



HALEY WARD

ENGINEERING | ENVIRONMENTAL | SURVEYING

*REQUEST FOR  
QUALIFICATIONS*

## **NEW CENTRAL FIRE STATION**

Town of Belgrade  
Belgrade, Maine



*March 6, 2024*



One Merchants Plaza, Suite 701, Bangor, ME 04401  
T: 207.989.4824 | [HALEYWARD.COM](http://HALEYWARD.COM)



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March 6, 2024

Town of Belgrade  
ATTN: Lorna Dee Nichols, Town Manager  
990 Augusta Road  
Belgrade, Maine 04917

**Re: Letter of Interest and Statement of Qualifications for Engineering, Architectural Design, and Environmental Permitting Services for New Central Fire Station**

Dear Ms. Nichols,

Haley Ward, Inc. (Haley Ward) is pleased to submit our letter of interest and statement of qualifications for Engineering, Architectural and Environmental services for New Central Fire Station in Belgrade, Maine.

We understand that your vision for a new Fire Station includes a new building on a newly acquired parcel of land. The new building will contain space for the Town's firefighting apparatus and equipment, office space for fire department officials, living space for on duty personnel, and various support spaces. The details of the required spaces in the building will be developed during a detailed building programming process.

To that end, we have assembled an experienced team of professionals who are prepared to create your vision:

- **Matthew Carter** will be our lead architect and project manager. Matthew brings an understanding of fire station/public safety design and programming, as well as a deep interest in project budget planning and project cost control to our project team.





- **Johanna Szillery** will be the Environmental Scientist for your project. Johanna has over 15 years of experience in natural resource and regulatory permitting/compliance, which includes positions in academic research, federal government, and as an environmental consultant. Johanna is a wetland scientist and a Maine Certified Soil Scientist. Her extensive experience in wetland, stream, vernal pool, and wildlife habitat identification and assessment will greatly benefit the phases of your project, especially during the permitting process.
- **Pete Tuell, PE** will be the Structural Engineer for your project. Pete has over 30 years of experience in Structural and Geotechnical Engineering. Pete has worked on a variety of projects ranging from landfill closures to building retrofits and major treatment plant rehabilitations. His strong understanding and experience in all phases of design and construction activity, from obtaining permits to coordinating with architects and contractors will be beneficial to ensuring the entire team communicates and works together effectively and stays on schedule.
- **Sean Thies, PE** will be the Civil Engineer for your project. He has extensive experience working with federal, state, and local planning authorities to achieve the approvals needed for complicated site design driven projects and has worked on many solar array site designs.
- **Ron Willey, PE** will be the MEP engineer, providing efficient and effective mechanical, plumbing, electrical, lighting and building controls designs for this municipal setting. Ron has over 25 years of experience in Mechanical Engineering. As a Mechanical Project Professional, Ron possesses a wide variety of design experience in the cleanroom and industrial healthcare, justice and corrections, and government market sectors.
- **Jeff Teunisen, PLS** will act as the Professional Surveyor for your project. Jeff has over 25 years of experience in surveying and is a licensed Professional Land Surveyor in the State of Maine and New York. Jeff has experience overseeing project development and provides budget and technical oversight for boundary, topographic, and construction survey services. Jeff is responsible for conceptual planning and permitting phases for a variety of development projects and works closely with our other service lines to ensure continuity of quality and communication on projects.



- **Jeff Weeks, PLS** will act as our Survey Technician. Jeff has over five years of experience in a variety of land surveying projects. Jeff is a Professional Licensed Land Surveyor within the State of Maine. He has extensive experience on topographic surveys for engineering design, boundary and ALTA/NSPS land title surveys for commercial real estate transactions, and construction layout for large scale buildings across Maine.
- **Jeanna DeTour** will be our project coordinator and field representative for the project. Her work providing field services in diverse settings has allowed us to keep projects on track with respect to construction budgets and design expectations.

It's important to note that many of our professionals are LEED and Well Building certified, and that all of our design disciplines with the exception of Landscape Architecture are provided under one roof, allowing us to streamline our design and project delivery processes.

It is our belief that our team will be the best fit for your project and will be able to satisfy your exciting plans for your New Central Fire Station. Working together, we know we can assist you with the creation of a modern, and connected fire station facility that allows you to respond to emergencies while fitting in the community. We will do all this while adhering to budget and timeline expectations.

Many thanks for considering Haley Ward to assist you with your project.

Sincerely,

Matthew Carter, AIA  
Project Manager

Travis Noyes, PE  
Chief Operating Officer

MGC/TEN/cmg  
Enc.



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## SECTION A | PROJECT UNDERSTANDING

Our approach to your New Central Fire Station, like any other project we do, is one of collaboration. The Town of Belgrade knows best their concerns and issues regarding constructing a new fire station, and our main focus will be to understand and address those concerns and issues with your community and building committee so all viewpoints can be heard, and relevant issues solved through a collaborative process. Our team will take the following steps to ensure each step is a smooth process.

**Project Planning and Stakeholder Analysis:** The design team will meet with your building committee to discuss whom we should meet with to gather the best information about facility needs now and in the future. We will work with you to facilitate meetings with the designated individuals and groups, record the information gathered and present it back to Town leadership for further review and discussion.

**Programming and space planning:** Programming is the key task to understanding the facilities needs of the Town, and how best to address those needs. This is where our Project Team will meet with key stakeholders and town staff to understand their concerns and space requirements. With the information gathered we can develop an understanding of what is needed to serve your current and future needs. Ultimately it is our team's goal to guide the town through a process that achieves the best creation of space in the most cost-effective way.

**Site Analysis:** Concurrent with the programming/space planning section, our team will review the Town of Belgrade's proposed site location to understand it's features and what sort of utility it does or does not possess relative to the future Fire Station needs. The goal here is to analyze how best to place and orient the building on the site, managing the various flows or personnel, utilities, and equipment on the site, and how they enter and leave the site. As with the programming task, our Team will look to meet with the Town personnel to understand their needs and overlay them on the proposed site to find the solutions that work best. Assessment of site features will be based on information on building spaces and size developed in the programming step as well as observation at the project site.

**Concept Design:** During this phase, project participants give form to the building outline developed in the programming phase, creating concept level floor plans, models and perspective renderings, as well as refined project budgets. These drawings and other exhibits form the basis of the fund-raising documents that are used to explain the project to prospective stakeholders and funding sources in subsequent steps.



**Code Review:** The design of your new facility will need to satisfy the requirements of applicable building codes, including the Maine Uniform Building and Energy Code (MUBEC), the NFPA101 Life Safety Code, the Americans with Disabilities Act Guidelines (ADAAG), the Maine Human Rights Act, and various guidelines and standards related to the Public Safety Building project type.

**Project Fund Raising:** This key phase is where the project participants present the case for the project to the community to convince stakeholders that the new Central Fire Station building project is not only needed, but of critical importance to the welfare of the city and its citizens. The design team works with the building committee to create convincing fund-raising exhibits and present them to the public in person, via the media and online so that all can understand the critical need for the project.

**Detailed Design:** Once you have achieved public consensus to construct the New Central Fire Station, you will be ready to begin detailed design for the project. Your selected design team will meet with you on a regular basis to flesh out the details of your project, producing drawings and other project exhibits that include more information and that address the needs of the of public safety staff and Town stakeholders on an increasingly granular level. As detailed design progresses, your design team will produce periodic cost estimates to confirm that the project is staying on track financially, using the new information created to confirm and expand on earlier design assumptions.

**Construction Documents:** The ultimate goal of the work in the detailed design step of the project is to develop Construction Documents (drawings and specifications) that can be used to solicit bids for the project, and that can be used by a contractor to construct the renovations to your new facility.

**Bidding:** With Construction Documents in hand, a bidding process is implemented where interested contractors are invited to make cost proposals to construct your project. Your selected design team administrates the bid process, issuing invitations to bid, providing bid documents, answering questions from the bidders and hosting the bid opening.

If the Town elects to use an alternative to traditional building procurement methods, such as Design-Build or Construction-Managed models, it will fall to the design team to educate and explain to Town decision makers about the pros and cons of these newer methods of paying for the construction of new facilities. Whatever method is selected, the Town will still need assistance in evaluating contracting firms with design-build



experience to participate with the design team in producing a cost-effective project that satisfies the goals of Town officials.

Once a Contractor is selected for the project, the Town and the selected Contractor then execute a Contract for Construction and the Work of the project begins. The design team will provide its experience and expertise in creating and executing the contracts that will govern the construction of the Work and support a project that is successful for all parties that participate in the Work.

**Construction Administration:** Once construction begins, your selected design team provides administrative services that help the construction work to proceed. The Project Manager and its consultants set up a meeting schedule including various pre-construction meetings, semi-monthly site visits and construction progress meetings, requisition meetings, and project closeout meetings. The design team also answers Owner and Contractor questions about the Construction Documents, and reviews detailed submittals from the Contractor regarding the actual building materials and systems that will be incorporated into the project.

**In Summary:** Our approach to supporting your project with the services outlined above is to work closely with Town staff throughout the work, helping you to understand your needs for the project step by step as the design is developed and refined while keeping the broad goal of a conceptual design to meet the needs. We will consider your programmatic requirements, your budgetary parameters, aesthetic concerns, the needs of the various building stakeholders involved in the project, your project delivery goals, and the details of the actual construction process. Once the concept is complete and approved by voters, the project moves to the detailed design and construction step.

It is important to note that the Haley Ward design team is present and involved with all groups participating in the project to make sure that all stakeholders are heard, important building features are provided and are functional and well designed, and budgets are reviewed and adhered to. Our staff are there with you at every step of the way to help you have a successful project. **We don't just design buildings, we facilitate projects, helping all project participants achieve their goals.** We hope that you will consider us for your project, the New Central Fire Station for the Town of Belgrade.



## FIRM QUALIFICATIONS

Haley Ward is a 100% employee-owned technical consulting firm offering a wide range of engineering, architectural, environmental, and surveying services focused upon delivering client-based solutions.

Founded as CES, Inc. of Brewer, Maine in 1978, our company evolved into Haley Ward in 2020 to better represent our increasing size, reach and services portfolio.

While our name has changed, our commitment to our clients has not. By listening attentively to clients' needs and working collaboratively, Haley Ward delivers optimal solutions built on value, quality, promptness, and teamwork.

Functioning as a team within our organization, and most importantly with our clients, promotes effective communication and results in the delivery of a cost-efficient project that is customized to fit your needs.

At Haley Ward, we value accountability and collaboration. These values drive us to provide every client with a quality service that meets, and often exceeds their expectations, and is one of the reasons clients routinely return to us for help. Haley Ward retains clients through our technical ability and years of experience solving problems across a wide spectrum of complexity.

Haley Ward is headquartered in Bangor, Maine, with branch offices located in Maine, Massachusetts, Connecticut, New Hampshire, and Florida. Our growing team includes approximately 220 employee owners.

### **COMPANY NAME:**

*Haley Ward, Inc.*

### **POINT OF CONTACT:**

*Matthew Carter, AIA  
Project Manager  
mcarter@haleyward.com*

### **ADDRESS:**

**Headquarters**  
*One Merchants Plaza  
Suite 701  
Bangor, ME 04401*

### **WEBSITE:**

*www.haleyward.com*

**PHONE: 207.989.4824**





## Our services include:

### Civil Engineering

- Land Use Permitting & Development
- Recreational Trails
- Roads & Parking Lots
- Transportation & Traffic
- Water/Wastewater Treatment & Conveyance
- Water Works

### Structural/MEP Engineering

- Architectural Design
- Building Services
- Building Evaluations
- Capital Needs Assessments & Services
- Electrical System Design
- Mechanical System Design
- Municipal Infrastructure
- Structural Design & Analysis
- Interior Design

### Building Information Modeling (BIM)

### Environmental Engineering

- Remediation Services
- Solid Waste

### Environmental Sciences

- Geology/Hydrogeology
- Geophysics
- PFAS Sampling & Analysis
- Solid Waste

### Environmental Compliance

- Air Emissions
- Drinking Water Operations
- Environmental Monitoring
- Petroleum, Hazardous Materials, Hazardous Waste
- Stormwater Compliance
- Wastewater Operations & Compliance

### Environmental Investigation

- Brownfields Redevelopment
- Environmental Site Assessments

### Natural Resources

- Permitting & Licensing
- Wetland Habitat Mapping

### Industrial Hygiene

- Indoor Air Quality Assessments
- Asbestos, Lead, & PCB Management Service

### Surveying

- Surveying Services
- Drone Services





## SECTION B | SIMILAR PROJECT EXPERIENCE

### BUDGETARY MANAGEMENT

From a budget perspective, we view a client's money as if it were our own, which means we take a fiscally conservative approach. We begin our discussion with a client to gain an understanding of their project's budget. **With a known budget, we can design the project to fall within the estimated costs.** We typically provide cost estimates at least three times during design, once during the programming step, once with the preliminary design submission and once with the final design submission. We carry contingencies in our pricing, typically based on a percentage of the total cost, which changes as more information is developed. The contingency provided during conceptual design is more than that presented with the final design because less information is known at that point. We feel strongly that our clients should budget for unknowns through a contingency. We have found that being able to provide our client with realistic budgeting allows successful project implementation.

### COMMUNICATION

Our overall approach to a project can be summarized in one word - collaboration. We value the institutional knowledge that our clients possess, and we routinely look to build on their local experiences. We see our role, besides providing technical expertise, as helping our clients coordinate efforts to achieve future growth and development goals. Effective coordination, good project planning and consistent communication are instrumental in our overall relationship and for our approach to specific projects.

Change is the only constant with any project. Our staff members are adept at identifying the changes that occur throughout the progress of the design and construction and effectively communicate the resulting impact with our clients. Since change can impact schedule and budget, timely and effective communication with all involved parties is necessary. Our goal is to minimize the unknowns for the bidders in order to decrease and hopefully eliminate change orders.

We will provide architectural and technical engineering expertise for the project and will also help coordinate with all parties involved to provide a systematic design for the project. This coordination and project planning will minimize inconveniences to any public access spaces, or people working in close proximity to the project area. This collaborative approach will also ensure the desired work is completed within the desired timetable. Our focus on communication gives us the ability to successfully guide the bid, construction administration and oversight processes.



## QUALITY CONTROL

Haley Ward is committed to being recognized as a leading consulting firm providing engineering, architectural, surveying, sciences, planning, and other related services. A large part of being recognized as a leading firm is achieving quality results and providing a quality deliverable. Given this, we created a Quality Assurance/Quality Control Policy that is followed for project deliverables.

This policy will be referred to by Haley Ward staff during the preparation of project deliverables and when initiating document review. Documents prepared must be based on accurate technical information, easy to read, well written, and well organized. Documents that are clear, concise, easily understood, and without errors are essential.

Utilizing the Quality Assurance/Quality Control (QA/QC) Policy will assist in meeting these requirements. QA is the process that ensures prudent quality control measures have been established and the desired quality in a deliverable or service is achieved. QC refers to the procedures, methods, and actions that are routinely employed to produce conformance with requirements and expectations.

Haley Ward's QA/QC policy ensures that:

- Quality work is consistently performed, and quality deliverables are consistently produced.
- Project documents are prepared in accordance with current regulations, policies, procedures, guidelines, and standards established at Haley Ward.
- Project documents have undergone the necessary technical and editorial review processes. Completing/performing quality work is the responsibility of every individual at Haley Ward.

By incorporating this QA/QC process and policy into our daily work practices, Haley Ward staff will identify errors, omissions, or potential conflicts, ask questions, or raise issues pertaining to items of design features that may present problems to find answers.

It is always our intention to provide quality services by finding optimal solutions for our clients. We will endeavor to work with the Town using our best practices to create the desired outcome, working with you for a better tomorrow for your community.



## SECTION C | PROJECT TEAM

KEY PERSONNEL	PROJECT ROLE
<b>Matthew Carter, AIA</b>	Senior Project Manager
<b>Johanna Szillery</b>	Senior Environmental Scientist
<b>Peter Tuell, PE</b>	Structural Engineer
<b>Ron Willey, PE</b>	Mechanical Engineer
<b>Sean Thies, PE</b>	Civil Engineer
<b>Jeff Teunisen, PLS</b>	Professional Surveyor
<b>Jeff Weeks, PLS</b>	Land Surveyor



**Matthew Carter, AIA**, will act as Senior Project Manager and Senior Architect for this project. He brings over 27 years of experience as a Maine-based architect and project manager on library, educational, municipal, institutional, and civic work, with an emphasis on historic preservation, code compliance, master planning, existing facilities renovation, and public safety projects. Matthew believes in the importance of a client-centered, team-driven design process that considers all aspects of design, understands the needs of the many stakeholders involved in a project, and is concerned with the effective use of the client's resources to produce affordable designs. His projects are sensitive to their surroundings and the needs of their occupants.



**Johanna Szillery, LSS**, will act as the Senior Environmental Scientist for your project. Johanna has over 15 years of experience in natural resource and regulatory permitting/compliance, which includes positions in academic research, federal government, and as an environmental consultant. Johanna is a wetland scientist and a Maine Certified Soil Scientist. Her extensive experience in wetland, stream, vernal pool, and wildlife habitat identification and assessment will greatly benefit the phases of your project, especially during the permitting process.



**Peter Tuell, PE**, will act as the Structural Engineer for this project. Pete has over 30 years of experience in Structural and Geotechnical Engineering. Pete has worked on a variety of projects ranging from landfill closures to building retrofits and major treatment plant rehabilitations. His strong understanding and experience in all phases of design and construction activity, from obtaining permits to coordinating with architects and contractors will be beneficial to ensuring the entire team communicates and works together effectively and stays on schedule.



**Ron Willey, PE**, will act as the Mechanical Engineer for this project. Ron has over 25 years of experience in Mechanical Engineering. As a Mechanical Project Professional, Ron possesses a wide variety of design experience in the cleanroom and industrial healthcare, justice and corrections, and government market sectors. Ron is experienced in the preparation of energy efficient designs that will provide a sustainable building for your project.



**Sean Thies, PE**, will act as the Civil Engineer for this project. Sean has over 25 years of civil engineering experience, which includes site design, roadway design, and permitting. Sean's knowledge includes working with private developers, municipalities, housing authorities, and universities. Sean is experienced in permitting with the Maine Department of Environmental Protection (MDEP), Land Use Planning Commission, Army Corps of Engineers, and many municipalities throughout the State of Maine. Sean's areas of permitting expertise are in site development, stormwater, and natural resources.



**Jeff Teunisen, PLS**, will act as a Professional Surveyor for your project. Jeff has over 25 years of experience in surveying and is a licensed Professional Land Surveyor in the State of Maine and New York. Jeff has experience overseeing project development and provides budget and technical oversight for boundary, topographic, and construction survey services. Jeff is responsible for conceptual planning and permitting phases for a variety of development projects and works closely with our other service lines to ensure continuity of quality and communication on projects.



**Jeff Weeks, PLS**, will act as a Land Surveyor for your project. Jeff has over five years of experience in a variety of land surveying projects. Jeff is a Professional Licensed Land Surveyor within the State of Maine. He has extensive experience on topographic surveys for engineering design, boundary and ALTA/NSPS land title surveys for commercial real estate transactions, and construction layout for large scale buildings across Maine.

Resumes for key personnel are included under Appendix 1.



## WORKLOAD PROJECTION

Haley Ward is capable of providing over \$600,000.00 of engineering and surveying services per week. Our current workload and the projected workload of key personnel are such that any reasonable time schedule which may be established for this project can be met. Since each of our personnel is trained in several different service categories, the availability of personnel is assured, and schedules are maintained. Project scheduling, personnel scheduling, and resource allocation are done on a weekly basis to identify potential conflicts and to adjust schedules accordingly. Our present workload will not affect our ability to provide the service you should expect.



## SECTION D | PROJECT REFERENCES

### Milford Fire Department Building

**Contact:**

*Town of Milford*  
*Sarah Commeau, Town Manager*  
*townmanager@milfordmaine.org*

The Town of Milford retained Haley Ward to design and develop a modern, cost-effective expansion that can support the needs of the Public Safety Staff. The expansion and development of the pre-existing building



included new fire department office spaces, additional apparatus space that is sized for modern equipment, supporting technical space, and sleeping accommodations for overnight staff. The design also included improvements for the existing public meeting room space, providing modern accessible restrooms and a modern kitchen facility. The new construction was 2,450 SF and the renovation was 2,591 SF.

Haley Ward provided Architectural, Survey, Interior Design, Civil Engineering, Structural MEP Engineering, and Fundraising Documentation services. Construction and bid documentation are in progress, and a groundbreaking is expected to occur in the Summer of 2024.



## Lincoln Community Services Building

### Contact:

Town of Lincoln  
Richard Bronson, Town Manager  
[Town.manager@lincolnmaine.org](mailto:Town.manager@lincolnmaine.org)

In 2023 Haley Ward was retained by the Town of Lincoln to provide a design concept for the new proposed Municipal Facility which includes Fire Safety, Police, Town Offices and Community Recreation Center.

Our design team met with town staff and interested stakeholders to develop a program for this building that would house all of the town's facilities in one location. Once the program was in hand the design team created a concept design that could be shared with the Town to explain the vision for the project to community members.

Haley Ward also created cost estimates for the project, so that the Town could understand the overall cost of the project and how the work could be split up over time. The total projected construction cost of the new facility was approximately 23 million dollars. The Town is reviewing the concept design to determine how best to move forward with the work.





## Town of Washburn Public Safety Building

### Contact:

Town of Washburn  
Donna Turner, Town Manager  
[townmanager@washburnmaine.org](mailto:townmanager@washburnmaine.org)

The Town of Washburn retained Haley Ward to provide Architectural Concept Design for their proposed Public Safety Building. The Town of Washburn currently has an aging public safety building which houses the town's fire



department, police department, and the Town Manager's office. They face daily challenges providing staff with sufficient space to do their jobs and the building is not designed to handle modern public safety operational requirements. The Town of Washburn received a grant from the federal government to address these issues with a new building that is designed specifically for the goals of modern public safety personnel. Haley Ward provided preliminary concept design services and fundraising documentation for the project in order to help build consensus for the new facility, and to raise additional grants for the work.

The design team worked with the town staff to develop a modern, cost-effective facility that can support the needs of public safety staff. Program features included a new fire department space, including a four-bay apparatus garage (sized for modern equipment) and supporting technical space, office space for fire department officers, and sleeping accommodations for overnight staff. The design also included space for police staff, including a vehicle bay/sally port, staff offices, evidence storage space, and detective space with much needed interview rooms.

The building will also provide office space for town management, including public transactions space, storage for vital records, meeting rooms and private offices for town officials. Shared spaces include a training room, break room, storage space and locker and shower space.

The project funding is on-going, and construction is expected to start in 2025.



## SECTION E | COST PROPOSAL

Haley Ward typically considers various factors to evaluate the cost of our services, as follows:

- **Form of Agreement:** Based on your answers to our questions, we assume that you will be willing to sign an AIA B101-2017 Standard Form of Agreement between Owner and Architect as the binding agreement for our services on this project.
- **Project Scope:** To make an accurate determination of our fee, it is important for us to understand the scope of your project. In this case there is no program for your new facility for us to follow, so we will use a similar facility that we have designed for another municipality to develop a design fee. That project had a program size of 11,200 square feet, and a Construction Cost of approximately \$4,600,000. Of course, should the scope of Belgrade's project vary from this benchmark, we would want to revise our proposal based on the revised size of the building.
- **Percentage of Construction Cost:** Using industry standard metrics, we develop an initial Project Budget for the project, which includes assumptions about the expected size of the project, current market rates for construction cost per square foot and site development design and other related costs. We then develop our fees as a percentage of the construction cost of the work. Because our clients often have many different ways to procure Construction Administration services during the construction phase of the work, we often provide Construction Administration phase work on a time and materials basis, which allows us to be flexible during this critical phase of the project, tailoring our services to actual client needs. We still present an expected cost for this portion of the work.
- **Time and Materials Cost Development:** We also develop costs based on our actual estimate of required hours, actual employees engaged in the work, and expected project expenses. Sometimes this is done as a check of a percentage of construction cost fee development, but sometimes T&E is the final method used to price our services.

**Task 1 | Schematic Design** – Haley Ward will create a Schematic Design package for your review, which will include schematic level plans, elevations, building sections and perspectives, as well as a schematic level project budget. We will meet with you up to three times to review the progress of the schematic level documentation.

**Task 2 | Opinion of Probable Construction Costs** – Haley Ward will develop progress documentation to evaluate the expected cost of the project and confirm that the building can be delivered for the expected project budget. Cost evaluations will be delivered on a regular basis as the design of the building is developed.



**Task 3 | Permit-Level Engineering Design** – Under this task Haley Ward will prepare site design plans to support the permitting services in Task 4 below. The design will include stormwater management, septic system (assume less than 2,000 gallons per day), site layout, etc. Included in this task is a geotechnical investigation and report for the site.

**Task 4 | Permitting Services** – Under this task Haley Ward will prepare permit applications for submission to the Maine Department of Environmental Protection (MDEP), Army Corps of Engineers (ACOE), Maine Department of Transportation (MaineDOT), and Town of Belgrade (Town). We anticipate the following applications will be required:

- MDEP Stormwater Permit
- MDEP Natural Resource Protection Act (NRPA) Tier 1 Permit
- ACOE Wetland Permit
- MaineDOT Entrance Permit
- Town Planning Board Approval

Haley Ward will prepare the required plans, forms, and narratives to support the applications. We will attend a pre-application meeting with MDEP and ACOE as required. We will attend up to two meetings with the Planning Board. We will prepare and submit the required application materials. Application and/or advertising fees shall be paid by the Town directly. They are not included in our fee.

**Task 5 | Construction Documents** – Once Schematic Design drawings are complete, Haley Ward will create Construction Documents level documentation which will further develop the design of the building, refining the features and details that will be incorporated into the project. The Construction Documents package will include detailed floor plans, ceiling plans, elevations and building sections, as well as wall sections and other pertinent details. Mechanical, Electrical and Plumbing (MEP) drawings will be provided, and the design will be coordinated with the project site design. A specification manual will be provided at this stage, along with detailed project budgets.

**Task 6 | Construction Administration** – Under this task, your selected design team provides administrative services that help the construction work to proceed. The Project Manager and its consultants set up a meeting schedule including various pre-construction meetings, semi-monthly site visits and construction progress meetings, requisition meetings, and project closeout meetings. The design team also answers Owner and Contractor questions about the Construction Documents, and reviews detailed submittals from the Contractor regarding the actual building materials and systems that will be incorporated into the project.



Task	Description	Proposed Cost
1	Schematic Design	\$69,100
	<i>Existing Conditions Topographic Surveys</i>	\$7,500
2	Opinion of Probable Construction Costs	\$10,000
3	Permit-Level Engineering Design	\$30,000
4	Permitting Services	\$33,000
	<i>NRPA Permitting</i>	
	<i>Chapter 500 MDEP Stormwater Permitting</i>	
	<i>MaineDOT Driveway/Entrance Permit</i>	
	<i>US Army Corps of Engineers Permitting</i>	
	<i>Planning Board Approval/Meetings</i>	
	<i>State Fire Permitting</i>	
	<i>*This fee does not include Fire Marshall Permitting</i>	
5	Construction Documents	\$299,200
6	Construction Administration (Based on a 12 month construction period)	\$92,100
<b>Total Proposed Cost</b>		<b>\$540,900</b>



## APPENDIX I | RESUMES



HALEY WARD  
ENGINEERING | ENVIRONMENTAL | SURVEYING

# Matthew G. Carter, AIA

## Senior Project Architect

[mcarter@haleyward.com](mailto:mcarter@haleyward.com) | 207.989.4824

Matthew Carter has 30 years of experience providing architectural design, civic architecture, institutional design, and historic preservation. As a Senior Architect / Project Manager for another firm, Matt designed and delivered civic facilities including churches, libraries, public safety buildings, housing, and offices, with a concentration on renovation and rehabilitation projects. Matt has participated in all phases of the project delivery process, including facilities surveys, code studies, schematic design, design development, construction documents, specification writing, bidding and construction administration.

### PROFESSIONAL HISTORY

#### 2020 – Present

Haley Ward, Inc.  
Senior Project Architect  
Maine Licensed Architect

#### 2015 – 2020

Carter Architectural Design LLC  
Principal

#### 2002 – 2014

WBRC Architects / Engineers  
Associate, Senior Architect, Project Manager

#### 1996 – 2002

Noelker and Hull Associates, Architects  
Principal Architect, Treasurer

#### 1994 – 1996

Bargainier Davis-Sims Architects  
Regional Architect, Project Manager



#### CORE EXPERTISE:

*Civic Architecture  
Institutional Design  
Historic Preservation*

#### EDUCATION:

*B.Arch (1990)  
Carnegie-Mellon University,  
Pittsburgh, PA*

#### REGISTRATIONS:

*NCARB Certified #47142  
Maine Certified #ARC2867*

#### AFFILIATIONS:

*American Institute of  
Architects  
Construction Specifications  
Institute  
LEED Accredited  
Professional*



## PROJECT EXPERIENCE

### **Blue Hill Consolidated School | Blue Hill, Maine**

*Renovation:* Designer and Architect of Record – Project to implement a program of new and improved teaching facilities, life safety improvements, and site amenities. Project included a new Tech Center and Fab Lab.

### **Porter Memorial Library | Machias, Maine**

*Concept Design:* Project Designer - Plan to provide interior programming updates and life safety improvements at an historic community library. Project included addition and renovation space. Provided exhibits to raise funds for the project.

### **Camden Public Library | Camden, Maine**

*Concept Design:* Project Designer - Plan to reorganize the interior program of a large historic community library. Project considered both addition and renovation space. Provided exhibits to raise funds for the project.

### **Ellsworth Public Library | Ellsworth, Maine**

*Concept Design:* Project Designer - Plan to double the program area of an historic community library. Project included addition and renovation space. Provided exhibits to raise funds for the project.

### **Our Lady of Angels Catholic Church | South Berwick, Maine**

*New Building:* Designer and Architect of Record - 350-seat church commissioned by the Diocese of Portland to merge two neighboring parishes.

### **Brewer Public Safety Building | Brewer, Maine**

*New Building:* Designer and Architect of Record - 27,000 SF building to house City of Brewer police and fire departments including all vehicles and apparatus.

### **Immaculate Conception Parish | Calais, Maine**

*New Building:* Designer and Architect of Record - 17,600 SF church and parish center constructed on the foundations of an existing church that was destroyed in a fire.

### **Shawn Walsh Hockey Center | University of Maine, Orono Campus**

*Renovation and Addition:* Designer and Architect of Record - Addition and expansion to Maine Black Bears hockey clubhouse at Alford Arena.

### **Bangor Waterworks Redevelopment | Bangor, Maine**

*Renovation:* Designer and Architect of Record - Converted historic Bangor Waterworks facility into 35 units of low-income section 8 housing for Shaw House, a home for endangered youth.

### **Bangor Police Station | Bangor, Maine**

*New Building:* Designer and Architect of Record - 3 story, 42,000 SF office and garage facility built to house the City of Bangor's police department and 911 call facility.

### **Holy Family Catholic Community | Middletown, Maryland**

*New Building:* Project Designer - New church and parish center for a growing central Maryland Catholic parish church.



## Johanna E. Szillery, L.S.S.

### Senior Project Scientist/Project Manager

[jszillery@haleyward.com](mailto:jszillery@haleyward.com) | 207.989.4824

Johanna has 15 years of experience in the natural resource and regulatory permitting/compliance field, which includes positions in academic research, Federal government, and as an environmental consultant. She is a wetland scientist and a Maine Certified Soil Scientist (ME CSS 494). Johanna specializes in project strategy, project planning, agency consultation and negotiation, wetland and natural resource delineation, and site permitting. She has completed wetland delineation and resource identification for residential, commercial, industrial and government clients on land in Maine and New Hampshire. She has extensive experience in wetland, stream, vernal pool, and wildlife habitat identification and assessment. Johanna has worked with a variety of clients and with State and Federal regulators to meet the goals of each through the permitting process. As a soil scientist, Johanna has performed soil surveys throughout Maine, from general planning level soil surveys to high-intensity soil surveys specific to the proposed development. She has completed soil suitability assessments for a variety of uses, including spray irrigation and composting sites. Johanna has also completed Phase I Environmental Site Assessments throughout Maine, on large and small parcels which encompass a variety of potential environmental concerns.

#### PROFESSIONAL HISTORY

##### 2016 – Present

Haley Ward, Inc., formerly CES, Inc.  
Senior Project Scientist

##### 2013 – 2016

CES, Inc. (Haley Ward)  
Environmental Scientist

##### 2006 – 2013

S.W. Cole Engineering, Inc.  
Soil & Wetland Scientist

##### 2003 – 2006

University of Maine  
Research Assistant in Forest Soils

##### 2000 – 2003

Graduate School, University of Maine



#### CORE EXPERTISE:

Wetland & Natural Resource Investigation  
Soil Science  
Natural Resource Planning & Permitting  
Phase I ESAs

#### EDUCATION:

M.S. Plant, Soil, & Environmental Sciences,  
University of Maine, Orono

B.A. Biology & Environmental Sciences, Drew University, New Jersey

#### REGISTRATIONS:

Maine Licensed Soil Scientist  
#494 (expires 12/20/2020)

#### AFFILIATIONS:

State Board of Certifications for Geologists & Soil Scientists

Maine Association of Wetlands Scientists

Maine Association of Professional Soil Scientists



## PROJECT EXPERIENCE

### **Solar Array Projects | Several Clients on Sites throughout Maine (2017-2020)**

Haley Ward was asked to provide permitting strategy, civil engineering design, natural resource identification and permitting for numerous proposed solar array sites throughout Maine. The Haley Ward team was a critical part of the site selection process, which consisted of initial desktop, then field review of several sites. Johanna led the natural resource team that completed wetland delineation and resource identification, documentation, and reporting. She also guided consultation with agencies on permitting resource impacts and coordinated completion of resource impact permit applications. Solar array projects have ranged from small, 20-acre arrays to arrays up to 80-plus acres. Johanna has managed the natural resource assessment, documentation, permitting and mitigation/compensation effort for these solar array projects. Several projects have included negotiating with State and Federal agencies on protected habitats and developing strategies related to construction timing and impact compensation and mitigation.

### **Environmental Assessment for Obstruction Removal Project | Hancock County – Bar Harbor Airport | Trenton, Maine (2019-2020)**

The Haley Ward team supported the work of the airport engineering, Jacobs Engineering Group, in completing an Environmental Assessment (EA) to comply with National Environmental Policy Act regulations. Haley Ward was responsible for resource assessment, agency consultation, and developing plans to address resources present in the project area. Johanna was responsible for all aspects of environmental assessment, permitting and compliance, including wetland delineations, natural resource evaluations, significant wildlife habitat assessment and vernal pool surveys. Johanna advised the project team and assisted in design of an obstruction removal plan to minimize impacts to protected resources.

### **Educational Facility and Recreational Trails | Soldiertown Township T2R7 Maine (2016-2019)**

The Haley Ward team provided civil engineering, natural resources identification, permitting strategy and preparation of permit applications for a project to develop approximately 10 miles of recreational trail and an educational campus facility in northern Maine. Johanna was the lead natural resource scientist and managed and oversaw the natural resource investigations and resource impact permitting for the project. Consultation with resource regulatory agencies and the project team allowed portions of the project to be developed under a tight timeline. Haley Ward completed vernal pool survey and assessments, wetland and natural resource delineation, and impact review and consultation related to wildlife habitats. In consultation with the project team and regulatory staff, Haley Ward developed a resource permitting strategy to address impacts to State Significant Wildlife Habitats and Federal Threatened and Endangered species. Permit applications submitted included a Site Location of development Act and Natural Resources Protection Act Individual permit application.



### **Versant Power | Multiple Transmission Line Projects | Maine (2015-2020)**

Johanna has served as Project manager and environmental lead for natural resource investigations and environmental permitting on multiple transmission line projects in eastern, central and northern Maine for Versant Power (formerly Emera Maine). These projects include a variety of project types, such as new transmission line corridors, substation construction projects, and existing utility line upgrades/maintenance. Haley Ward has completed resource assessment on projects that vary from several thousand feet of new or rebuilt transmission line, to 40 miles of assessment on a transmission line project. The scope of services completed by Haley Ward includes project scoping and strategy, natural resource assessment, permitting, and consultation on minimize impacts to protected resources both in project planning and during construction.

### **Soil Chemistry and Erosion/Sedimentation Assessments | Confidential Client, Maine (2015-2018)**

Haley Ward was retained to assess the impact of erosion and sedimentation to soil conditions on a forested property in Maine. Based upon the client's needs and site conditions, Johanna developed a study plan to determine the presence and magnitude of off-site soil erosion related sediment deposition in the project area and its impact on soil chemistry and physical characteristics. Johanna was responsible for developing the work plan, completing field work, evaluating and assuring the quality of the data, and preparing a final report summarizing findings and presenting final conclusions.

### **Solid Waste Processing Facility | Hampden, Maine (2015-2018)**

Haley Ward provided civil engineering, natural resources identification, and permitting services on this project to develop a recycling and solid waste processing facility to be located in Hampden. The design consists of the facility, access road, and utility corridor. Johanna was part of the natural resources team that completed vernal pool survey and assessment, wetland delineation and natural resource survey. Haley Ward developed a resource permitting strategy to address historic impacts to wetlands, and current impacts to Significant Wildlife Habitat, including Significant vernal pools and deer wintering areas. Johanna worked with a project team of engineers, foresters, resource regulators, and land trusts to develop a mitigation package for the proposed project impacts and identify likely partners.

### **Sewer Stabilization Upgrades | Lewiston, Maine (2015-2017)**

The City of Lewiston proposed upgrades to several sections of aging sewer line. Some of the maintenance activity involved sewer line stabilization and in-stream work in waters which are designated Atlantic salmon habitat. Haley Ward worked with state and federal regulators to identify key resources of concern and specifications for the sewer project. Johanna completed a Biological Evaluation for the project, with the aim of meeting federal permitting requirements and ensuring resource protection, balanced with an achievable plan for construction.



### **Line 74-73-50 Rebuild Project | Bangor to Milo, Maine (2015-2017)**

Haley Ward was hired by Emera Maine to complete natural resource surveys along approximately 40 miles of existing transmission line corridor to provide data in support of planned maintenance activities along this corridor. Johanna was part of the team responsible for wetland delineations, vernal pool surveys, data management, and reporting. The field surveys consisted of spring vernal pool surveys to document potential significant wildlife habitat, and wetland delineations, which included mapping and associated documentation. A quality assurance/ quality control program established for the project ensured quality of the final product.

### **Line 85 Expansion Project | Lincoln to Chester, Maine (2015-2016)**

Haley Ward was retained to complete natural resource surveys along two miles of existing transmission line corridor in support of an expansion. Johanna was part of the project team that completed vernal pool and natural resource surveys. She completed reporting and documentation in support of permits applications for the project. Upon approval of the project, Johanna was part of the project team that completed signage/marketing of the resource within the project area, prior to construction work.

### **US Navy Sites | Great Pond, Maine and Rangeley, Maine (2015-2017)**

Johanna was lead field scientist for natural resource delineation and documentation for several U.S. Navy sites in Maine. Her duties included managing and scheduling field work, performing wetland and natural resource delineations, and documentation to the client's specifications. She was responsible for quality assurance/quality control of the final deliverables, including reporting, documentation, and GIS deliverables.

### **Blueberry Processing Facilities | Cherryfield, Maine and Franklin, Maine (2015-2016)**

Johanna was the lead field scientist for the determination of soil/land capacity for spray irrigation of wastewater for several clients in the blueberry processing industry in Maine. An incremental approach was used to identify areas for more detailed soil characterization. Based on the detailed soil survey information, Johanna provided recommendations to the design team and client regarding soil capacity for spray irrigation and management practices to improve system performance. Haley Ward provided the client with permitting support prior to construction. Haley Ward continued to work with the client through the initial site work and pre-construction phase, to ensure optimal design and performance of the system. One spray irrigation facility, which was an expansion to an existing operation, has been operating for four years



# Sean M. Thies, PE

Vice President

Regional Manager

Senior Project Manager

[sthies@haleyward.com](mailto:sthies@haleyward.com) | 207.989.4824

Sean Thies has over 23 years of civil engineering experience, which includes site design, roadway design, and permitting. Sean's knowledge includes working with private developers, municipalities, housing authorities, and universities. As a Senior Project Manager, Sean manages a wide variety of ventures including road construction/reconstruction projects for municipalities, site development projects for medical facilities, retail facilities, banks, restaurants, offices, and ports to name a few. Additionally, he has managed several projects for affordable senior and family housing and designed commercial and residential subdivisions. Sean is experienced in permitting with the Maine Department of Environmental Protection (MDEP), Land Use Planning Commission, Army Corps of Engineers, and many municipalities throughout the State of Maine. Sean's areas of permitting expertise are in site development, stormwater, and natural resources.

## PROFESSIONAL HISTORY

### 2022 – Present

Haley Ward, Inc.  
Regional Manager

### 2014 – 2022

Haley Ward, Inc.  
Senior Project Manager

### 2007 – 2014

CES, Inc.  
Project Manager

### 2002 – 2007

CES, Inc.  
Project Engineer

### 1999 – 2002

CES, Inc.  
Assistant Project  
Engineer



## CORE EXPERTISE:

Site Development  
Stormwater Design  
MDEP Permitting  
Road & Infrastructure  
Design

## EDUCATION:

B.S. (1996) Civil Engineering,  
University of Maine, Orono

## REGISTRATIONS:

Professional Engineer, State  
of Maine (#10139)  
Professional Engineer, State  
of Florida (#88127)



## PROJECT EXPERIENCE

### **RH Foster - Freshies | Various Locations**

As project manager, Sean has overseen the concept planning, site design, and local permitting for more than twenty sites for RH Foster. The work at each site varies from concept planning for future development to site design for the redevelopment of an existing convenience store/gas station as RH Foster has been rebranding their store to "Freshies." Many of the sites have included redesign of the site layout and access. Upon completion for the redesign, Sean has overseen the preparation of local permit applications and presented to municipal planning boards for approval. Typical services have included: site survey; concept layouts; site layout and grading; site lighting; and local permitting.

### **Aroma Joe's | Various Locations**

As project manager, Sean has provided the site design and permitting for several Aroma Joe's sites throughout New England. Services have included conceptual plans to determine if a site is feasible, to full design and permitting plans for local municipalities. Projects have included sites in Maine, New Hampshire, and Connecticut. We have worked for both Aroma Joe's corporate and their franchisees.

### **Solar Clients | Various Locations**

Sean has been responsible for managing various aspects of the site design and permitting for over 80 separate solar developments for numerous clients throughout the State of Maine. Sean has managed the survey, natural resource work, site designs, and permitting for these sites. The scope of these projects required close coordination with the Clients and regulatory agencies to navigate through Federal, State, and Municipal permitting processes. Following the permitting phase, construction level plans and specifications were completed as requested.

### **Hampshire Street Housing Project | Auburn, Maine**

Sean served as the project manager for the site design and City permitting for a 53-unit affordable housing project located on the corner of Hampshire Street and Troy Street in Auburn. The project included 53 housing units in one three-story building. The project was developed on property owned by the City of Auburn. The project included the City abandonment of Troy Street so that the street right-of-way could be incorporated into the project boundary. In addition to the City property, the development also obtained an option agreement to purchase adjacent land for Pan Am Railways. Haley Ward services included site survey, site design, and City planning board approval.



### **Park Street Retaining Wall | Bangor, Maine**

Haley Ward teamed with Sargent Corp. for the design-build of the Park Street retaining wall stabilization for the City of Bangor. The project included the stabilization of an existing retaining wall that separates Park Street from City Hall and provides the structural integrity of Park Street. The existing failing wall ranged in height from 8 to 22 feet tall and supported Park Street located behind City Hall. As part of this project, the City wanted to improve the staff parking lot adjacent to the wall and building. Sean oversaw the site design for improvements to the parking lot and drainage. The site plan was submitted to the City for planning board approval. Sean worked directly with City staff to incorporate their desired improvements and recommendations in the site design for what has ended up being a significant improvement to the staff parking area.

### **Eastern Maine Healthcare | Brewer, Maine**

As project engineer, Sean provided the site design and Site Location of Development Application (SLODA) and Natural Resources Protection Act (NRPA) permitting for a 500,000- square foot professional office complex on a 126-acre lot in Brewer, Maine. This work involved the design of a new intersection onto Wilson Street (U.S. Route 1A), a 1,000-foot access road complete with all utilities, and approximately 24 acres of parking lot. This project also involved interior roadway design, sanitary sewer, water, surface and subsurface drainage, underground electric and fiber-optic telephone utilities, and a stormwater detention/treatment system.

### **Miscellaneous Projects for Husson University | Bangor, Maine**

Sean was involved in preparing an after-the-fact Site Location of Development Application (SLODA) for Husson University to permit completed and planned projects at that time. Since this was completed, Sean has been involved in the design and permitting of additional parking lots for Husson, as well as the design and permitting for a new entrance road to the University.

### **Leonard Lake Senior Housing | Ellsworth, Maine**

As the Project Manager/Senior Project Engineer, Sean provided site design and permitting for a 26-unit senior housing facility located in Ellsworth, Maine. The proposed project was developed by Penquis Housing for low-income senior citizens. The project included one 12,000 square foot two-story building with associated parking and access. Haley Ward provided site design including parking, vehicle, and pedestrian access, utilities, stormwater, and retaining wall design. The project required Site Plan and Subdivision review by the City of Ellsworth along with a MDEP Storm Water Permit-by-Rule application.



### **Community Center – Brewer Housing Authority | Brewer, Maine**

As the Project Manager/Senior Project Engineer, Sean provided site design and permitting for a proposed 12,000 square foot community center building for the Brewer Housing Authority in Brewer, Maine. The proposed building included adult education classrooms as well as daycare facilities. Haley Ward provided site design including parking, pedestrian access, utilities, and stormwater management design services. The proposed project required Site Development permitting through the City of Brewer along with an amendment to the Housing Authority's existing MDEP Site Location of Development Permit. The site design was required to meet all MDEP requirements pertaining to stormwater management. The project was successfully completed in the fall of 2013.

### **Parking Lots – University of Maine | Orono, Maine**

Sean has assisted in the permitting and design, as well as construction observation on four parking lots at the University of Maine. These lots ranged in size from 90 spaces to 360 spaces. Projects included developing surface and subsurface drainage systems for each lot and connecting these systems into the existing drainage system of the University. Haley Ward was also responsible for providing lighting designs to meet the University's requirements. One project included the construction of a detention pond and treatment system to control runoff quality and quantity. Other responsibilities have involved providing existing conditions surveys, developing conceptual plans, reviewing conceptual plans with the University, and selecting a design, permitting the project with the MDEP, providing final design plans and specifications, putting the project out to bid, contractor selection, construction observation, and contract administration.

### **Bike Paths – University of Maine | Orono, Maine**

The University of Maine (UMaine) hired Haley Ward to provide design and permitting services for the construction of a 0.5-mile extension of the existing bike path system as well as the reconstruction of the existing bike paths that were constructed in the 1970's. Sean served as the Project Manager for both of these projects. Tasks included: survey, MDEP permitting, Army Corps of Engineers Permitting, design, and assisting UMaine with the Maine Department of Transportation (MDOT) Local Project Administration (LPA) process. Both of these projects were funded by the MDOT and locally administered by UMaine. Due to limited funds, the existing bike paths were evaluated to determine what level of reconstruction should be done on each section depending on the conditions of those sections. We were able to work well with UMaine and the contractors to complete two successful projects that the owner is incredibly happy with.

### **Veteran's Park | Milo, Maine**

Sean served as the project manager for the design of Veteran's Park for the Town of Milo. The Town hired Haley Ward to design a park area along the shores of the Sebec River. The project included improvements to an existing boat ramp facility, parking area



improvements, and walkways connecting the existing park gazebo area to the Main Street sidewalks. Sean provided survey, design services, and construction administration and inspection. Since the project included improvements to the Main Street sidewalk, coordination with MDOT was also required. The project was funded with Community Development Block Grant money and Haley Ward provided the grant administration.

### **Dirigo Drive | Brewer, Maine**

Sean served as Project Engineer and assisted the task of designing 7,700 feet of new roadway to alleviate traffic congestion on Wilson Street in Brewer, Maine. This road, known during construction as the Parallel Road, runs alongside Wilson Street on the north and Interstate 395 on the south. Sean was involved with the right-of-way, roadway design, storm and sanitary sewer design, permitting, and construction monitoring for the entire project.

### **The Pines Neighborhood Infrastructure Project | Millinocket, Maine**

Haley Ward worked with the Town and Aqua Maine (the Town's water service provider) on a neighborhood scale infrastructure improvement project in the "Pines" neighborhood. As Project Manager, Sean was directly involved with the replacement of sanitary sewer lines, water lines, storm drain, and the reconstruction and repaving of all affected roadways.

### **Miscellaneous Permitting for the University of Maine | Orono, Maine**

Sean was involved in preparing an after-the-fact Site Location of Development Application (SLODA) for the University of Maine (UMaine) to permit completed and planned projects at that time. Since this permit was issued by MDEP, Sean has helped prepare more than 35 minor modifications, minor amendments, and amendments to the original permit. Projects have included parking lots, building additions, new building construction, sidewalk construction, and many other miscellaneous projects. Through these permitting projects, Haley Ward has completed stormwater management plans to control the runoff from the campus. All new projects done on campus that create impervious surface are required to modify the original SLODA permit. Sean worked on a stormwater management plan for the entire UMaine campus to address drainage issues that are a concern to both UMaine and MDEP.

### **Dirigo Drive Subdivision and Shapero Lot Subdivision – Brewer Economic Development Corporation (BEDC) | Brewer, Maine**

Sean designed and permitted two commercial subdivisions on Dirigo Drive in the City of Brewer. The two subdivisions created 12 lots for development in the newly created Professional Business District in the City. Work included City and State permitting as well as lot layout. Lots were generally accessed from Dirigo Drive, which was also designed and built as a separate project.



## Peter J. Tuell, PE

### Vice President / Project Manager

[ptuell@haleyward.com](mailto:ptuell@haleyward.com) | 207.989.4824

Pete Tuell holds a B.S. in Civil Engineering from the University of Maine and has been serving clients of Haley Ward for over 30 years with his specialized knowledge in Structural and Geotechnical Engineering. As a project engineer, Pete works on projects ranging from landfill closures to building retrofits and major treatment plant rehabilitations. Pete has a strong understanding and experience in all phases of design and construction activity, from obtaining permits to coordinating with architects and contractors.

#### PROFESSIONAL HISTORY

##### 2015 – Present

Haley Ward, Inc., formerly CES, Inc.  
Senior Project Manager/Vice President

##### 2009 – Present

CES, Inc.  
Director of Structural Engineering

##### 1993 – Present

CES, Inc.  
Project Engineer

##### 1988 – Present

CES, Inc.  
Engineer



#### CORE EXPERTISE:

*Structural Engineering  
Geotechnical Engineering  
Expert Witness Testimony*

#### EDUCATION:

*B.S. Engineering, University  
of Maine, Orono*

*A.S. Civil Engineering,  
University of Maine, Orono*

#### REGISTRATIONS:

Professional Engineer,  
State of Maine (#7695)

#### Affiliations

National Society of  
Professional Engineers

American Society of  
Civil Engineers

Maine Society of  
Professional Engineers  
Maine Section of American  
Society of Civil Engineers



## PROJECT EXPERIENCE

### **Cianbro Corporation – Eastern Manufacturing Development | Brewer Maine**

Over the years Pete provided structural engineering services to the Eastern Paper facility in Brewer, Maine. When that facility closed and came under the ownership of Cianbro Corporation, they turned to Haley Ward to help them in the renovation/remake of the facility into their vision of a new manufacturing facility to serve their industrial clients. Pete worked closely with the Cianbro Team to provide structural engineering services for those buildings that were to remain and re-purposed to meet the proposed new facility. Design tasks included Life Safety review, floor load ratings, Elevator design and placement, exterior envelop improvements, and general site design/infrastructure improvements.

### **Nine Dragon Paper Structural Improvements | Old Town, Maine**

Nine Dragons Paper recently purchased the former Georgia Pacific Mill in Old Town, Maine with the goal of resurrecting operations at that facility. As part of the start-up process, many improvements needed to be made to the various buildings and support structures. Pete has overseen a team of Haley Ward engineers and designers to evaluate, design, and coordinate with local contractors throughout this process. Given the tight timeframes and schedules, projects had to be completed within the specified windows to meet production goals.

### **Brookfield Renewable Energy /Dolby Dam Floor Analysis**

Brookfield Renewable Energy owns and operates several hydroelectric dams that used to power the Mills of Great Northern Paper in Millinocket and East Millinocket. One of those Dams is located in Dolby Township on a section of the West Branch of the Penobscot River. Pete provided the structural engineering support to Brookfield as they prepared to remove and replace one of the Rotor units within the dam complex. Tasks entailed reviewing old drawings of the structure, analyzing the floor system to determine load limits and ratings, design support structures to aid in Rotor removal, and providing drawings that showed the limits for travel paths on the floor system for large crane units. The project was completed in the fall of 2018.

### **Finson Road Bridge Replacement – City of Bangor | Bangor, Maine**

The City of Bangor solicited Design-Build bids for the replacement of an aging bridge on the Finson Road in 2014. Pete secured the services of a local contractor familiar with the project and working for the City of Bangor. With the Project Team in place, Pete oversaw the design process for pricing and submission to the City. Pete's innovative approach to the project allowed for final budget that was below the City's estimate, but also allowed for a shorter construction time frame and less impact on local residents and traffic. The project was completed in August of 2015.



### **Town of Carrabassett Valley: Recreation Bridge Design / Carrabassett Valley, Maine**

During the fall of 2017, the area surrounding Carrabassett Valley experienced a large storm event that caused the Carrabassett River to flood into low areas and cause damage to structures within the flood path. One of the structures effected was an existing pedestrian bridge located within a strategic section of Town and was part of a trail system that supported biking, skiing, and hiking. As a Project Manager, Pete oversaw the design of a new steel bridge structure, including flood evaluation and placement, foundation design, fabrication oversite, and construction oversite. The project was completed in the fall of 2018.

### **Penstock Replacement for Brookfield Energy – Sargent Corporation | Millinocket, Maine**

Sargent Corporation of Stillwater, Maine was retained by Brookfield Renewable Energy to replace some sections of existing Penstocks that run from Ferguson Lake to the Powerhouse on the site of the former Great Northern Mill in Millinocket, Maine. Sargent Corporation turned to Haley Ward to help complete the design and plan development for these projects. Pete oversaw the re-design and alignment requirements, permitting, and construction drawing development. The first project was completed in the summer of 2017, and the second in the summer of 2018. The first project received an (American Council of Engineering Companies) ACEC Engineering Excellence Award.

### **Park Street Retaining Wall Stabilization – City of Bangor | Bangor, Maine**

The Park Street Retaining Wall is an important piece of infrastructure that abuts City Hall and provides the structural integrity of Park Street. Originally constructed in the early 1900's, it has become a focal point of the City and is part of the City's Historical District. Over the years the wall has experienced significant deterioration that required the City to seek solutions. The project was put out to bid in a Design-Build format and Pete teamed with a local contractor to develop a design solution, bid pricing, and time frame that met the City's objectives. As the project commenced, the City took the opportunity to make changes to the existing site, parking, and drainage. Pete managed all aspects of the design, including working with a local Architect to develop a submission package for approval by the local Historical Preservation Committee. The initial project scope was completed in November 2017. Additional scope items were completed in 2018.

### **Sand Salt Shed Development – Town of Burlington | Burlington, Maine**

Pete oversaw the design of a new Sand Salt storage facility for the Town of Burlington, Maine. The project entailed site selection and design, foundation and superstructure design, contract document development, and contract administration during construction. The project was completed in 2017.



### **Pier Evaluations | Various Locations in Maine**

Pete has been involved in numerous pier and associated structural support systems over his career. Some of these projects include the renovation of the Bar Harbor Pier, evaluation of the piles and cathodic protection system of the main pier for Verso Paper in Bucksport, Load Rating various deck structures for industrial and commercial piers such as the one used by Cooke Aquaculture in Machiasport and in Southwest Harbor. In addition to the pier evaluations and analysis, Pete has designed and/or load rated hoist systems tied to these structures for commercial use.

### **K-8 School Renovations – Blue Hill School District | Blue Hill, Maine**

The Blue Hill School Consolidated School District received a grant to improve access to its existing K-8 School. Pete secured the services of a local Architectural firm to develop solutions to these issues. As the project evolved, the School was determined to reprogram existing space and make the layout more efficient. Pete managed the Project Team through these issues and changes.

### **Penobscot Energy Recovery Company (PERC) | Orrington, Maine**

Pete has served as the primary contact and engineer for many services performed for PERC. Pete's most recent work has involved secondary shredder improvements, fabrication drawings, fire suppression system improvements, platform designs, load ratings for OSHA requirements, gas absorber analysis, design and rebuild; lift beam design, foundation retrofit and site and foundation design; among other things.

### **Design Group Collaborative – Long Logan Outdoor Center**

This project entailed the development of a new outdoor recreation center in north central Maine. Haley Ward teamed with a local Architectural firm to design the site, trail system, and buildings associated with the property. Pete oversaw the structural and mechanical designs of the buildings and worked directly with the local contractors during construction. The project was completed in 2018 and ready for operation for winter use for the 2018-19 season.

### **Treats Falls House | Orono, Maine**

Pete served as the Project Manager for the structural design for the renovations and additions to the 16,000 square foot Intermediate Care Facility in Orono. The project was financed by a \$5 million United States Department of Agriculture (USDA) Rural Development (RD) Loan and included two building additions and a renovation of the existing structure. The additions and renovations were phased to accommodate use of the existing facility during construction. Materials included conventional dimensional lumber, pre-engineered trusses, composite framing, and structural steel.



### **Bar Harbor Municipal Pier and Parking Lot Rehabilitation | Bar Harbor, Maine**

As Project Manager, Pete provided an evaluation of the condition of the pier, designed a retrofit, prepared bidding documents, and performed construction management. The process of creating the new road base and pavement included design and/or rehabilitation of a new water meter station and conveyance systems, as well as storm water drains, catch basins, and conveyance systems. In addition, new walkways were constructed, as was a concrete dock to serve local fishermen. The project was completed within a time frame that did not disrupt the tourist season.



## Ron Willey, PE

### Senior Project Manager

[rwilley@haleyward.com](mailto:rwilley@haleyward.com) | 207.989.4824

Ron has over 25 years of background, training, and experience in the Mechanical Engineering field. As a Mechanical Project Professional, Ron has a wide variety of design experience in the cleanroom and industrial, healthcare, justice and corrections, and government market sectors. Ron is experienced in the preparation of energy efficient designs that will provide for a sustainable building for the client.

#### PROFESSIONAL HISTORY

##### **August 2021 – Present**

Haley Ward, Inc.  
Senior Project Manager

##### **2019– 2021**

The LiRo Group/DiGiorgio Associates, Inc.  
Senior Mechanical Engineer

##### **2017– 2019**

SMRT, Inc.  
Director of Mechanical Engineering

##### **2005– 2017**

SMRT, Inc.  
Senior Mechanical Engineer

##### **2002-2005**

AWM Engineering, Inc.  
Mechanical Engineer

##### **1997-2002**

Efficient Air Systems, Inc.  
Mechanical Engineer

##### **1996-1997**

Hancock Lumber Co.  
Project Engineer



#### CORE EXPERTISE:

*Energy Efficient Design  
Sustainability  
Designing to Budget*

#### EDUCATION:

*M.S. Wood Science &  
Technology (1996),  
University of Maine, Orono*

*B.S. Mechanical  
Engineering (1993),  
University of Maine, Orono*

#### REGISTRATIONS:

*Licensed Professional  
Engineer in:  
Maryland (#55132)  
Maine (#11029)  
Michigan (#6201057394)  
New Hampshire (#12037)  
New York (#085315-1)  
Virginia (#0402054141)*



## PROJECT EXPERIENCE

### **Dental Clinic Renovation – The Dimock Center**

Ron was the Mechanical engineer for the renovation of existing open office and private offices that were converted into dental exam rooms and operatories. The renovation was to expand the current dental suite to provide additional services for a growing community. Clinical spaces included clean and soiled utility rooms, exam rooms, training rooms and student shared offices. Existing HVAC systems were reconfigured to meet the new program space.

### **Cleanroom Conversion – Confidential Client**

Serving as the Mechanical engineer for the fit out of an existing 9000 square foot shell space to be converted into a cleanroom, Ron was responsible for the mechanical design sizing and selection of a make-up air unit, air-cooled chiller, sensible cooling coils to account for space loads, gas-fired humidifier, and pumps with piping specialties. The cleanroom area included ISO 7 and ISO 8 clean spaces that had both positive and negative pressure requirements to adjacent rooms. The plumbing design included a reverse osmosis system and process piping for multiple process gas systems.

### **Acute Care (COVID-19) Facility – Westchester County**

During the COVID-19 Pandemic, Ron was the mechanical engineer for the transformation of the Westchester County Center and its adjacent parking area into an Emergency Medical Treatment facility for 110 patients suffering from COVID-19. Ron designed all necessary HVAC and exhaust needed to provide negative air pressure to the treatment rooms.

Inside the facility, four Treatment Pods or wings were installed on the arena basketball court. All Pods were fitted out with necessary clinical spaces such as a Nurses Station, Med Room, Nourishment Area, Nurses Lounge, and storage for linen.

Four additional pods with all the above spaces were installed in tents in the arena parking area. Each of the four tents could provide treatment space for 14 patients, bringing the total patient count to 110.

### **Greene County Jail**

As mechanical engineer for a new county jail for men and women in Coxsackie, New York, Ron's design utilized a vacuum sanitary vacuum system to minimize water usage and allow the facility to isolate nuisance flushing and reduce damage or downtime to clear lines. The HVAC systems included central boiler plant and chiller plant that served all air handlers and terminal units and housing pod units incorporated energy recover in the exhaust air stream from the cells.



### **Ambulatory Surgical Care – Signature Health Brockton**

Ron was the mechanical engineer for the renovation of an existing imaging suite inside the hospital into an outpatient surgical care center. The new program for the space included pre- and post-operative areas, two operating rooms, waiting area, and other support spaces. The design included a new air handler to serve the two operating rooms and an existing packaged rooftop unit was replaced with a new unit to serve the pre- and post-operative areas and support spaces. Cooling redundancy was provided in the operating room air handler by providing a chilled water coil that was fed from the central chiller plant and a DX refrigerant coil fed from a new condensing unit. Humidification was provided using steam from the central boiler plant. Medical gases and vacuum were designed and connected to existing services.

### **New Hampshire Correctional Facility for Women**

Boasting a campus-type layout, the new women's correctional facility in Nashua, New Hampshire housed 220+ beds and is equipped with a re-entry building and main building and included teaching classrooms and an extensive health care unit. Ron was responsible for the mechanical design which consisted of: a central boiler plant utilizing condensing boilers with low supply water temperature to obtain the highest efficiency possible; housing pod ventilation units with energy recovery and smoke management modes of operation; and the healthcare area was separated into overnight patient care, constant observation, and acute care areas each requiring different types of HVAC specialties.

### **Grafton County Department of Corrections**

Ron was the mechanical engineer assigned to design HVAC systems for a new 90,000 square foot corrections facility. The project included a closed loop geothermal design with water-to-air and water-to-water heat pumps and custom air handlers were incorporated to handle the special ventilation needs of the living quarters.



# Jeanna M. DeTour

## Project Coordinator

[jdetour@haleyward.com](mailto:jdetour@haleyward.com) | 207.989.4824

Jeanna DeTour has over 30 years of experience in site layout, building design and construction, traffic analysis and is proficient using CAD software. Her experience includes evaluating site and building systems, health and safety conditions, physical and structural conditions, environmental and accessibility concerns, and estimating costs of repairing, replacing, and improving site and building components for Capital Needs Assessments (CNA). Jeanna has vast knowledge in the preparation of local, state, and federal permit applications to include local applications, State of Maine, Site Location of Development Application (SLODA) and Stormwater Permit Applications. She is also responsible for investigations and report documents necessary in completing Phase I Environmental Site Assessments. She is certified by the State of Maine as a Third-Party Inspector (TPI) of Residential and Commercial Buildings and Maintenance and Inspection of Stormwater Best Management Practices. Jeanna is familiar with the current International Building and Residential Codes, Energy Conservation, Existing Building Codes, ADA Standards for Accessibility, and Life Safety. Jeanna successfully completed the 10-hour Construction Safety and Health in 2020.

### PROFESSIONAL HISTORY

#### 2021 – Present

Haley Ward, Inc.  
Project Coordinator

#### 2017 – 2021

Haley Ward, Inc  
Senior Project Professional

#### 2004 – 2016

Carpenter Associates  
Senior Associate Engineer

#### 2000 – 2004

James W. Sewall Company  
Senior Engineering  
Technician

#### 1995 – 2000

Lane Supply Company  
Field Technician / CAD  
Operator

#### 1988 – 1995

James W. Sewall Company  
Engineering Technician



### CORE EXPERTISE:

*Site Layout  
Building Design  
Capital Needs Assessment  
NFPA 101 Life Safety  
ADA Standards  
Local, State and Federal  
Applications and Permitting*

### EDUCATION:

*A.S. (1987) Architectural &  
Building Engineering  
Technology, Vermont  
Technical College*

### CERTIFICATIONS:

*Certification #101, Third Party  
Inspector of Residential  
Building Code, Commercial  
Building Code, Residential  
Energy Code and Commercial  
Energy Code*

*Certification #082,  
Maintenance & Inspection of  
Stormwater Best Management  
Practices*

*OSHA 10 Hour*



## PROJECT EXPERIENCE

### **CHA Architects | RSU 26 Additions and Renovations**

Jeanna's duties included traditional Clerk of the Works services for observing a twelve-million-dollar project that included constructing approximately 20,000 square feet of additions, including a 450-seat auditorium and two-story classrooms. The project also included approximately 6,500 square feet of renovation work at the high school and demolition of approximately 6,000 square feet and an addition of 10,000 square foot upgrade to the elementary school. The campus site work included replacing the competition track and football field, a new storm water system, and an expansion to the parking lot. She did on-site observations and reviews of work progress to be in conformance with Contract Documents. She maintained a daily report that included photos, reviewed pay requisitions and worked collaboratively with the Owner, Architect, and General Contractor.

### **Machias Savings Bank | Maine**

Currently Jeanna is working with Machias Savings Bank on a project in downtown Bangor, The Charles Inn, to aid in construction pay requisitions and the progress and quality of work. This is a two-million-dollar renovation project with hopes of being in operation the end of 2022.

Jeanna acted as the Owner's Representative on a project in Trenton, Maine. Gateway Estates, a new apartment complex, is under construction on the Phase I of the 62-acre property that will eventually have 42-52 units. Jeanna was responsible for the recommendation of money disbursement on pay requisitions based on project progress.

### **Armory Indoor Firing Range | Belfast and Waterville, Maine**

Jeanna prepared separate project manuals to be used for contractor bidding that included the plans, elevations, and details for the remediation of the Indoor Firing Range at the Belfast and Waterville Armory to facilitate reuse. She was also involved with the construction management "Type C" Services, throughout the duration of the project, for the Department of Defense, Veterans and Emergency Management.

### **Code Reviews | Maine**

Jeanna was responsible for the project meeting NFPA Life Safety 101 and obtaining a State Fire Marshal's permit and City of Bangor's Construction Permit for Buck Construction's project. Other projects include KidsPeace to review their facility in Ellsworth and Hardy Construction to perform several code reviews for their multiple projects in Maine. River Church in Bar Harbor; Highview Christian Academy in Charleston, Columbia CTS, Dalegip America of Searsport, and Napa have all hired our services for code reviews.



### **Old Town/Orono YMCA | Old Town, Maine**

The YMCA contacted Haley Ward after receiving an eight-page defiance letter from the State Fire Marshal. Jeanna provided services to help the YMCA stay in operation, economically meet current codes, and obtain a State Fire Marshal's permit.

### **Katahdin Valley Health Care (KVHC) | Maine**

Jeanna has been involved with many aspects of the renovations, additions, newly constructed health care facilities for KVHC throughout Maine. Jeanna's role as project coordinator required, she provide reviewing construction drawings and specifications, construction administrative duties, as well as all aspects necessary in obtaining permitting. Overseeing construction quality and progress was her responsibility.

### **Town Office Programming and Master Plan | Lincoln, Maine**

Jeanna was responsible for gathering existing conditions at the site and building at the town office in Lincoln, Maine. Together with the lead Architect, Matt Carter, Jeanna helped determine how best the Town could move forward with improving the current floor space and concepts with expansion of the floor space to improve the appearance to residents and potential businesses and plan for long term needs for space allocation.

### **Capital Needs Assessments**

Jeanna has completed over 125 Capital Needs Assessment (CNA) Reports for multi-family and elderly housing projects. She has also finished CNA reports for the Town of Holden's municipal buildings, Orion Rope Works in Waterville, and Emera Maine's facility in Lamoine, Maine. Her tasks include building and site inspections, review of maintenance, and replacement records to estimate the remaining useful life and compare against the industry standards and determine an estimated cost of repair or replacement. The CNA is a 20-year span report that estimates the valuation for repair of each component.



HALEY WARD

ENGINEERING | ENVIRONMENTAL | SURVEYING

Jeff A. Teunisen, PLS  
Executive Vice President  
Survey **Service Line** Director  
[jteunisen@haleyward.com](mailto:jteunisen@haleyward.com) | 207.989.4824

Jeff Teunisen has over 25 years of experience in surveying and as **Service Line** Director. Jeff is responsible for project development, project oversight, internal management, staff development, and team coordination. Jeff takes an active role serving as a client liaison, providing budget and technical oversight for boundary, topographic, and construction survey services. In addition, he is a team leader on small and large site development projects. Jeff is responsible for conceptual, planning, and permitting phases for a variety of development projects. He works closely with other departments within our Bangor Corporate office, and the **regional** offices.

PROFESSIONAL HISTORY

2009 – Present

Haley Ward, Inc., formerly CES, Inc.  
Executive Vice President

2006 – Present

CES, Inc.  
Principal

2002 – Present

CES, Inc.  
Survey Manager

1997 – 2002

CES, Inc.  
Survey Technician



CORE EXPERTISE:

*Survey Management  
Boundary Analysis  
Construction Staking  
Survey Consultant*

EDUCATION:

*B.S. (1997) Journalism,  
University of Maine, Orono  
A.S. (1992) Surveying  
Engineering Technology,  
University of Maine, Orono*

REGISTRATIONS:

*Professional Land Surveyor,  
State of Maine #2365  
Professional Land Surveyor,  
State of New York, #51079  
FAA Part 107 sUAS Remote  
Pilot*

AFFILIATIONS:

*Maine Society of Land  
Surveyors  
National Society of  
Professional Surveyors  
Boy Scouts of America Land  
Development Board  
Maine Waterfowl Council,  
Penobscot Co. Rep.*



## PROJECT EXPERIENCE

Downeast Reliability Project: Bangor Hydro Electric Company | Bangor, Maine

Haley Ward contracted with Bangor Hydro Electric Company (BHE) to provide a full range of land surveying services for a proposed 43-mile transmission corridor from Ellsworth to Harrington, Maine. The line upgrade will serve residents of Washington and Hancock Counties with more reliable electricity.

Initially, while the route was being determined, Haley Ward provided BHE map exhibits showing the proposed routes, landholders, and published natural resource information. The utilization of GIS was an integral part of the initial investigatory phase. Haley Ward produced maps showing the route for public display and for presentations at local Planning Board meetings.

Haley Ward survey crews were tasked with setting up a control network along the 43-mile route. The utilization of a tight GPS control network was instrumental in the success of the survey. Most of the 43-mile route was heavily wooded and the survey crews were responsible for collecting ground topography throughout the corridor. In addition, our survey staff compiled boundary information, conducted deed research and compiled all data into a project digital drawing for the project design team and the land acquisition team.

Haley Ward survey crews were also responsible for staking the clearing limits for the entire project. The staking was conducted in heavily wooded areas with traditional surveying instrumentation. After the clearing was complete, Haley Ward was engaged by BHE to stake the proposed poles and guy wire locations.

A majority of the project's success was attributed to Haley Ward's ability to manage such a large project. Haley Ward accomplished this through effective team collaboration that resulted in the completion of all project phases in a timely manner. The team was highly responsive to **the client's needs and assigned field crews that were** capable of tackling the technical and physical demands of such a large-scale survey.

City of Bangor | Waterfront Concert Venue | Bangor, Maine

In 2018 Haley Ward was awarded a boundary and topographic survey for the Bangor Waterfront concert area. This large-scale survey project of over 35 acres is being utilized for future improvements and planning for the successful concert venue. While the focus of our work was a boundary survey and topography survey, Haley Ward was tasked with full boundary research, including right of way lines.



Haley Ward worked with City Staff to map underground utilities throughout the entire site for future design and improvements planned for the facility. Haley Ward utilized existing GIS information pertaining to some underground utilities, and also obtained invert information for a large sewer line running through the property. This project was unique in that a variety of instrumentation was used throughout the project. We utilized aerial imagery, GPS equipment, auto-levels, robotic total stations and traditional Theodolites. The base map was related to State Plane Coordinates. Jeff was the lead surveyor on the project.

TRC Solutions | Farmington and Sanford Solar, Maine

Haley Ward was contracted by TRC Solutions to provide ALTA Surveys, Easement Surveys and various property descriptions for large-scale solar array projects in these two communities. Initial field work was conducted to establish existing property lines for site development and permitting. Once the projects were fast-tracked, Haley Ward was involved with ALTA surveys of the properties slated for development. Time-sensitive submittals were produced, along with final ALTA surveys of the properties. Jeff was the lead surveyor and contact person for TRC and the projects are continuing during 2019.

Gale Associates, Navy Sites | Various Sites in Maine

Haley Ward was engaged by Gale Associates to perform large scale topographic and boundary surveys for four sites in Maine. Jeff oversaw the projects located in Rangeley, Cutler, Prospect Harbor and Great Pond. The projects included detailed surveys of all improvements, including roads at each site. To meet the client's aggressive project schedule, Haley Ward utilized both RTK and traditional surveying services. In addition, the survey information was utilized internally where Haley Ward created a large-scale GIS database of each site.

Bangor Natural Gas | Various Sites in Maine

In 2014, Haley Ward was contracted by Bangor Natural Gas to update their base maps for planning, design and permitting for proposed natural gas infrastructure throughout the Bangor Region. Haley Ward was tasked with working closely with a local utility locating company to map underground utilities with the project areas slated for new services. Haley Ward surveyed over 20 miles of roadways and project areas and verified Right of Way locations along the routes. Locations included waterlines, storm drain and sewer systems, all existing improvements within project areas including trees and shrubs. Our timely delivery of updated base maps was a critical step in the success of the projects as the survey, design and installation of gas lines occurred during months of no snow cover.



#### Hoyle, Tanner & Associates | Millinocket and Lincoln, Maine

Jeff was the lead surveyor for the obstruction mapping project at both the Millinocket and Lincoln Airports. His duties included oversight of ground surveys and ground control of aerial imagery to facilitate removal or lighting of obstructions to air navigation, in accordance with Federal Aviation Administration (FAA) advisory circulars. Off-airport boundary surveys are being conducted for easements needed for future maintenance. Tree clearing was also conducted on this project. Jeff served as lead surveyor for staking of the limits for the contractor.

#### Forest Society of Maine | Piscataquis, Maine

Haley Ward was proud to be part of the Forest Society of Maine's team for a large conservation easement of over 4,300 acres of land surrounding Silver Lake and the West Branch of the Pleasant River in Piscataquis County. This project involved surveying and marking the easement boundaries, writing descriptions, and plan creation for what is dubbed by the Forest Society of Maine as an important conservation effort related to **wildlife species of state and national significance, one of Maine's finest silver maple floodplain forests** and an area popular with outdoor enthusiasts.

#### Northeast Harbor, Maine

Jeff was the lead surveyor for a large topographic and right of way survey for a portion of the Village of Northeast Harbor; located in Mount Desert Maine. Drainage issues surround a portion of the community and Jeff conducted a survey where Rights of Ways were researched and plotted, topography was captured and utilities were also located. The information was then passed on to Haley Ward Engineers for their design phase of the project.

#### Hammond Lumber | Various Sites in Maine

Haley Ward was engaged by Hammond Lumber after their acquisition of EBS to compile boundary surveys of all of their existing and new sites throughout the State. The client wanted Haley Ward to compile all pertinent site information for each site for future planning and on-site management. Boundary surveys were conducted and property lines were monumented for clarity on the ground. Jeff worked closely with Hammond Lumber and Haley Ward Surveyors to provide the client with boundary plans showing improvements to the existing facilities.



# Jeffrey Weeks, PLS

## Land Surveyor

[jweeks@haleyward.com](mailto:jweeks@haleyward.com) | 207.989.4824

Jeff has over five years of experience in a variety of land surveying projects. Initially, he started with Haley Ward upon graduation from the University of Maine as a Survey Technician in May of 2018. He since has gained the necessary experience and passed required examinations to obtain his Professional Land Survey license in the State of Maine. His time at Haley Ward has been spent working extensively on topographic surveys for engineering design, boundary and ALTA/NSPS land title surveys for commercial real estate transactions, and construction layout for large scale buildings across Maine.

### PROFESSIONAL HISTORY

#### 2018 – Present

Haley Ward, Inc.  
Land Surveyor

#### 2018 – 2018

Rice Surveying Services, PA  
Survey Technician

#### 2016 – 2018

Bangor Lawn & Landscape  
Grounds Maintenance



### CORE EXPERTISE:

*AutoCAD*

*Boundary Surveys*

*ALTA/NSPS Land Title Surveys*

*Topographic Surveys*

*Construction Layout*

### EDUCATION:

*B.S. (2018) Surveying Engineering Technology, University of Maine, Orono*

### REGISTRATIONS:

*PLS #2609 State of Maine  
OSHA HAZWOPER*



## PROJECT EXPERIENCE

### **Solar Farm ALTA/NSPS Land Title Surveys | Various Locations in Maine**

Managed projects from field to finish. Analyzed costs from previous alike projects to develop a cost estimate and monitor project performance ensuring the budget was being met. Performed initial property and abutting property deed research, field work and boundary analysis to produce a final plan.

### **Gordon Center for Creative & Performing Arts – Colby College | Waterville, Maine**

Establish control points to assist building contractors with construction of the building throughout the span of the project. Client was Consigli Construction.

### **Frye Mountain Boundary Survey | Knox/Montville, Maine**

Haley Ward was hired by the State of Maine to conduct boundary surveys of different portions of their land located on Frye Mountain in the towns of Knox/Montville. Jeff's job was to handle the deed research, reconnaissance of property lines for boundary evidence, flagging line and marking any missing property corners.

### **Topographic Survey Ringing Point, LLC | Mount Desert Island, Maine**

Mapped existing conditions of just over 15 acres of property on the rugged Maine coast, measuring enough shots to produce a deliverable with contours of the one-foot interval.



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