

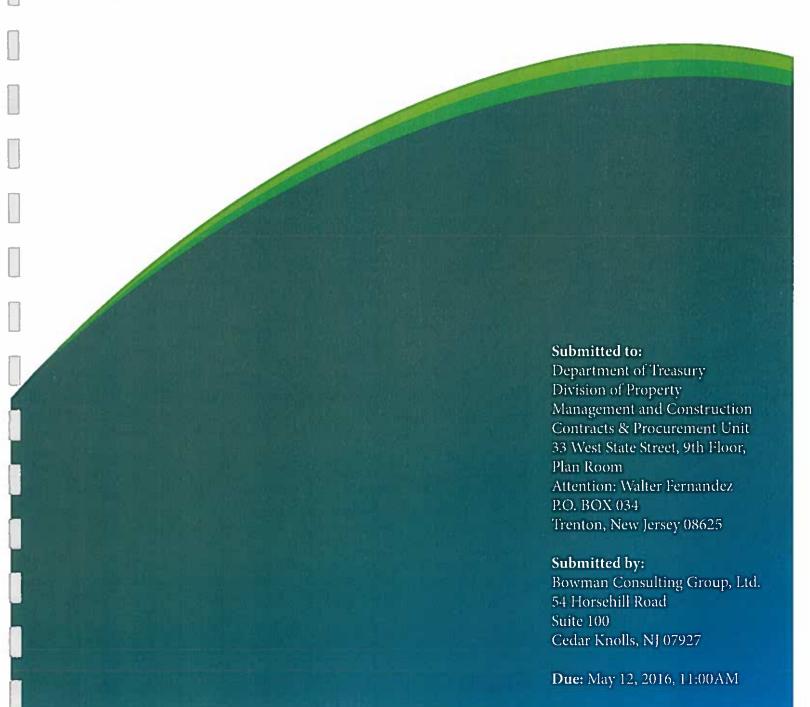
## **Technical Proposal**

Response to Request for Proposal

### **Boundary Surveys for Land Acquisition, Various Parcels**

Borough of New Milford, Bergen County, New Jersey

DPMC Project No.: P1139-00



# Final/Accepted Final/Accepted

### PROFESSIONAL SERVICES FEE PROPOSAL DIVISION OF PROPERTY MANAGEMENT & CONSTRUCTION

THIS FEE PROPOSAL TO BE RETURNED

IN A SEPARATELY SEALED ENVELOPE TO:

PROJECT NO.: P1139-00

Division of Property Management & Construction 33 WEST STATE ST 9TH FLOOR, PLAN ROOM P.O. Box 034 Trenton N.I.08625-0034

Trenton, NJ 08625-0034 Attention: SHAWN TAYLOR

THIS PROPOSAL DUE DATE, NO LATER THAN 2:00 PM, Thursday, May 12, 2016

FIRM NAME BOWMAN CONSULTING GROUP

THE UNDERSIGNED PROPOSES TO PROVIDE ALL PROFESSIONAL SERVICES AS STATED IN THE REQUEST FOR PROPOSAL AND SCOPE OF WORK

 CONSULTANT SURVEY SERVICES
 \$ 50,450.00

 SUB CONSULTANT SURVEY SERVICES
 \$ 0.00

 TOTAL LUMP SUM FEE FOR SURVEY SERVICES
 \$ 50,450.00

 CORNER MARKER SETTING ALLOWANCE (Monuments 40@ \$200/ea.)
 \$ 8,000.00

 CORNER MARKER SETTING ALLOWANCE (Iron Bars 60@\$85/ea.)
 \$ 5,100.00

 TOTAL CONTRACT AMOUNT
 \$ 63,550.00

#### PROPOSAL TO HOLD GOOD FOR 60 DAYS AFTER THE DUE DATE.

Signature and Title of Principle or Individual of the firm authorized to sign contractual documents:

Signature of the consultant below attests that the Consultant has read, understands and agrees to all terms, conditions and specifications set forth in the Bequest for Proposal (RFP) and Consultant Proposal Package.

Signature: Print Name: DAVID B. DIXON

Title: DIR. OF SURVEYING Date: 5/12/16

ATTACH PROOF OF REQUIRED INSURANCE COVERAGE

See attached requirements per "General Conditions to Consultant Agreement" Section 27, pp. 18-19 PROFESSIONAL LIABILITY INSURANCE
(\$100,000 MIN LIMIT/\$25,000 MAX DEDUCTIBLE)

# Final/Accepted Fee Proposal

**CONSULTANT TASK/LABOR/FEE SHEET** 

Project # P1139-00

A/E:

**Project Name: Boundary Surveys for Land Acquisition, Various Parcels** 

Project Location: Borough of New Milford, Bergen County, NJ

PROJECT			CONSU	LTANTS LEVE	L OF EFF	ORT IN HOURS/FEE			REPROD. COST	TOTALS
PHASE OR	LEVEL	7	6	5	4	3	2	1	PER PHASE INCLUD.	PER TASK
TASK	*HOURLY								SUB CONSULTANT	HOURS
	RATE	\$	\$180.00	\$160.00	\$	\$135.00	\$170.00	\$	DOCUMENTS	\$ AMOUNT
PRELIMINARY PHASE	HOURS		6	4		2				12
	AMOUNT	\$	\$1,080.00	\$640.00	\$	\$270.00			s	\$1,990.00
FIELD PHASE	HOURS		8	10		60	96			174
	AMOUNT	\$	\$1,440.00	\$1,600.00	\$	\$8,100.00	\$16,320.00	\$	\$	\$27,460.00
OFFICE PHASE	HOURS		10	20		90	Č.		S	120
	AMOUNT	\$	\$1,800.00	\$3,200.00	\$	\$12,150.00	\$	\$	\$	\$17,150.00
DELIVERABLES	HOURS		5	10		10				25
	AMOUNT	\$	\$900.00	\$1,600.00	\$	\$1,350.00	\$	\$	\$	\$3,850.00
	HOURS		29	44		162	96			331
TOTAL	AMOUNT	\$	\$5,220.00	\$7,040.00		\$21,870.00	\$16,320.00		s	\$50,450.00
<u> </u>			<u></u>		·	PROF	ESSIONAL S	ERVICES	HOURS	331
							GRANE	TOTALS	AMOUNT	\$50,450.00

### **Table of Contents**

- 1 Cover Letter and Firm/Project Team Experience
- 2 Organization Chart
- **3** Resumes of Key Team Members
- 4 Key Team Members Project Experience Data Sheet
- 5 Project Key Personnel List
- **6** Project Approach
- 7 Project Schedule
- **8** Certificate of Employee Information Report
- **9** Certification of Public Law 2005, Chapter 92

Cover Letter and Firm/Project Team Experience



RECEIVED

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TREASURY DPMC PROCUREMENT

May 12, 2016

Walter Fernandez
Department of Treasury
Division of Property Management and Construction
Contracts & Procurement Unit
33 West State Street, 9th Floor, Plan Room
P.O. BOX 034
Trenton, New Jersey 08625-0034

RE:

Department of the Treasury Division of Property Management and Construction Response Request for Proposal DPMC Project No.: P1139-00, Boundary Surveys for Land Acquisition Various Parcels

Borough of New Milford, Bergen County, New Jersey

Dear Mr. Fernandez:

Bowman Consulting Group, Ltd. is pleased to respond to the Department of the Treasury, Division of Property Management & Construction Request for Proposal (RFP) for Land Surveying Services. Bowman Consulting is a multidisciplinary design firm, with over 500 professionals located in more than 30 offices throughout the United States. Bowman serves a broad array of industries including land development, transportation, oil and gas, water resources, and mining, as well as local, county and state governments. Bowman has garnered numerous awards and recognition for growth, as well as for environmentally sensitive designs.

As a full service professional services firm, we have the ability to provide boundary and topographic surveys, existing conditions surveys, tax map preparation and maintenance, construction stakeout, ground control for aerial surveys, global positioning systems (GPS) surveys and wetland surveys. All of our work is performed with state of the art electronic field equipment and data collectors, processed using AutoCAD, Carlson and Leica software. All maps are prepared in the AutoCAD environment for compatibility.

Our past project experience of similar projects is attached. Bowman Consulting is a full service firm committed to proving quality service with our diverse personnel. We will not utilize subcontract personnel to complete the assigned surveys. While we have multiple offices throughout New Jersey, this contract will be serviced from our main office located in south central Morris County.

We believe that we are uniquely suited to provide the requested services to the State and trust that this response will demonstrate those attributes.

In accordance with the RFP we have attached the items in the order they were requested.

- Cover Letter and Firm/Project Team Experience
- Organization Chart
- Resumes of Key Team Members
- Resumes of Key Team Members Experience Data Sheet (form enclosed)
- Project Key Personnel List (form enclosed)
- Project Approach
- Project Schedule
- Certificate of Employee Information Report
- Certification of Public Law 2005, Chapter 92



We eagerly look forward to continuing our relationship with The Department of The Treasury Division of Property Management & Construction. We would be pleased to meet with you to answer any questions you may have or to provide additional information.

Very truly yours,

David B. Dixon, PLS, PPP

Director of Surveying

Bowman Consulting Group, Ltd.



#### Firm/Project Team Experience

Our firm has provided Land Surveying services in support of Green Acres acquisitions in several municipalities. Below is an abbreviated list:

- 1. Borough of Sayreville, Middlesex County, New Jersey Green Acres survey of 57 parcels to be acquired for Blue Acres. This survey was performed in March, 2014 for a fee of \$82,305 for DPMC,
- 2. Township of Hanover, Morris County, New Jersey Green Acres survey of a 38 acre parcel to be acquired. This survey was performed in January, 2007 for a fee of \$6,400 for the Township Engineer,
- 3. Township of Hanover, Morris County, New Jersey Green Acres survey of a 3.4 acre parcel to be acquired. This survey was performed in January, 2011 for a fee of \$2,900 for the Township Engineer,
- 4. Township of Parsippany-Troy Hills, Morris County, New Jersey Green Acres survey of a 19 acre parcel to be acquired. This survey was performed in December, 2007 for a fee of \$5,900 for the Township Purchasing Agent,
- 5. Township of Franklin, Somerset County, New Jersey Farmland survey of a 160 acre parcel. This survey was performed in 2002 for a fee of \$25,600 for the Township, Senior Engineer,

In addition, Bowman Consulting Group, Ltd. has provided Land Surveying services for many projects throughout New Jersey with similarities to the expected challenges for a project of this type. Below is an abbreviated list:

- 1. Township of Hanover, Morris County, New Jersey, a survey of the former Bell Telephone property bordering on Morristown Airport containing 193 acres. The survey included the location of former tract lines, unimproved streets and 600 wetlands flags.
- 2. City of Newark, Essex County, New Jersey, a survey of 4 city blocks for a residential, commercial and educational rehabilitation project. The survey involved the survey of 10 street right of ways and 56 individual lots.
- 3. Borough of Madison, Morris County, New Jersey, a survey of 11,500 l.f of municipal roadway for capital improvements. This survey included the establishment of the frontage limits of 250 privately owned lots.



#### **Muscarelle Tract**

Hanover, New Jersey







This project involved the surveying of a 195 acre tract of land in Hanover Township, Morris County, New Jersey in support of a Green Acres acquisition by the Township. The tract was bordered by a municipal airport, Township property and dozens of residential property and was crossed by several gas, sewer and access easements. The survey included the surveying of over 300 wetland flags delineated by the environmental consultant. Survey plats and colored exhibits were prepared to be used for the Green Acres acquisition as well as to establish land values.

#### Client

Hanover Township 1000 Route 10 PO Box 250 Whippany, NJ 07981

, Township Administrator

#### **Features**

- Boundary Survey
- Wetland Locations



#### **Oliver Street Elementary School**

Newark, New Jersey

Client

Epic Management, Inc. 136 Eleventh Avenue Piscataway, NJ 08854 p: 732.752.6100

#### **Services Provided**

- Site Planning
- Land Surveying
- Landscape Architecture
- Permitting

Bowman Consulting is the lead engineer for the new Oliver Street Elementary School in Newark, NJ. The approximate 137,000 sq ft school will house 938 students, grades pre-k through sixth. This new facility will include general classrooms, a media center, multi-purpose/assembly room, cafeteria, gymnasium, as well as administrative and support facilities. Construction will begin September 2013.

Bowman's scope of work included engineering and surveying services for the redevelopment of the site, boundary and topographic surveying, site design, and landscape architectural design services. In addition, we processed and acquired all necessary local, county and state permitting for the project.



# **Grand Prix at Port Imperial Race Course**

Weehawken and West New York, New Jersey



This exciting 3.2 mile course will run on existing public streets starting at the Weehawken Ferry Terminal. In addition to site development, part of Bowman's role was to provide detailed surveying and mapping of the race track and adjacent areas. The task of surveying proved particularly crucial to the project due to the low ground clearance of Formula One cars. For areas surrounding the course, Bowman has been designing smooth transitions with minimal disruption to intersecting streets, sidewalks, parks, utilities, and traffic controls. After design is complete, Bowman will be applying for the major permits and approvals for the project.



#### Client

Port Imperial Racing Associates 405 Lexington Avenue New York, New York 10174 p: 212.503.2870

#### Features

- Site Planning
- Land Surveying
- Local, County and State Permitting





#### **Bloomfield College**

#### Bloomfield, New Jersey

Bowman provided the engineering, planning, landscape architectre and surveying services for a number of renovations and enhancement projects on campus. These services were provided as part of a continuing on call contract with the college. Completed projects to date include the renovation of the Liberty Street Residence Hall, plaza improvements at the Science Building, and general campus service and pedestrian improvements at the Library, Westminster Hall, Richards Hall and Voorhees Hall.

Most recently we are working on the college's latest expansion, Franklin Hall. This four-story building will house retail space, classrooms, and dormitories. The facility is expected to open September 2014 with the expectation of LEED silver certification. Bowman provided teh demolition engineering, construction plans and specifications.







#### Client

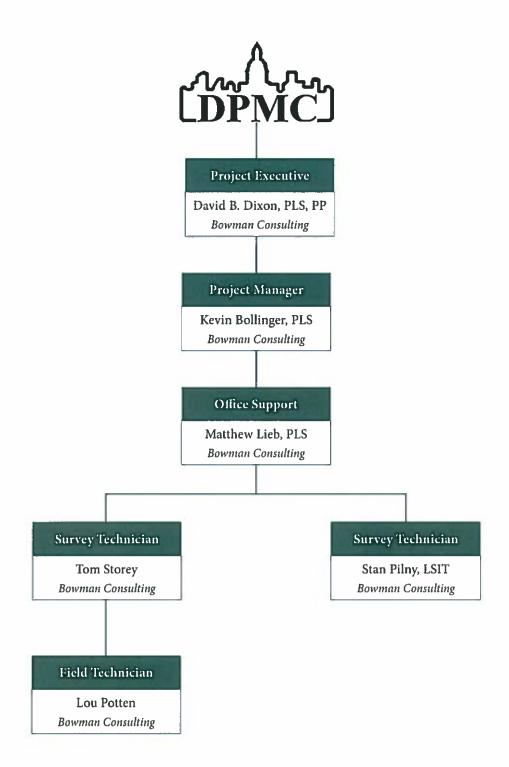
Bloomfield College 467 Franklin Street Bloomfield, New Jersey 07003 William McDonald p: 973.748.9000

#### Services Provided

- Demolition Engineering
- Site Planning
- Land Surveying
- Landscape Architecture
- Permitting
- Construction Plans and Specifications

# Team Organization Chart





# 3

Resumes of Key Team Members



#### David B. Dixon, PLS, PP

**Project Executive** 

#### **Education**

 Rochester Institute of Technology, Rutgers University

#### Registrations

- New Jersey PLS (27282)
- New Jersey PP (2608)

#### **Associations**

- National Society of Professional Surveyors
- American Congress of Surveying and Mapping
- New Jersey Society of Professional Land Surveyors (Past President)

Mr. Dixon has over 43 years of experience in the field of Land Surveying and Development. As Director of Surveying, he is responsible for all facets of Land Surveying projects, from initial client contact through research and computations, on to the final product. His diverse experience in both private and public sector work has given him the tools to provide the proper technical and practical supervision of any Surveying and Mapping project. These types of projects range from 5,000 s.f. to over 1,200 acres. Mr. Dixon is also responsible for overseeing day to day surveying and mapping operations and staffing.

Prior to joining Omland, Mr. Dixon was the Director of Surveying and Project Manager at a large north Jersey engineering and surveying firm for twenty-five years. Subsequent to this, his two-year tenure at a large photogrammetric and surveying firm gave him the unique perspective of a specialty market.

Mr. Dixon is a former adjunct professor of County College of Morris. He is also an active member of the NJ Society of Professional Land Surveyors and is active on committees and seminar presentations. Within the last two years Mr. Dixon has also been a court appointed commissioner for Boundary Survey.

#### Blue Acres Project, Sayreville, NJ

Bowman was awarded a contract in March of 2014 to prepare individual property surveys of 58 properties in Sayreville, New Jersey. These properties are situated in flood prone areas and were selected to be qualified for purchase by the State of New Jersey and added to the Green Acres Open Space program. The work involved the research, field survey and preparation of individual maps and descriptions suitable for property conveyance.

#### Formula 1 Grand Prix of America at Port Imperial, Weehawken & West New York, NJ

Mr. Dixon provided surveying and mapping services for a 3.2 mile race course to run through the public streets of Weehawken and West New York. The project included not only the course but also surrounding support areas for the race event. Mr. Dixon prepared and coordinated applications for municipal, county, SCD, NJDEP and ACOE permits and approvals.

#### Muscarelle Tract, Hanover, NJ

Mr. Dixon provided surveying of a 195 acre tract of land in support of a Green Acres acquisition. The project included surveying of over 300 wetland flags delineated by an environmental consultant. Survey plats and colored exhibits were also prepared to be used for the Green Acres acquisition as well as to establish land values.

#### Layton Green Acres, Hanover, NJ

Mr. Dixon performed surveying of a 17.8 acre site in Hanover Township. This project included the preparation of survey plats and descriptions to Green Acres acquisition standards, as well as monument property corners with GPS derived state plane coordinates.



#### **Kevin Bollinger, PLS**

**Project Manager** 

#### Education

- County College of Morris
- Fairleigh Dickinson University

#### Registrations

New Jersey PLS (30744)

#### Associations

- National Society of Professional Surveyors
- American Congress of Surveying and Mapping
- New Jersey Society of Professional Land Surveyors

Mr. Bollinger began his surveying career in 1972. His experience ranges from field survey crew, performing boundary and topographic surveys, and construction layout to vice president of a large New Jersey surveying and engineering firm to founding his own firm providing consulting engineering and land surveying. In 2005, Mr. Bollinger joined the firm of Omland Engineering Associates, Inc. as assistant director of land surveying services. This diversified experience has given Mr. Bollinger a unique perspective of the special organizational and coordination challenges facing a professional service organization.

Responsibilities include research and analysis for the preparation of boundary surveys, topographic surveys and roadway existing condition surveys.

#### Felts Tract, Hanover, NJ

Mr. Bollinger performed surveying services for a boundary survey for 10 acres in Hanover Township. The project was part of the Green Acres acquisition.

#### Hansch Tract, Hanover, NJ

Mr. Bollinger performed surveying services for a boundary survey for 20 acres in Hanover Township. The project was part of the Green Acres acquisition.

#### Rienau Farmland Acquisition, Mendham, NJ

Mr. Bollinger performed surveying services for a boundary, easement and acquisition survey for 28 acres in the Borough of Mendham. This project was part of a Green Acres acquisition through the County of Morris.

#### AT&T Tract, Bernards, NJ

Mr. Bollinger performed surveying services for a boundary survey for 119 acres located in Bernards Township. This project was part of a Green Acres acquisition through Somerset County.

#### Lucent Tract, Hanover, NJ

Mr. Bollinger performed surveying services for a boundary survey for 193 acres located in Hanover Township.



#### Matthew Lieb, PLS

Office Support

#### Education

- B.S., Surveying, Pennsylvania State University, 2000
- B.A., Anthropology, Pennsylvania State University, 1995

#### Registrations

 Licensed Land Surveyor: New Jersey (24GS04324500), Pennsylvania (SU075148) Mr. Lieb has over 18 years of land surveying experience involving a wide variety of assignment types including commercial land development, residential subdivision and environmental remediation projects. He has served as a survey crew member as well as and Project Manager and is therefore well versed in field-to-finish surveying procedures. Mr. Lieb is proficient in conducting boundary surveys, topographic surveys, preparing plats, ALTA/ACSM land title surveys, and construction staking.

#### Value Industries, Newark, NJ

Mr. Lieb is a Project Manager on this project to provide surveying services for Value Industries in Newark, NJ. The project involves performing a boundary survey on approximately 11 acres. The site is located on the east side of Doremus Avenue and is a former chemical site. The boundary survey includes: closed traverse loop, location of property evident, title review and documentation, and plat preparation.

#### Delbarton School Trinity Hall Addition, Morris County, NJ

Mr. Lieb is a Project Manager on this project to provide surveying services for the expansion of Trinity Hall to construct a Learning Commons. This project involves performing a boundary survey, as well as a tree location survey.

#### Berkeley Heights, Union County, NJ

Mr. Lieb is a Project Manager on this project to provide surveying services on this site currently occupied by a shopping center and a vacant Kings Supermarket. This project involves performing a boundary survey as well as a topographic survey on two (2) lots.

#### J. Landau & Company, Bergen County, NJ

Mr. Lieb is a Project Manager on this project to provide surveying services to assist in the capping of the J. Landau & Company property in Bergen County. This project involves performing a boundary and topographic survey on approximately 1.9 acres, as well as a topographic survey and final as-built survey.

#### Barry Isett & Associates, Inc., Trexlertown, PA & Phillipsburg, NJ

Mr. Lieb served as a Project Manager and Professional Land Surveyor. He was the Surveyor of Record for various boundary surveys, subdivisions & land development, and environmental remediation projects. He maintained file records documenting various stages of project progress & completion, and was a team member of multi-discipline engineering projects. He prepared project cost estimates and proposals based on client needs, and was the responsible charge of the New Jersey office. Additionally, Mr. Lieb maintained client communications and business development.

#### Hahn Surveying, Bath, PA

Mr. Lieb served as a Survey Crew Member, Drafter and Project Manager. As a Survey Crew Member, he performed work for various boundary, topographic and construction stakeout surveys. As a Drafter, Mr. Lieb was in charge of preparing record documents and plans. He also represented clients at public municipal meetings, and modified projects to meet municipal, state and federal regulations.



#### Thomas C. Storey

Survey Technician

#### **Education**

- County College of Morris, New Jersey
- County College of Sussex, New Jersey

#### **Associations**

- National Society of Professional Surveyors
- New Jersey Army National Guard (retired)

Mr. Storey has been involved with land surveying for the past 25 years. Joining Omland Engineering Associates, Inc. fourteen years ago as Senior Party Chief, he has currently taken on the role of Survey Technician and field crew supervisor.

Tom has taken numerous continuing education courses in his field and is now proficient in a number of areas, to include: Topographic surveys utilizing field and aerial photographic methodology, construction layout of subdivision and site plan projects, Global Positioning System project planning, execution and computation, ss-Built surveys of municipal and private sector projects, utility surveys for design and reconstruction, bridge monitoring for location and movement, environmental and wetlands surveys and mapping, and more.

#### Morristown Municipal Airport, Morristown, NJ

This project involved a topographic survey with cross sections on both airport runways over 88 acres. Coordination with ground operations was required to complete this project. The project utilized both conventional and modern approached to surveying methods.

#### Avalon Bay Communities, Wharton, NJ

Mr. Storey provided microgravity point survey services to an area which was once an iron ore mine. He located test borings and grout holes, and also coordinated with Avalon Bay Communities to ensure mines were contained.

#### New Jersey Institute of Technology, Newark, NJ

This project involved the surveying and mapping of three replacement offsite parking areas.

#### Point Pleasant Borough, Point Pleasant, NJ

For this project, Mr. Storey provided flood certifications for home owners that were affected by Hurricane Sandy.



#### Stanley Pilny, LSIT

Survey Technician

#### Education

 B.S., Surveying Engineering Continuing Education Courses, NJIT (Newark)

#### Registrations

New Jersey LSIT

Mr. Pilny has been with Omland Engineering for over five years and is a key member of our survey department. His experience includes large and small tract Boundary surveys, Topographic surveys utilizing field and aerial photographic methodology, construction layout of subdivision and site plan project. He also has experience with Global Positioning System project planning, execution and computation, As-Built surveys of municipal and private sector projects, utility surveys for design and reconstruction, bridge monitoring for location and movement, environmental and wetlands surveys and mapping, and more. His office experience includes deed plotting for boundary analysis, processing and plotting of electronic field book observations and preparation of final as-built surveys.

Mr. Pilny recently recieved his Surveying Engineering degree and is taking numerous continuing education courses in this field.

#### Avalon Bay, Wharton, NJ

Mr. Pilny established and maintained survey control for stakeout and location of construction items for 4-story parking garage and 3-story residential apartment complex.

#### Memorial Field, West Caldwell, NJ

This project involved field work for the preparation of a boundary survey of a property owned by the Township of West Caldwell comprised of athletic fields, walking paths and open space. Mr. Pilny performed traverse and evidence locations including traverse closures and quality control.

#### Sunnyside at Howell, Howell Township, NJ

Mr. Pilny performed all field observations for the post-construction as-built survey of a 300-unit residential apartment site. Field survey included topographic and utility as-built conditions. Mr. Pilny also prepared final as-built plans from field observations for submission to local authorities for acceptance.



#### Lou Potten

Field Technician

#### **Education**

- Dover High School
- Various continuing education technical programs

Mr. Potten has been a Field Technician with Omland Engineering for over 15 years. During this time he has gained extensive experience in survey field procedures, while efficiently and accurately executing assigned tasks. Mr. Potten's diligence, independence and resourcefulness frequently produce creative solutions to emergent problems which sometimes arise in a dynamic field environment.

#### Avalon Bay Communities, Wharton, NJ

Mr. Potten provided microgravity point survey to an area which was once an iron ore mine, located test borings and grout holes, coordinated with Avalon Bay Communities to ensure mines were contained, and performed precise stakeout and locations for a 5-story parking garage and 3-story residential building.

#### Memorial Field, West Caldwell, NJ

This project involved field work for the preparation of a boundary survey of a property owned by the Township of West Caldwell comprised of athletic fields, walking paths and open space. Mr. Potten performed initial evidence reconnaissance, traverse and evidence locations including traverse closures and quality control.

#### Sunnyside at Howell, Howell Township, NJ

Mr. Pilny performed all field stakeout for utilities, site improvements and the construction of a 300-unit residential apartment site. He alos prepared data collector files for import and generation of cut sheets for various construction items.

NAME David B. Dixon

**TITLE Project Executive** 

FIRM Bowman Consulting Group, Ltd.

						1	
PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION)	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT ( IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTRACT PERSON AND PHONE NUMBER
Hanover Twp, NJ Green Acres - Eden Lane \$6400	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Prìncipal	1	10%	JAN - 2007	
Hanover Twp, NJ Green Acres - Townsend Ave \$2900	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Principal	1	10%	JAN - 2011 thru FEB 2011	
Parsippany, NJ Green Acres - Grange Road \$5900	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Principal	1	10%	DEC - 2007 thru JAN 2007	
Franklin Twp, NJ Green Acres Farmland Presv. Bennets Lane	Omland Engineering Associates Inc.	Boundary Survey for Farmland Preservation	Principal	2	15%	APR - 2002 thru JUNE - 2002	
Sayreville, NJ Blue Acres - 57 Parcels \$82,305	Omland Engineering Associates Inc.	Boundary Survey & Monumentation for Blue Acres Acquisition	Principal	6	20%	MAR - 2014 thru OCT 2014	

<sup>\*</sup> A KEY TEAM MEMBER IS A TECHNICAL OR MANAGEMENT PERSON DEVOTING 20% OR MORE OF THEIR TIME TO ANY PHASE OF THE PROJECT

NAME Kevin Bollinger	
TITLE Project Manager	
FIRM Bowman Consulting Group, Ltd.	

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION)	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT ( IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTRACT PERSON AND PHONE NUMBER
Hanover Twp, NJ Green Acres - Eden Lane \$6400	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Project Executive	1	20%	JAN - 2007	
Hanover Twp, NJ Green Acres - Townsend Ave \$2900	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Project Executive	1	20%	JAN - 2011 thru FEB 2011	-
Parsippany, NJ Green Acres - Grange Road \$5900	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Project Executive	1	20%	DEC - 2007 thru JAN 2007	-
Franklin Twp, NJ Green Acres Farmland Presv. Bennets Lane	Omland Engineering Associates Inc.	Boundary Survey for Farmland Preservation	Project Executive	2	25%	APR - 2002 thru JUNE - 2002	
Sayreville, NJ Blue Acres - 57 Parcels \$82,305	Omland Engineering Associates Inc.	Boundary Survey & Monumentation for Blue Acres Acquisition	Project Executive	6	25%	MAR - 2014 thru OCT 2014	

<sup>\*</sup> A KEY TEAM MEMBER IS A TECHNICAL OR MANAGEMENT PERSON DEVOTING 20% OR MORE OF THEIR TIME TO ANY PHASE OF THE PROJECT

IAME Matthew Lieb	
TITLE Office Support	
FIRM Bowman Consulting Group, Ltd.	

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION)	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT ( IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTRACT PERSON AND PHONE NUMBER
Matthew Lieb is a red	ent employee of Bowma	n Consulting and has n	ot had the oppor	tunity to work on any	y of the proposed p	rojects.	
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<sup>\*</sup> A KEY TEAM MEMBER IS A TECHNICAL OR MANAGEMENT PERSON DEVOTING 20% OR MORE OF THEIR TIME TO ANY PHASE OF THE PROJECT

NAME	Thomas Storey
TITLE	Survey Technician
FIRM	Bowman Consulting Group, Ltd.

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION)	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT ( IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTRACT PERSON AND PHONE NUMBER
Hanover Twp, NJ Green Acres - Eden Lane \$6400	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Survey Technician	1	20%	JAN - 2007	
Hanover Twp, NJ Green Acres - Townsend Ave \$2900	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Survey Technician	1	20%	JAN - 2011 thru FEB 2011	
Parsippany, NJ Green Acres - Grange Road \$5900	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Survey Technician	1	20%	DEC - 2007 thru JAN 2007	
Franklin Twp, NJ Green Acres Farmland Presv. Bennets Lane	Omland Engineering Associates Inc.	Boundary Survey for Farmland Preservation	Survey Technician	2	20%	APR - 2002 thru JUNE - 2002	
Sayreville, NJ Blue Acres - 57 Parcels \$82,305	Omland Engineering Associates Inc.	Boundary Survey & Monumentation for Blue Acres Acquisition	Survey Technician	6	20%	MAR - 2014 thru OCT 2014	

<sup>\*</sup> A KEY TEAM MEMBER IS A TECHNICAL OR MANAGEMENT PERSON DEVOTING 20% OR MORE OF THEIR TIME TO ANY PHASE OF THE PROJECT

NAME Stanley Pilny	
TITLE Survey Technician	
FIRM Bowman Consulting Group, Ltd.	

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION)	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT ( IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTRACT PERSON AND PHONE NUMBER
Hanover Twp, NJ Bell Labs Survey \$91,000	Omland Engineering Associates Inc.	Boundary and Topo Survey for Redevelopment	Survey Technician	1	50%	OCT - 2009	
Hanover Twp, NJ Green Acres - Townsend Ave \$2900	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Survey Technician	1	20%	JAN - 2011 thru FEB 2011	
Parsippany, NJ Green Acres - Grange Road \$5900	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Survey Technician	1	20%	DEC - 2007 thru JAN 2007	
City of Newark, NJ Survey for Redevelopment Williams Ave.	Omland Engineering Associates Inc.	Boundary Survey for Redevelopment	Survey Technician	3	20%	APR - 2011 thru JUNE - 2012	
Sayreville, NJ Blue Acres - 57 Parcels \$82,305	Omland Engineering Associates Inc.	Boundary Survey & Monumentation for Blue Acres Acquisition	Survey Technician	6	20%	MAR - 2014 thru OCT 2014	

<sup>\*</sup> A KEY TEAM MEMBER IS A TECHNICAL OR MANAGEMENT PERSON DEVOTING 20% OR MORE OF THEIR TIME TO ANY PHASE OF THE PROJECT

NAME Louis Potten	
TITLE Field Technician	
FIRM Bowman Consulting Group, Ltd.	

PROJECT TITLE LOCATION AND TOTAL CONSTRUCTION COST OR FEE	A/E OF RECORD FOR THIS REFERENCED PROJECT	SPECIFIC TYPE OF WORK EXPERIENCE (STUDY, SCHEMATIC, CONSTRUCTION ADMINISTRATION)	TEAM MEMBERS SPECIFIC ROLE OR TITLE ON THE REFERENCED PROJECT	DURATION OF TEAM MEMBER'S INVOLVEMENT OF THE REFERENCED PROJECT ( IN MONTHS)	% OF TIME DURING DURATION BASED UPON A 40 HOUR WEEK	DATES OF THE TEAM MEMBER'S INVOLVEMENT IN THE REFERENCED PROJECT	CLIENT NAME CONTRACT PERSON AND PHONE NUMBER
Hanover Twp, NJ Green Acres - Eden Lane \$6400	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Field Tecnhician	1	50%	JAN - 2007	
Hanover Twp, NJ Green Acres - Townsend Ave \$2900	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Field Tecnhician	1	50%	JAN - 2011 thru FEB 2011	
Parsippany, NJ Green Acres - Grange Road \$5900	Omland Engineering Associates Inc.	Boundary Survey for Green Acres Acqusition	Field Tecnhician	1	50%	DEC - 2007 thru JAN 2007	f -
Franklin Twp, NJ Green Acres Farmland Presv. Bennets Lane	Omland Engineering Associates Inc.	Boundary Survey for Farmland Preservation	Field Tecnhician	2	50%	APR - 2002 thru JUNE - 2002	
Sayreville, NJ Blue Acres - 57 Parcels \$82,305	Omland Engineering Associates Inc.	Boundary Survey & Monumentation for Blue Acres Acquisition	Field Tecnhician	6	50%	MAR - 2014 thru OCT 2014	

<sup>\*</sup> A KEY TEAM MEMBER IS A TECHNICAL OR MANAGEMENT PERSON DEVOTING 20% OR MORE OF THEIR TIME TO ANY PHASE OF THE PROJECT

# Project Key Personnel List

		PERCENTAGE OF TIME	PERCENTAGE OF TIME ASSIGNED TO PROJECT						
FIRM NAME	KEY PERSONNEL & TITLE	SURVEY SERVICES	HOURLY WAGE LEVEL 1-7						
Bowman Consulting Group, Ltd.	David B. Dixon - Project Executive/Director	25	Level 6						
Bowman Consulting Group, Ltd.	Kevin Bollinger - Project Manager	25	Level 5						
Bowman Consulting Group, Ltd.	Matthew Lieb - Office Support	50	Level 3						
Bowman Consulting Group, Ltd.	Thomas Storey - Survey Technician	20	Level 3						
Bowman Consulting Group, Ltd.	Stanley Pilny - Party Chief/Survey Technician	50	Level 3						
Bowman Consulting Group, Ltd.	Louis Potton - Party Chief/Field Technician	50	Level 2						
-									

INSERT THE WAGE LEVEL FROM 1 TO 7 OF EACH KEY PERSON. <u>DO NOT</u> INSERT ANY HOURLY RATE





#### **Project Approach**

#### Overview

In general terms, this project consists of the preparation of boundary surveys and monumentation of 38 parcels of land made up of 38 lots in New Milford to be acquired under the State of New Jersey's Blue Acres program. The New Milford parcels are grouped together and located on Hackensack River, Columbia, Harvard, Stueben, Lennox, Pine, and Washington Streets.

We will prepare a boundary survey of each parcel, or in the case of adjoining parcels under common ownership, a survey of the owner's combined parcels in accordance with N.J.A.C. 13:40-5.1, Land Surveyors; Preparation of Land Surveys and NJDEP Green Acres Program "Scope of Survey Services and Standard Detail Requirements", Sections 3-10. The final surveys will be monumentated in accordance with the Scope of Work, individual maps, electronic files, metes and bounds descriptions. Backup materials will be provided as part of the final deliverables.

#### **Preliminary Work**

Upon the issuance of the Notice to Proceed, we will hold a project kick-off meeting to identify the tasks required for completion and the staff and equipment resources necessary to complete them. At this time, project milestones will be established and the project will be added to our office and field schedules. We will utilize the Microsoft Office suite of products for project scheduling and documentation. A dedicated database will be created to include the following: each lot to be surveyed, a tracking of documents required and received, entries for each of the field and office tasks to be performed for each lot, a tracking of property corners to be set, and an entry to indicate the final documentation has been completed and transmitted. At this time we will review the information provided by the Division and determine what additional data will be required from other State and local authorities. Deeds and maps for adjoining properties will be researched as required by Administrative Code to be obtained.

#### Field Work

Prior to our field work, we will send letters to all lot owners informing them of this project and our anticipated presence on or near their property lines. We will also invite them to share their knowledge of their property boundaries. Subsequent to the contact with the property owners, we will begin the field reconnaissance of property evidence based on a review of the deeds and maps of record. Once the preliminary orientations of the properties to be surveyed are determined, we will establish our initial GPS control utilizing our Topcon GR5 and data collector. This equipment will allow us to set traverse points in advantageous locations and establish high-order coordinates in New Jersey's State Plane Coordinate system. These GPS observations will be processed in the National Geodetic Survey's OPUS adjustment program which utilizes the logged GPS data to compute coordinated positions.

From this control framework, we will utilize our Topcon GTS 3001 total station and/or Leica TPS 1200 robotic total station together with our Allergo electronic data collectors running Carlson Survey data collection software to set additional traverse points to facilitate the location of property evidence.

Physical features on or near the lot lines which would influence the establishment of property lines such as buildings, fences, walls, driveways and other details necessary for boundary resolution will be shown exactly. Vacant properties will be noted as such. For properties which are not vacant, we will depict, in general terms, the extent of the improvements on the parcel. This data will be downloaded via a Carlson Survey link directly to the computers for storage and processing. This raw field data is then archived for future processing.

After the preliminary property positioning by the office staff and review by the licensed surveyor, our field crews will return to the site to further expand the property evidence locations. These locations are based on calculations prepared in the office for evidence which was called for in deeds and maps, but were not found during the initial reconnaissance. Once these additional locations are complete, the field crews will also locate any additional physical features which may have been missed during the first series of observations. The





data will be collected.

To finalize the individual surveys, property corners must be set. Lot corners consisting of a rebar and identifying cap, driven flush to the ground, will be set at the limits of each individual (non-contiguous) survey. Contiguous parcels comprised of multiple lots separated by non-NJDEP lots or public streets will be marked by a minimum of three monuments in accordance with Green Acres requirements. These corners will be set only on vacant parcels. Where parcels are not vacant, the setting of the lot corners will be postponed until we are notified that the demolition is complete. During the corner marking process, photographs will be taken and cataloged with their location, lot number and property owner. These photographs will become part of the final delivery package.
Office Work Following the kick-off meeting, survey technicians will be assigned the task of organizing the deed and map information in blocks corresponding to the groups of surveys to be prepared. The deed and map information will be plotted using Carlson Survey and AutoCadd Land Companion or Autocadd Civil 3D software. Each deed is plotted and checked for closure as well as evidence calls. Filed maps are handled in a similar fashion. Discrepancies in the wording and/or intention of the deeds are highlighted for resolution in the analysis phase. Individual deed plottings are then connected to form a compilation of lots. Map information is combined with the deed plottings to become the base upon which field evidence and locations will be overlaid. This plotting also serves as a compilation for the reconnaissance by the field crews.
The downloaded data collection files are processed and analyzed for conformance to desired accuracy. This analysis is to ensure that the field location observations are correct, properly identified and coded prior to the import process. The codes utilized by the field crews provide an automated process which creates unique layers and point groups in the Autocadd file which facilitates faster drafting of specific data types. The field files are then imported, in chronological order, into a master computer file to produce a single map of all boundary evidence and planimetric locations for all the lots.
Under the supervision of the licensed land surveyor, this field location file is overlaid to the deed and map file previously prepared. The deed file is rotated and translated to the field evidence based on the calls identified during the plotting process. At this time, previously identified deed and map discrepancies are matched to their corresponding field locations for resolution. This compiled map will be prepared indicating evidence found and preliminary property line establishment. This plotting will provide the field surveyors a guide to look for and uncover additional monumentation which was called in the deeds and maps of the properties. Subsequent field locations will be obtained to fine tune the lot line determination.
Upon the receipt of the additional field locations, the final analysis of the title documentation and comparison of physical evidence locations will begin. This analysis of property location scenarios is performed on a block by block basis to ensure all lots receive their record size and location based on the recorded deeds and maps, thus accounting for resolution of any record discrepancies. From this master file, individual surveys of lots with metes and bounds descriptions are prepared in accordance with the Administrative Code and Green Acres requirements for content. A copy of this master file, with extraneous information removed, will become the Blue Acres Project Map. This composite plan will indicate all of the lots surveyed by its owner's name, owner ID, tax block and lot numbers, municipality, county and street address in the form of a table. It will be included in each lot package to depict each lot and its relation to the entire project.
Once each lot has been resolved, calculations are prepared to establish the locations for future setting on lot corners. These calculations are exported to an ASCII file which is uploaded to the field data collection for stakeout. This file, together with a plotting of all corners to be set is sent to the field crews for field stakeout of the rebars and monuments. All surveys will reflect the type and locations of corner markers found and set on vacant properties. Should the site not be vacant at the time the survey is completed, the survey will be noted that the markers indicated as "set" shall be installed upon notification by the Project Manager of the demolition an all structures thereon.

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survey datum will be New Jersey State Plane Coordinate System (NJSPCS) in the North American Datum of 1983 (NAD83). No vertical



#### **Deliverables**

Upon completion of the field and office work, we will prepare the final survey of each parcel or group of common owner parcels. We will provide the State with 4 signed and sealed full size copies, 1 reduced copy on 8.5"x14" plain paper, copies of signed and sealed metes and bounds descriptions, copies of notification letters, traverse closure calculations and a Surveyor's Certification and Summary form and corner marker description sheets in accordance with specifications recited and a PDF copy of the Blue Acres Project Map. We will also provide the State with a digital CD containing a copy of the full final lot survey in digital .DWG format and .DXF format, as well as a linework file in .DXF format and the description in Word format. Color photographs will be provided for each site showing vacant land, or, if the site is not vacant at the time of the survey, a color photograph of the vacant site when the property corners are set. In addition, we will prepare and provide a Blue Acres Project Map showing all the parcels surveyed, identified as specified. The individual lot identification will be made in the form of a table on the Location Plan. This map will be presented in PDF format and included with each parcel's submission set.





# ANTICIPATED WORK PLAN - PROJECT SCHEDULE P1139-00

F1139-00															
Month 1			Month 2			Month 3			Month 4						
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#### **Project Schedule**

#### Overview

This project consists of the preparation of boundary surveys and monumentation of 38 parcels of land in New Milford to be acquired under the State of New Jersey's Blue Acres program. The parcels are grouped together and located on Hackensack River, Columbia, Harvard, Stueben, Lennox, Pine, and Washington Streets. As with any project of this magnitude, project scheduling and coordination are critical to timely completion.

#### **Preliminary Work**

This phase centers on the planning of the project to ensure completion within the allotted time and budget. By recognizing the resources needed and what additional information may be needed early in the project, delays can be minimized. This phase also establishes the order of the tasks to be performed and which tasks are dependent on others.

#### Field Work

Once the individual tasks have been identified, the field work begins. Preliminary evidence reconnaissance and recovery determine where traverse control points need to be established. Once complete, this control is used for the evidence and planimetric details to be located. This data is returned to the office for processing. After plotting and analysis in the office, the field crew returns to locate any additional required evidence. Once all lots have been established, the lot corners and monuments can be set on the vacant parcels. If the parcels are not vacant, we will be notified by the Project Manager when the structures have been demolished and lot corners and monuments can be set. This may occur after the 45-day initial schedule. Once set, the corners are documented for inclusion in the project deliverables.

#### Office Work

The deed and map plotting portion of the project begins shortly after the kick-off meeting. This task can occur during the time that the field crew is performing the evidence reconnaissance and locations. As deed calls contained in the record documentation are discovered, they are sent to the field crew for recovery. Only after all evidence and locations are completed in the field can the traverse closures and adjustments take place. This is followed by the evidence analysis and lot line determination. Any additional field evidence collected when the crew returns to the site are incorporated in the analysis and the surveys can be final drafted. Subsequent to drafting, metes and bounds descriptions are prepared for each lot.

#### Deliverables

At this final stage, the project deliverables consisting of the prints of the surveys, metes and bounds descriptions, notification documentation and electronic files are compiled. Each lot receives a CD with this information as well as a copy of the Blue Acres Project Map in accordance with the Green Acres specifications.



Certification of Public Law 2005, Chapter 92, Formerly: Executive Order 129