

Statement of Qualifications for Wind Energy Project Support

James W. Sewall Company (Sewall) provides civil engineering, surveying, mapping, and GIS consulting services to the wind energy market across the eastern United States. We have an established record of successful projects, including permit-level and construction design services on fifteen (15) commercial-scale wind energy projects in New England representing 453 wind turbine generators, over 200 miles of access roads, and over 1119 MW of potential power production. Sewall's broad capabilities and previous project experience provide wind energy clients with the following benefits:

- **Streamlined project execution.** Sewall's integrated wind energy services, from initial strategic planning and assessment through engineering design and construction management can help clients accelerate all aspects of their wind energy projects;
- **Efficient communications.** Sewall's comprehensive resources can be accessed by our wind energy clients through one Sewall project manager ensuring responsive and coordinated teamwork and highest quality performance; and,
- **Efficient use of resources.** Sewall's extensive experience on wind energy projects means our wind energy clients will not be paying for Sewall's training; we will provide meaningful contributions from day one.

Sewall has structured this SOQ to provide a clear, succinct summary of our corporate history, integrated services and relevant project and personnel experience.

I. Corporate Profile

Founded in 1880 in Old Town, Maine, Sewall provides comprehensive engineering, mapping, forestry/natural resources, and geospatial solutions to developers, private and public utilities, municipal governments, and the forest industry. We have over 80 staff located in seven offices throughout the country as shown on the map provided below. With our Engineering Division, three aircraft and fully equipped surveying staff, Sewall has the resources to provide fast and responsive service to a diverse client base.



Sewall has been a key player in driving the adoption of renewable energy technologies and helped position Maine as New England's leader in wind power. Our engineers supported the development of the first commercial wind project in Maine and the largest commercial wind farms in New England. Sewall continues to provide siting assistance, aerial mapping, civil design, permitting and program management services for several current onshore and offshore wind farm development projects in Maine, New England, and the Mid-Atlantic States.



SEWALL OFFICE LOCATIONS

II. Integrated Services

Identifying and selecting suitable wind project locations requires knowledge of multiple factors, including suitable wind class resources; supportive land ownership, land use and population density; proximity to transmission lines and regional customers; existing road infrastructure and critical community support. Sewall understands the need to balance these factors and to bring together the interests of engineering and energy firms, landowners, environmental groups, and the public. We provide a full range of project life-cycle services, including:

Siting Assistance

- Assistance in acquiring leases, easements, and ROWs
- Environmental, cultural/historical, road and hydrographic data compilation
- Critical issues and fatal flaw analyses

Mapping

- Parcel and land ownership mapping
- Aerial photography, GPS surveying, photogrammetric mapping, and digital orthophotography

Engineering Design and Permitting

- Turbine micro-siting
- Civil engineering, site and road design
- Environmental Site Assessments
- Environmental permitting
- ALTA surveys

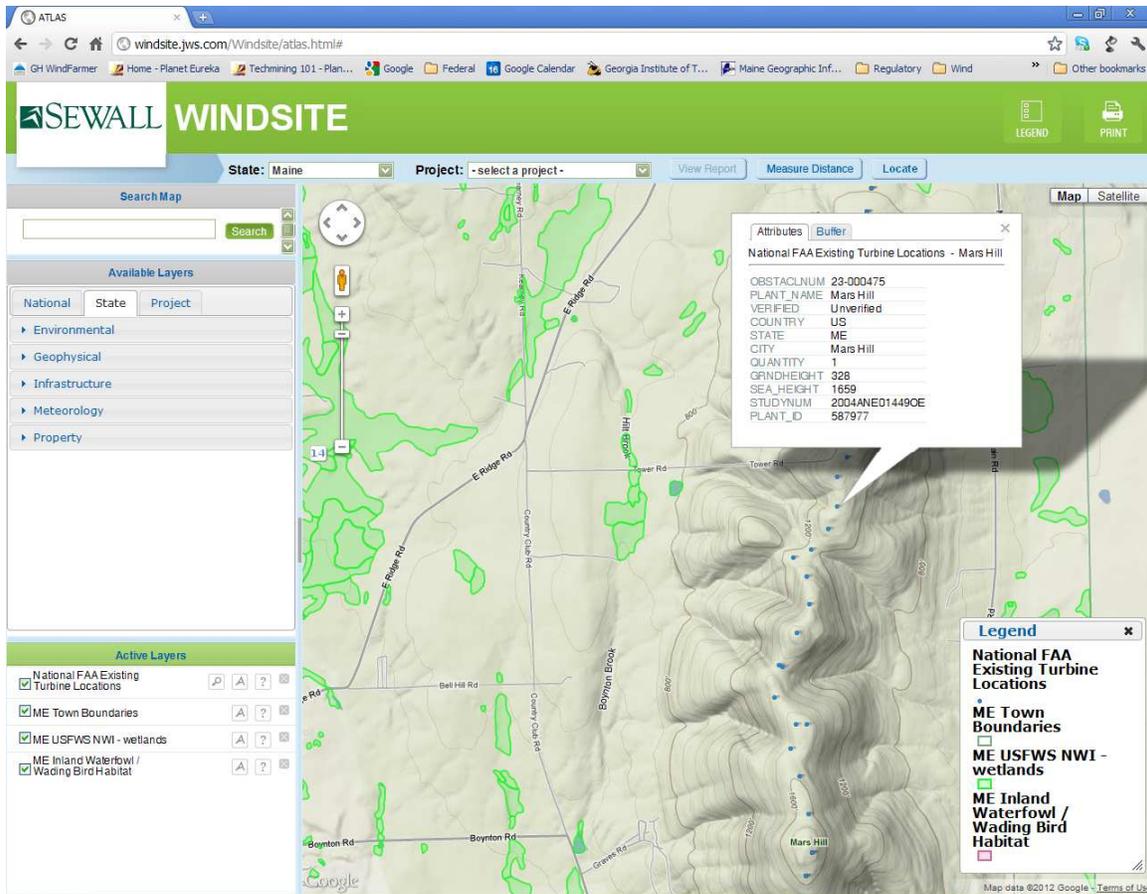
Program Management

- Stakeholder meeting facilitation
- Program Management Services

III. Wind Project Siting Application

Sewall has developed a web-based GIS and data-sharing platform called “WINDSITE” to support our existing wind clients. This platform has the power to meet the continuing needs of all members of the project development team, providing access to national, state and project-level data layers in the following categories:

- Environmental (e.g., wetlands, wildlife habitat, etc.)
- Geophysical (e.g., topographic contours)
- Infrastructure (e.g., roads, FAA wind turbines permits, etc.)
- Meteorology (e.g., mean annual wind speed)
- Property (e.g., parcel data with ownership attributes, town boundaries, etc.)



SEWALL WINDSITE APPLICATION

IV. Comprehensive Project Experience

Sewall has a history of successful mapping, design and permitting work on wind projects in the Northeast and GIS data collection and fatal flaw analyses in the Mid-Atlantic region as depicted in Table 1.

Table 1: Sewall's Wind Energy Project Experience

	New England Wind Energy Projects															
	Bingham - Maine	Bowers - Maine	Bull Hill - Maine	Hancock - Maine	Highland Plantation - Maine	Kibby - Maine	Kingdom Community - Vermont	Mars Hill - Maine	Oakfield - Maine	Passadumkeag - Maine	Record Hill - Maine	Rollins - Maine	Sheffield - Vermont	Stetson I - Maine	Stetson II - Maine	
Turbines	62	16	19	18	48	44	21	28	50	14	22	40	16	38	17	
Capacity (MW)	191	48	34	54	129	132	63	42	150	42	51	60	40	57	26	
Road Length (miles)	22	7	5	5	23	36	7	11	28	8	7	14	8	15	6	
Project Status																
In Development																
Under Construction																
Operating																
Sewall Services																
Geospatial/Survey Services																
Aerial Photography																
Mapping																
Digital Orthophotography																
Boundary, ROW, Topographic Survey																
ALTA/ACSM Land Title Survey																
Engineering Services																
Civil Site and Road Design																
Turbine Micrositing																
Stormwater Design/Calculations																
Permitting Support																
Construction Drawings																
Construction Support																
Transport Study, Transport Design																

V. Project Team Experience and Qualifications

Sewall can assemble experienced and qualified project teams to assist our clients with wind energy project development. Our team of professionals has prepared preliminary and final civil site and road designs, stormwater management plans, permit applications, parcel maps, and aerial mapping for wind energy projects throughout New England. Sewall’s wind energy design team is led by seven Licensed Professional Engineers who are supported by the 34 engineers, surveyors and GIS professionals in Sewall’s Engineering Division. Table 2 provides an overview of our core team’s relevant experience. A brief summary of each member’s qualifications follows.

Table 2: Sewall’s Core Team Project Experience

Project Team Experience	Wind Energy Projects												
	Mars Hill Wind, Mars Hill, ME	Stetson Wind, Washington Co., ME	Stetson II Wind, Washington Co., ME	Kibby Wind, Kibby Twp., ME	Record Hill Wind, Roxbury, ME	Sheffield Wind, Sheffield, VT	Highland Pkt. Wind, Highland Pkt., ME	Rollins Wind, Penobscot County, ME	Bull Hill T16MD, Hancock County, ME	Bowers Carroll Plantation, ME	Passadumkeag Wind Grand Falls, ME	Hancock Wind T22MD, T16MD, ME	Confidential Client Maine
Scott Graham, P.E. <i>Principal Engineer</i>													
Brett Hart, P.E. <i>Director of Engineering</i>													
John Theriault, P.E., PTOE <i>Senior Project Manager</i>													
Jodi O’Neal, P.E., CPESC <i>Project Engineer</i>													
Janine Murchison, P.E. <i>Project Manager</i>													

Scott Graham, P.E., Principal Engineer

Scott Graham is Vice President of the Sewall Engineering Infrastructure Division and brings over 20 years of civil and construction engineering experience to wind energy projects. His background extends to advanced areas such as local, state, and federal planning and permitting, site design and development, and state and local road design. Scott serves as Principal Engineer for all of Sewall’s wind energy projects to ensure that the necessary staff resources are allocated to meet project deliverable milestones.

Brett Hart, P.E., Director of Engineering

Brett Hart presently serves as Director of Engineering Operations in the Sewall Engineering Division. He has 14 years of engineering experience, including a strong background in transportation engineering, site design and surveying. His experience includes traffic and transportation engineering, roadway and intersection design, site layout and design, surveying, and construction administration. Brett is responsible for project management of four of Sewall’s current wind energy projects.

John Theriault, P.E., PTOE, LEED®AP, (LAP Certified), Project Manager

John Theriault is a Project Manager in the Sewall Engineering Division. John is a transportation engineer and brings to the Sewall team over 18 years of highway design and traffic analysis experience. He is an experienced designer with extensive knowledge in the preparation of roadway design improvements plans developed in accordance with MaineDOT, AASHTO, ADA, and MUTCD Standards. He has successfully managed numerous projects throughout the State of Maine including several of Sewall's recent wind energy projects.

Jodi O'Neal, P.E., CPESC, Project Engineer

Jodi O'Neal is a Project Engineer in the Sewall Engineering Division and brings over 9 years of experience and a strong background in civil and environmental engineering to wind energy projects. Jodi developed compliance documents for MDEP and LURC permit requirements for several Maine wind energy projects as well as final stormwater management designs. Stormwater discharges had to be compliant with MDEP regulations despite rugged terrain, and she successfully negotiated with MDEP to determine Best Management Practices technology for the projects.

Janine Murchison, P.E., Project Manager

Janine Murchison is a project engineer in the Sewall Engineering Division with over 20 years of experience in the civil engineering field. Ms. Murchison has managed, designed, and monitored construction activities on a wide variety of projects including roadway, storm drain, water, and sewer systems. She also has practical experience with LURC permitting of large-scale site development projects. Jan is project manager for one of Sewall's current wind energy projects.

Mary McDonald, GIS Project Manager

Mary McDonald is a Project Manager and project team supervisor in the Sewall Geospatial Solutions Division and brings over 23 years of GIS experience to wind energy projects. Her experience includes management of Sewall's geospatial data development and GIS integration services for over 10 sites in the mid-Atlantic area. Mary supervised a team of GIS analysts and coordinated development of fatal flaw analysis reports.

Daniel Long, GISP, Photogrammetrist / Project Manager

Dan Long offers more than 20 years of survey, mapping and project management experience including all phases of photogrammetry, field surveying, property surveying, and cadastral tax mapping. He has a broad-based background in the mapping sciences field, has the ability to manage projects from flight planning, ground control layout / aerotriangulation, mapping compilation and professionalism to communicate to colleagues and clients. Dan has extensive involvement in quality assurance/quality control (QA/QC) methods and procedures for each project at all the various phases of any project.

VI. References

Below is a list of clients who are familiar with our work.

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