS Technician

Suffolk County Tax Map Migration to Parcel Fabric, NY, GIS Analyst – Mr. Manor was the lead tax map technician on the migration of parcel data into Esri's Parcel Fabric Data Model.

Town of Yorktown Tax Mapping, NY, GIS Analyst – Mr. Manor is providing tax map updates to the Town of Yorktown by editing tax map data in GIS.

Town of Lewisboro, Tax Mapping, NY, GIS Analyst – Mr. Manor is providing tax map updates to the Town of Lewisboro by editing tax map data in GIS.

City of Yonkers Department of Assessment, Tax Map Update, Yonkers, NY, GIS Analyst - Mr. Manor recorded a list in Excel of parcel keys for the tax parcels in Yonkers. He also helped create a tax map book and edited the labels and tax parcel information in ArcMap.

City of Bridgeport, GIS Sewer System Development, Bridgeport, CT, GIS Analyst - Working with the City Engineer and the WPCA (Water Pollution Control Authority), LiRo is providing GIS data creation and editing services in the development of a sanitary sewer, combined sewer, and storm sewer GIS layer. The key component is to differentiate the three systems and to trace each network to either an outfall or the City's wastewater treatment plant. The deliverable is an Esri Stormwater and Sewer Utility network. Scanned and georeferenced record plans are used to verify the system and to add assets and infrastructure.

Town of Oyster Bay DPW, Highway Improvements, Intervale Avenue, Farmingdale, NY, GIS Analyst - LiRo was retained to prepare a report assessing the current deteriorated roads of the area, comparing alternatives for repair, and recommending the most effective method. Recommendations included ADA compliant pedestrian ramps, upgraded drainage system, mixed in place asphalt, monolithic curb and gutter and new driveway aprons. The services provided by LiRo also included a survey of the project area. The ground survey work established baselines that serve as the network to provide data of topographic conditions and utility positions for use in design applications. The supplemental survey work to investigate sanitary sewer and storm water drainage determined pipe inverts elevations and structure capacities. (\$8 million)

Village of Sleepy Hollow, WQIP Round 12 for SHMC, NY, GIS Analyst – Mr. Manor is digitizing drainage structures and pipes based on reports and plans provided by the village as well as the other municipalities involved with the project.

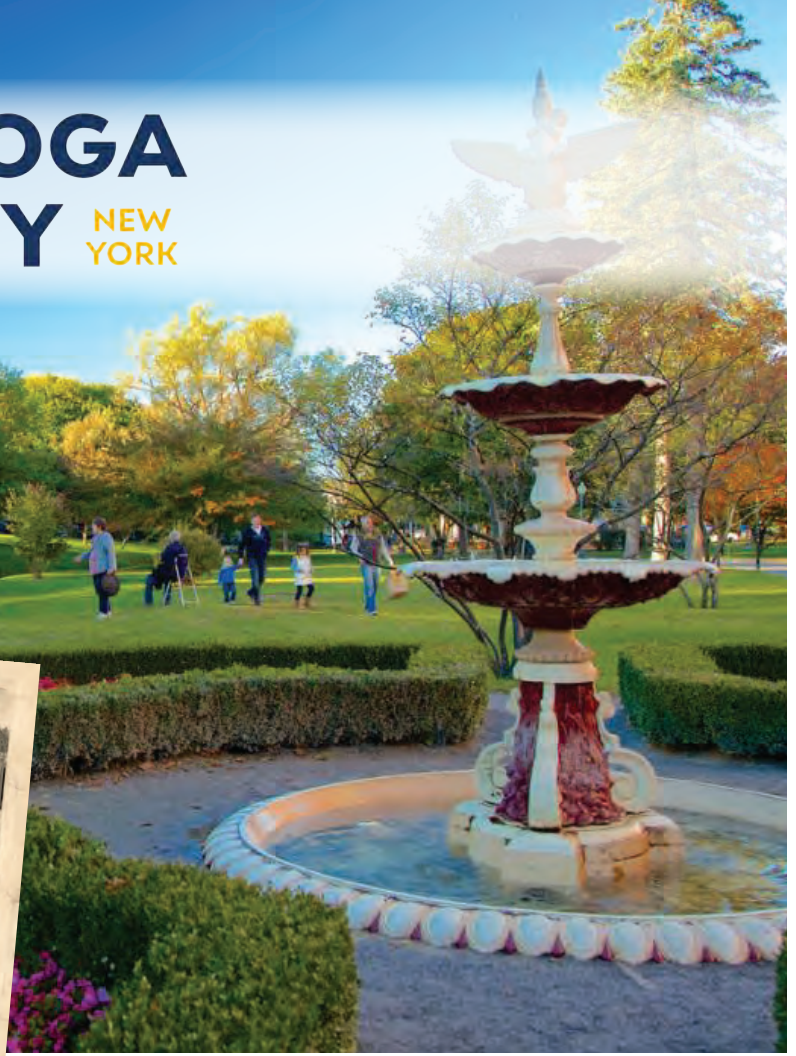
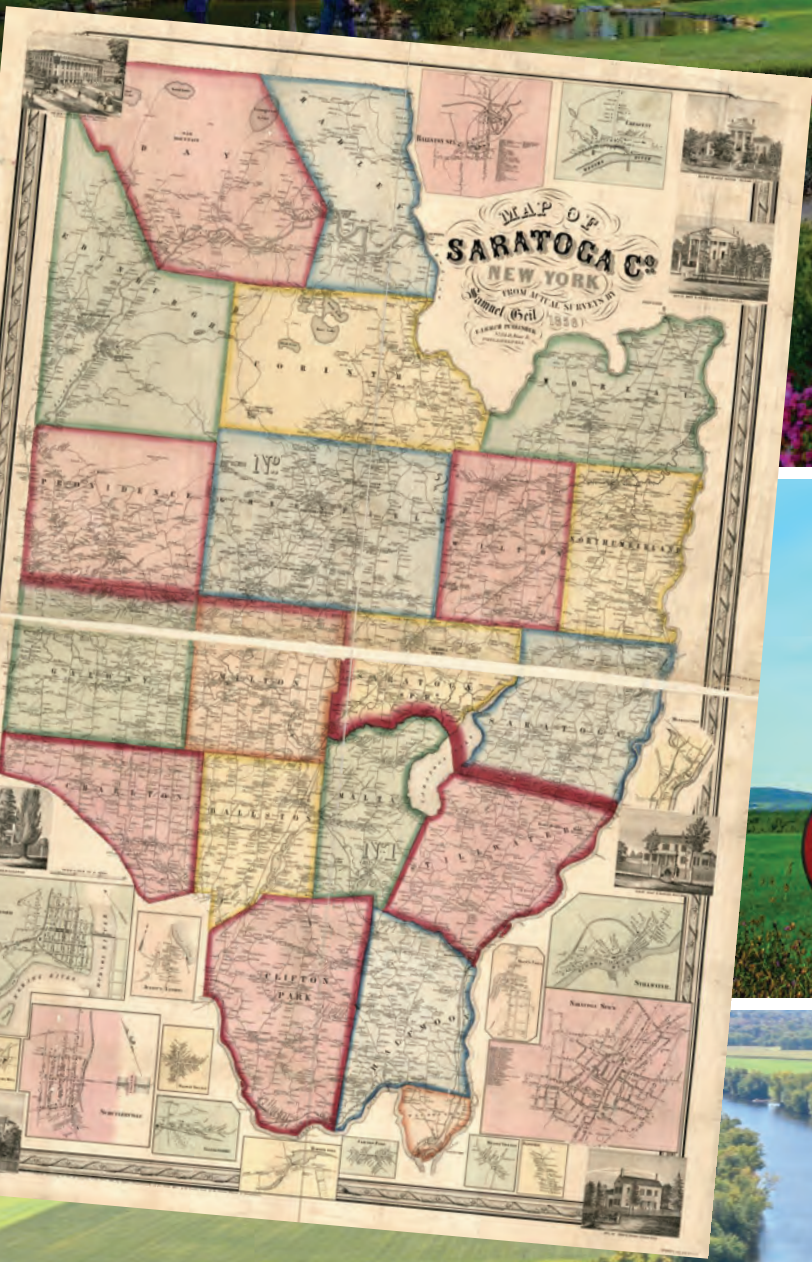
City of Yonkers Water Digitization - LiRo is providing the City of Yonkers services for scanning all water bureau documents, such as sections maps and as-built drawings, and creating a system to retrieve these documents in the field. The work includes spatially representing and retrieving documents using a mapping interface; updating water system records (approximately 1,150 sheets ranging in size from 30" X 20" and larger), as well as updating approximately 40 pipeline/system improvement projects on the sections sheets; and doing field work to confirm conflicting or missing information.

New York City Department of Design and Construction, Reconstruction of Grand Concourse, Phase 3 - LiRo provided resident/construction engineering and inspection services for the Reconstruction of Grand Concourse Service Roads Phase 3. The scope of work involved reconstruction of Grand Concourse service roads, resurfacing of the main roadway and widening of medians from East 171st Street to East 175th Street, including sewer, water main, street lighting, and traffic signal work and all other work incidental thereto, in the Bronx; Maintenance and Protection of Traffic; installation of new watermain and sewer, catch basins and manholes, utilities relocation; installation of new pavement markings and permanent roadway and regulatory signs; removal and installation of new street-lighting; and preparation of daily reports. (\$23 million)



SARATOGA COUNTY NEW YORK

4. Similar Project Experiences



LiRo GIS, Inc.
A LiRo-Hill Company



EXPERIENCE

LiRo-Hill is one of the largest public sector-focused IT and GIS consulting firms in the region. LiRo-Hill has grown from a small construction management firm into a multidisciplinary organization with approximately 1,100 employees, including certified GIS professionals (GISP), licensed land surveyors, certified project managers (PMPs), IT professionals, business and systems analysts, application developers, GIS analysts, specialists and technicians, licensed professional engineers, registered architects and landscape architects, schedulers, estimators and inspectors.

The LiRo-Hill GIS practice began in 1982 and serves public and private clients throughout the nation. LiRo-Hill has been developing GIS databases, deploying desktop and web-based GIS applications and performing GPS based field data collection for over 30 years. These applications have served the land records community, the public works and asset management work force, and public safety agencies across the nation.

This significant work effort has helped us develop the most experienced and talented tax mapping team in the Northeast and we are growing as the marketplace changes. LiRo-Hill is responsible for the development of over two million tax parcels in the State of New York. We now provide a mix of traditional services including:

- Land records research
- Tax map maintenance (using Esri, AutoCAD or Microstation)
- Tax map generation (paper, mylar, PDF, PDF/A, TIFF)
- Onsite updating of hardcopy tax map books

Our talented team now tackles a wide range of other tax map-related services including:

- Converting existing digital tax mapping to Esri's parcel fabric
- Training county or municipal tax mapper professionals to maintain their own digital tax maps
- Providing as-needed technical mentoring and support
- Re-engineering tax map maintenance workflows to save time and improve data quality
- Developing custom tax map maintenance solutions for government staff to use
- Creating interactive Web map-based GIS applications for intranet and public use
- Supporting grievance management and revaluations with GIS analysis

With offices in Rochester, Buffalo, New York City, Long Island, New Jersey, Pennsylvania, Boston, and Connecticut, LiRo-Hill has become one most respected GIS consulting firms in the Northeast, enjoying a solid reputation among our clients, vendors, consultants and financial communities. Repeat business from an extensive list of public agencies and local municipalities with a steady need for our services accounts for 95% of our sales.

LiRo-Hill team members deliver quality GIS solutions to our clients. Over time, we have become one of the leading spatial information technology consulting firms in the Northeast U.S. and have become a **Silver Level Esri Business Partner**. LiRo-Hill's services encompass full lifecycle consulting and management, ranging from needs assessment, requirements definition and system design through acquisition assistance, implementation, training and ongoing support.

As demonstrated within our proposal, LiRo-Hill has been providing a full range of GIS services similar to those required by the County for a wide variety of government clients. Detailed descriptions of this work and other relevant projects are provided on the following pages.



ONEIDA COUNTY - DIGITAL TAX MAP MIGRATION TO ESRI TECHNOLOGY & MAINTENANCE



CLIENT

Oneida County Finance Department
 800 Park Avenue
 Utica, New York 13501

PROJECT PROFILE

In 2016, LiRo-Hill staff migrated the County’s 105,000 parcels from AutoCAD format to Esri Geodatabase and provided the required linkage to the State of New York’s RP-5217 Real Property Transfer Report/Sales Reporting data for applicable parcels. In Oneida County, the County is responsible for the maintenance of tax map while the local jurisdictions are responsible for assessment.

REFERENCE

Jeff Quackenbush, Deputy Commissioner of Planning
 315-798-5710
jquackenbush@ocgov.net

The migration required the development of an Esri Data Model and a mapping of AutoCAD data types and geometry to Esri Geodatabase geometry and domains. The data for 26 Towns, 3 cities, and 18 villages separate villages (and AutoCAD drawings) was migrated into a single, comprehensive parcel database for the entire County. Editing occurs in a Working File Geodatabase, structured by Town and edits are posted to the main Geodatabase. Tax maps are generated using ArcGIS Pro Map series.

COMPLETION DATE

Ongoing

Since 2019, LiRo-Hill has maintained the County’s digital tax maps in Esri Geodatabase format and provides regular updates and a revised Esri Geodatabase. The County transmits documents (i.e. NYS RPS 5217 and deeds) that support the work to be completed. LiRo-Hill interacts with the County’s Clerk’s site as required.



NYC DEPARTMENT OF FINANCE – REPLACEMENT DIGITAL TAX MAP SYSTEM

The screenshot displays the NYC Department of Finance Property Information Portal. On the left, the 'Property Details' section shows information for 37-29 94 STREET, FLUSHING 11372, Borough: Queens, Block: 1402, and Lot: 53. Below this is an 'Assessment' section with a table of assessed value history.

FY	Building Class	Tax Class	Land Value	Improvement Value	Total Value	Change	Taxable Billable AV	Change
2024	B2	1	\$175,000	\$1,069,000	\$1,244,000	3.87%	\$40,262	0.00%
2023	B2	1	\$175,000	\$1,025,000	\$1,200,000	8.21%	\$40,262	5.89%
2022	B2	1	\$175,000	\$934,000	\$1,109,000	-2.29%	\$38,022	6.00%
2021	B2	1	\$175,000	\$960,000	\$1,135,000	4.61%	\$36,870	6.00%

On the right, a 2D tax map shows a grid of lots with lot numbers 61, 62, 63, 64, and 65. Lot 63 is highlighted in light blue. The map includes street names and lot dimensions.

CLIENT

NYC Department of Finance
1 Centre Street
10th Floor, Room 1040
New York, NY 10007

REFERENCE

Carmela Quintos, Asst. Commissioner, Property Valuation & Mapping
212-291-4876
quintosc@finance.nyc.gov

COMPLETION DATE

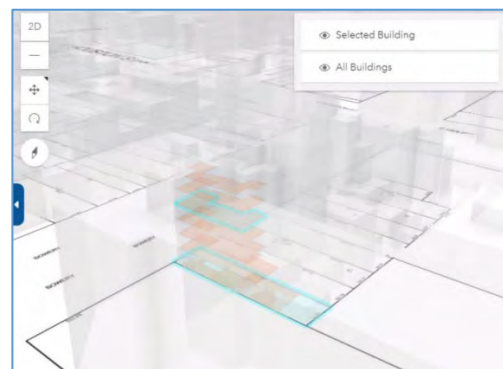
Ongoing

PROJECT PROFILE

LiRo-Hill is working with the NYC Department of Finance to replace their current Digital Tax Map (DTM) system with the Replacement DTM that meets the requirements of DOF and creates a blueprint for the future vision of DOF. LiRo-Hill is providing a carefully crafted, integrated set of services, cloud computing, Infrastructure as a Service (IaaS), next generation GIS desktop software and data model enhancements. In addition, it includes integration with state-of-the-art Building Information Model (BIM) technology, which will have immediate and long-term benefits for DOF. The Replacement DTM went into production on 12/1/2023. The system tightly integrates Microsoft Azure, ArcGIS Enterprise, and ArcGIS Online and ArcGIS Pro. The system is 100% service based.

The DTM system is comprised of a series of Esri ArcGIS Pro editing “wizards”, which are used by the City tax mappers to perform their work using a step-by-step process, and a public facing presence – “Property Information Portal”, a custom Javascript app which allows the public to view current tax maps, millions of assessment records, Cyclomedia imagery, 3D tax lost, and historical tax maps. All data is stored in the cloud in a branched versioned Esri Geodatabase.

The enhanced DTM will engage architects and planners in a way that was previously not possible and will provide DOF staff with digital tools to enhance productivity and participation. The enhanced DTM will provide the foundation and tools for the next generation of Assessment applications and public engagement.





TOWN OF MOUNT PLEASANT – TAX MAP MAINTENANCE



CLIENT

Town of Mount Pleasant
1 Town Hall Plaza
Valhalla, NY 10595

REFERENCE

James Timmings, Assessor
(914) 742-2345

COMPLETION DATE

Ongoing

PROJECT PROFILE

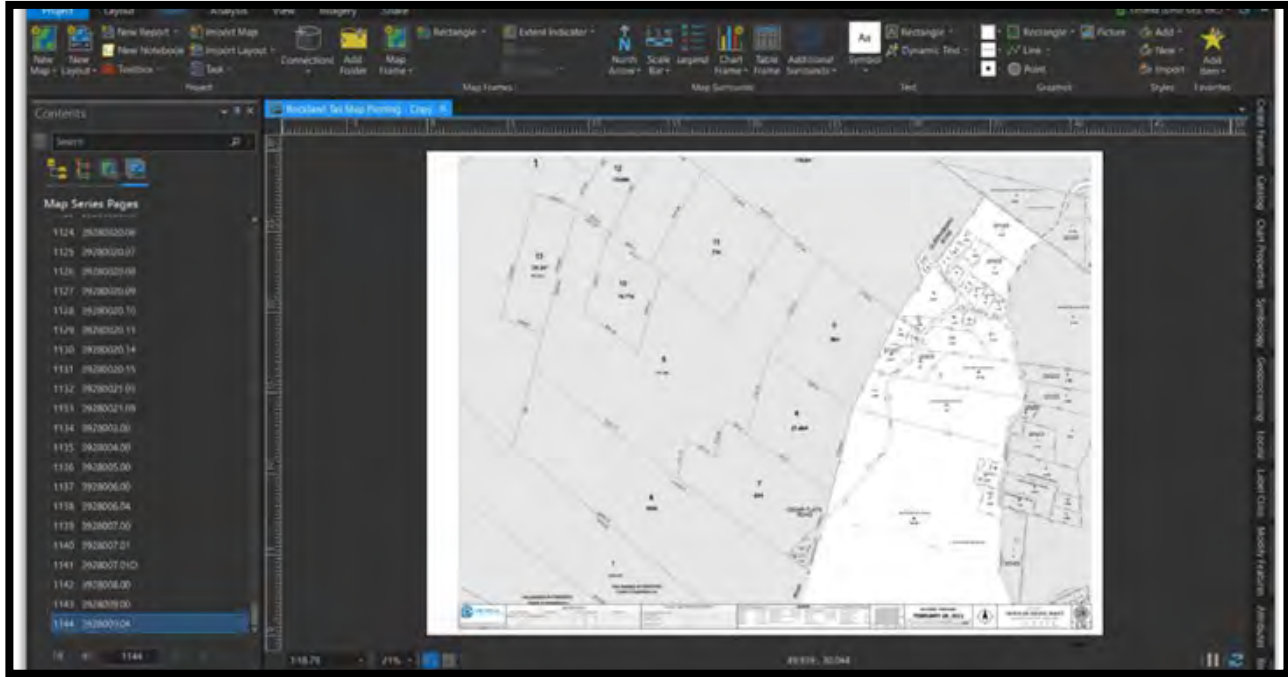
LiRo-Hill is providing maintenance of the Town’s Digital Tax Map, which is maintained using AutoCAD. On an as-needed basis, LiRo-Hill re-plots the Tax Map and exports the CAD data to an Esri-compatible format for use by Town staff who have Esri’s ArcGIS Desktop software (e.g. in the Engineering Department).

In 2014, LiRo-Hill staff proactively offered to generate the hardcopy Tax Maps in color instead of the traditional black and white. Several rounds of sample maps were generated and all of the Town’s requested changes were incorporated into the final plot configuration. Now all hardcopy maps are generated only in color – a sample of the map content appears below.

Since 2015, LiRo-Hill has maintained the Towns tax maps.



ROCKLAND COUNTY - DIGITAL TAX MAPPING MAINTENANCE



CLIENT

County of Rockland Department of Planning and Public Transportation
50 Sanatorium Road, Bldg T
Pomona, NY 10970

PROJECT PROFILE

Since 2019, LiRo-Hill has been providing digital tax map maintenance for the County of Rockland Department of Planning. Tasks include maintaining the existing digital tax map vector information, maintaining an existing digital tax map database, and generating thousands of tax maps. The current digital tax map data exists as a County-wide layer in an ESRI Enterprise Geodatabase format.

REFERENCE

Douglas J. Schuetz, Acting
Commissioner of Planning and
Public Transportation
845-364-3421
schuetzd@co.rockland.ny.us

Key features include:

- Cadastral Mapping
- Map generation via ArcGIS Pro Map Series
- Enterprise Geodatabase and Editing
- Out of the Box Esri COTS Solution
- Daily interaction with the Rockland County Clerk's site
- Automation via Esri Geoprocessing Toolbox

COMPLETION DATE

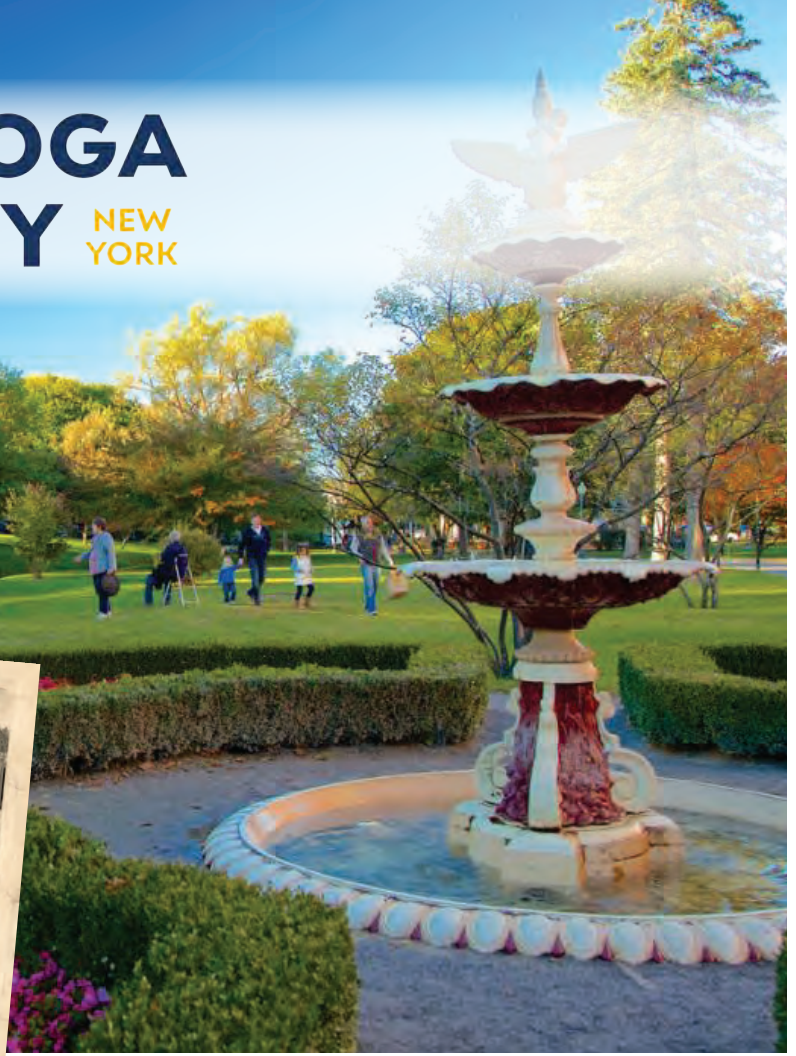
Ongoing



SARATOGA COUNTY

NEW YORK

5. Cost Proposal



LiRo GIS, Inc.
A LiRo-Hill Company



COST PROPOSAL

LiRo-Hill's proposed fee for the Scope of Work identified by the County is \$39,432.85. The cost for each task is contained in **Table 1**.

Table 1

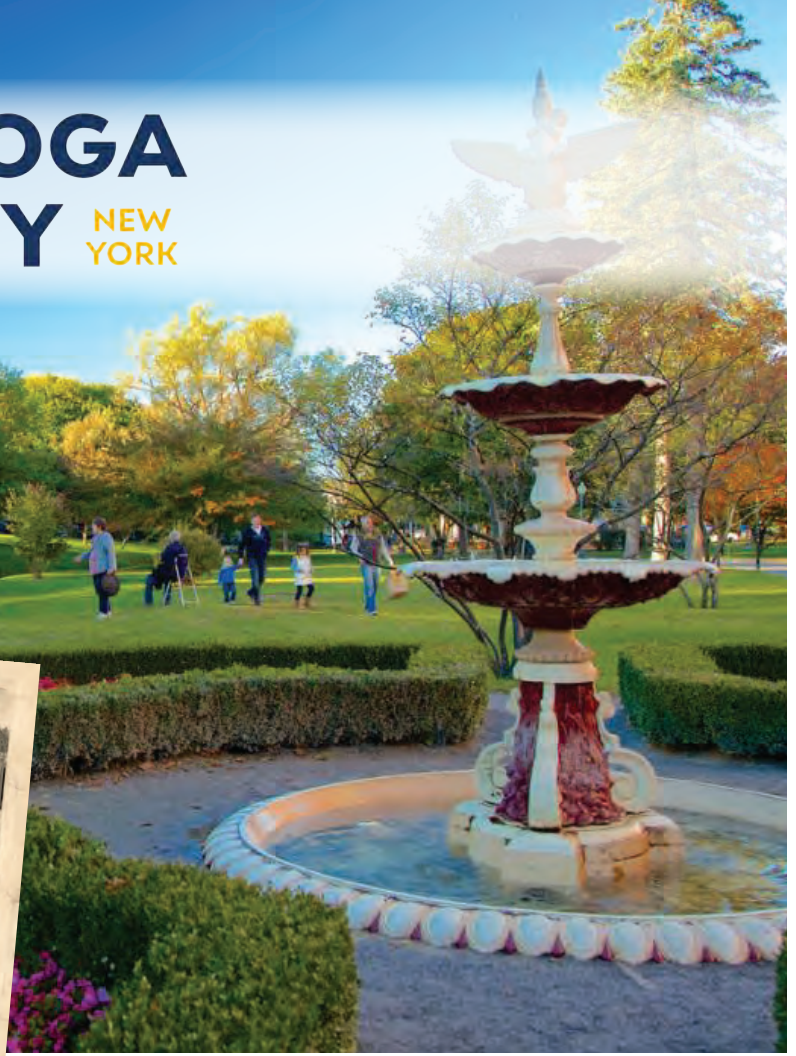
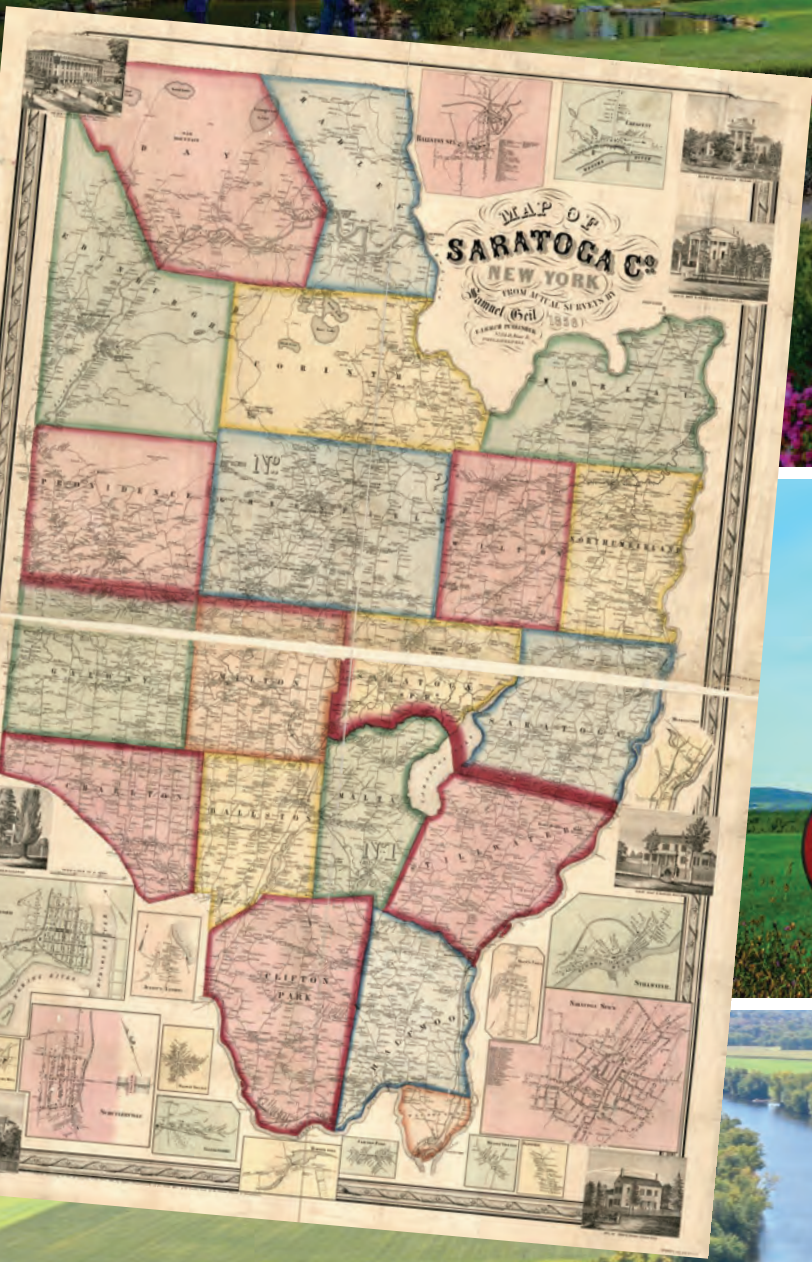
Conversion				
Subtotal				\$19,031.24
Training				
Subtotal				\$9,803.73
Ortho-Imagery				
Subtotal				\$7,102.42
Post Training Support				
Subtotal				\$2,330.30
Meetings				
Subtotal				\$1,165.15
Total Cost				\$39,432.84



SARATOGA COUNTY

NEW YORK

6. Required Forms



LiRo GIS, Inc.
A LiRo-Hill Company



REQUIRED FORMS

The forms listed below are provided on the following pages.

- Indemnity and Insurance Agreement
- Certification of Compliance with Iran Divestment Act
- Certification of Compliance for the Prevention of Sexual Harassment
- Vendor Information for the County of Saratoga

INDEMNITY AND INSURANCE AGREEMENT

IT IS HEREBY AGREED by LiRo GIS, Inc., the PROFESSIONAL, as follows:

INSURANCE
PROFESSIONAL'S LIABILITY INSURANCE

The Professional shall purchase and maintain such insurance as will protect him from claims as set forth below, which may arise out of or result from the Professional's operations under the Contract, whether such operations be by himself or any subcontractor or by anyone employed by any of them or anyone for whose acts the Professional may be liable:

1. claims under workmen's compensation, disability benefit and other similar employee benefit acts;
2. claims for damages because of bodily injury, occupational sickness or disease, or death of his employees;
3. claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees;
4. claims for damages insured by usual personal injury liability coverage which are sustained (1) by any person as a result of an offense directly or indirectly related to the employment of such person by the Professional, or (2) by any other person; and
5. claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.

Certificates of Insurance acceptable to the County shall be filed with the County prior to commencement of the work. The County must be named and included as an additional insured under the Professional's general liability insurance. Proof that the County has been named as an additional insured on the Contractor's general liability insurance must be provided in the form of an additional insured rider to said policy, or by other proof acceptable to the Saratoga County Attorney

The Professional's Comprehensive General Liability Insurance and Automobile Insurance shall be in an amount not less than One Million Dollars (\$1,000,000) for injuries, including accidental death, to any one person and subject to the same limit for each person, and in an amount not less than One Million Dollars (\$1,000,000) on account of one occurrence. The Professional's Property Damage Liability Insurance shall be in an amount not less than One Million Dollars (\$1,000,000). The Professional shall require his subcontractor's to procure and to maintain during the life of his subcontract Comprehensive General Liability, Automobile Liability, and Property Damage Liability Insurance of the type and in the same amounts as specified hereinabove. The Professional's and his subcontractors' Liability Insurance shall include adequate protection against the following special hazards:

Bodily Injury and Property Damage – completed job operation and/or products liability at before mentioned limits with \$1,000,000 for bodily injury and \$1,000,000 aggregate for operations, protection, contractual and products and/or completed job operations. Property Damage shall be on the broad form and shall include coverage for explosion, collapse and underground damages.

The above insurance is not, and shall not be construed as, a limitation upon Professional's obligation to indemnify the COUNTY.

Attorney's Approval

All documents submitted shall be subject to the approval of the Saratoga County Attorney as to form and content.

HOLD HARMLESS

The Professional shall, to the fullest extent permitted by law, at all times indemnify and save harmless the COUNTY from and against any and all claims and demands whatsoever, including costs, litigation expenses, counsel fees and liabilities in connection therewith arising out of injury to or death of any person whomsoever or damage to any property of any kind by whomsoever, to the extent caused in whole or in part, directly or indirectly, by the negligent acts or omissions of the Professional, any person employed by the Professional, or anyone for whom the Professional is liable, while engaged in the work hereunder. This clause shall not be construed to limit, or otherwise impair, other rights or obligations of indemnity which exist in law, or in equity, for the benefit of the COUNTY.

IN WITNESS WHEREOF, the PROFESSIONAL has set its hand this 2nd day of April, 2024.

SIGNATURE 
NAME & TITLE Richard Annitto, GISP

**CERTIFICATION OF COMPLIANCE FOR THE
PREVENTION OF SEXUAL HARASSMENT**

Pursuant to State Finance Law §139-1 of the State of New York, effective January 1, 2019, where competitive bidding is required for certain public contracts, every bid must contain the following statement affirming that the bidder has implemented a written policy addressing sexual harassment prevention and that the bidder provides annual sexual harassment prevention training, which statement must be signed by the bidder and affirmed by such bidder under the penalty of perjury:

[Please Check One]

BIDDER'S CERTIFICATION

- By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that the bidder has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of section two hundred one-g of the labor law.

- I am unable to certify that I, or my employer, have implemented a written policy addressing sexual harassment prevention in the workplace. The reason(s) why neither I nor my employer can make such certification is/are: _____

Dated: April 3, 2024.

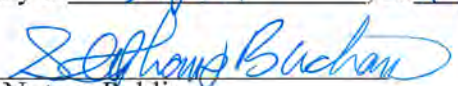
STATE OF NY)
COUNTY OF Nassau) ss:

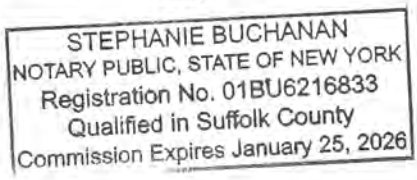
The undersigned, being duly sworn, says: (a) I am duly authorized to execute this Certification and (b) I hereby certify, under penalty of perjury, that the forgoing Certification is in all respects true and accurate.


Signature

Richard Annitto, GISP
Printed Name

Vice President
Title

Subscribed and sworn to before me this 3
day of April, 2024

Notary Public



VENDOR INFORMATION
FOR THE COUNTY OF SARATOGA

Please complete the following information which is necessary in order for Saratoga County to track vendor applicant information and the County's purchasing process.

Business Name LiRo GIS, Inc.

Address 3 Aerial Way, Syosset, NY 11791

Business Type (Sole Proprietorship, Corporation, LLC, etc.) Corporation

Is your business a Disadvantaged Business Enterprise (DBE)? Yes No

Is your business a Minority and Women-Owned Business Enterprise (MWBE)? Yes No

Does your business have a small business status? Yes No

Any other business status, please provide information: _____

Provide the name of the Certifying Entity (ties): LiRo GIS, Inc.

Have you conducted business with the County before? Yes No

If the answer to the above question is NO, please provide your Federal ID Number and attach a copy of your W-9 Form. FEIN #: 11-2720418

How did you discover this Bid opportunity? through the rfpmart

Do you use the Empire State Municipal Purchasing Group Website (BidNet)? Yes No

If Yes, do you find it useful (explain) or if No, why? _____

It is convenient to find information in one place instead of searching various websites to find information.

Completing the above information does not change your chances of being awarded a contract. The information collected will NOT be sold and will not be used to contact you.

Thank you.