Request For Qualifications Bid #42-06

Engineering Services For

Shelton Canal Locks Park

August 27, 2021

LANDSCAPE ARCHITECTURE
KENT+FROST
1 HIGH STREET MYSTIC, CT 06355

BSC GROUP

AHS CULTURAL RESOURCE MANAGEMENT

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1 HIGH STREET
MYSTIC, CT 06355
860.572.0784
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Brian Kent, PLA
Chad Frost, PLA

Landscape Architecture
Urban Planning
Sustainable Design
Project Management

August 27, 2021

Mr. Gene Sullivan, Purchasing Agent
City of Shelton
54 Hill Street
Shelton, CT 06484-3207

Letter of Interest for: RFQ 42-06 – Engineering Services for Shelton Canal Locks Park

Dear Mr. Sullivan, Shelton Economic Development Corp.,
and Project Stakeholders,

With great interest the team of Kent + Frost Landscape Architecture (K+F), Archeological & Historical Services (AHS), and BSC Group engineers presents Qualifications for this exciting project. Years in the making, Canal Locks Park has exceptional value to the residents of Shelton and the region and is deserving of careful planning and wise investment. K+F has assembled a uniquely qualified team with unparalleled expertise in creative park planning, historical interpretation, and engineering.

K+F is a Landscape Architectural practice with expertise in a wide spectrum of planning, design, and project management. We have a 20-year record of successful public open space and community improvement projects in Connecticut. This record of exemplary work in the public realm makes our team a perfect match for Canal Locks Park. Relevant projects by the team and its principals include Mystic Seaport Museum, Mystic Boathouse Park, Ocean Beach Linear Park, New London Riverside Park, G&S Trolley Trail, Shelton River Walk Reconnaissance Study (AHS), Willimantic Bridge Street Dam Study (AHS), among others. We have specific expertise in the planning and design of linear parks with projects like Bicentennial Pond at Schoolhouse Park for the Town of Mansfield, CT consisting of an Accessible Trail loop around the pond, boardwalks, fishing piers and outdoor classrooms. These projects and more are described in detail in the teams' relevant experience sections of this document.

K+F is also known for our Creative Placemaking, Public Art, and Streetscape design including Betsy Patterson Square in Storrs Center, Hygienic Art Park in downtown New London (recipient of the 2010 CT ASLA Award of Excellence), and streetscapes in historic centers like Chester and Collinsville. Our sub-consultants, AHS and BSC Group have significant technical expertise in their respective fields and will add solid research, analytical depth, and accuracy to the project.

The following Statement of Qualifications will describe our team's approach, firm information including resumes and project experience. I look forward to discussing in more detail how we can assist the City in this exciting project.

Sincerely,

Brian Kent, Principal
Kent + Frost Landscape Architecture
1 High Street
Mystic, CT 06355
860.572.0784
bkent@kentfrost.com

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PROJECT UNDERSTANDING & APPROACH

PROJECT UNDERSTANDING

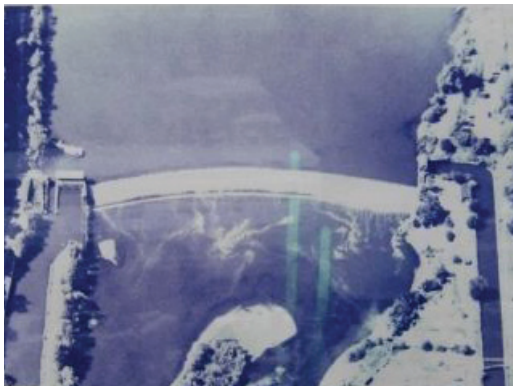
We have scoured the internet for background information on the canal and its historical context. Following are descriptions of the site and its historical context. These narratives, plus information in the RFQ, our discussions with team members and Shelton contacts have shaped our understanding of the site and its potential. One of the most succinct descriptions we could find was published on the Historical Marker Database website (HMdb.org):

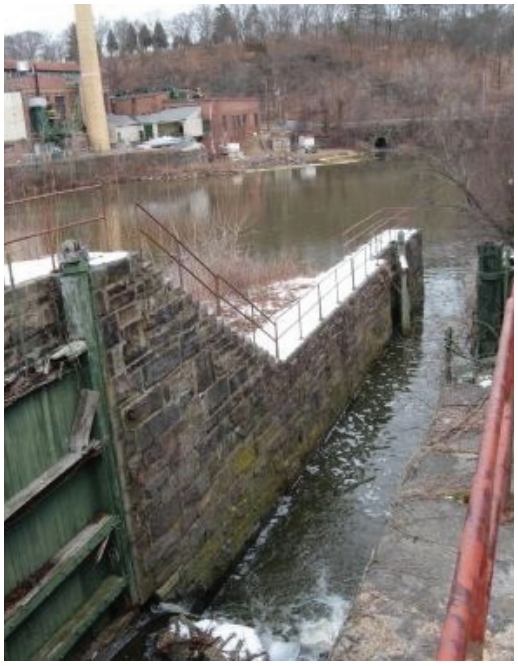
"The Housatonic Dam and Shelton Canal were constructed in the late 1860's to power new factories which lead to the rise of industrial Shelton. The canal was the power source for all downtown industries in an age before electricity. The dam was built to fill the canal with water at an elevation higher than the river. Each factory tapped into the canal with a tunnel. The water fell to the river below, powering a turbine, connected to factory machinery through a series of shafts, pulleys, and belts. The canal and dam were so important that the town took its name after Edward Shelton, the primary mover and backer of the Housatonic Dam Company.

Most of the canal has been filled in over the years, but a remnant still survives off the northwest end of Canal Street. The remaining canal is 1200 feet long and 80 feet wide, totaling 2.5 acres. It rests on a six-acre piece of riverfront property owned by the hydroelectric company which operates the dam and is open to the public under their federal licensing agreement."

Additionally, AHS' 2010 Reconnaissance Survey project narrative provides detail on the canal specifications as well as additional context on industrial activity on the riverfront :

" The construction of the Derby-Shelton dam and canals, one of the state's largest 19th-century engineering undertakings, was the reason Shelton developed into a small industrial city after completion of the project in 1870. Today significant industrial remains include the dam, headgates, and canals on either side of the river, several tailraces on the Shelton side, a retaining wall along the bank on the river's west side, and several historic factory complexes in Shelton. The proposed River Walk lies within the Shelton Canal Industrial District, which has been determined to be eligible for the National Register of Historic Places.





PROJECT UNDERSTANDING

The canals provided 22 feet of fall for the factory sites along the riverbanks and enough water to generate 2,400 horsepower during all but two months of the summer, when the available power dropped to 1,725 horsepower. At one time, more than 1,000 workers were employed making flatware, textiles, corsets, fasteners, and other products in the Shelton-side factories.

The canal was primarily conceived as an industrial-power facility, but two locks on the Shelton side allowed small vessels to bypass the dam and thereby continue navigating the Naugatuck River. In addition, a basin was constructed at the southern end of the canal to accommodate waiting vessels."

We further understand that the remnant canal section has been isolated from the river and only the lower lock structure remains. Over the lock, a bridge was constructed to convey heavy equipment to and from the power station. The bridge provides a unique vantage point for viewing the lock. This intimate proximity to such a rare 19th century artifact helps justify investment in its restoration and interpretation for the public. The remaining canal section has been filled with silt and debris over the years and is home to dense vegetation including invasive species.

Lastly, we understand that the City has invested millions in the remediation and redevelopment of the upper Canal Street district and that the Canal Locks Park has enormous potential to stimulate more investment and economic development. The potential of reimagined derelict industrial corridors was proven with lower Manhattan's Skyline Park; this site may have similar potential for Canal Street. Our charge will be to unlock that potential through these storylines and initiatives:

1. Conceive the park as a recreational resource open to all Shelton residents and visitors. Program appropriate uses that balance development with environmental quality. Ensure that the park is resilient and can be operated and maintained efficiently. Stakeholders: Shelton Parks and Recreation, DPW, Shelton Economic Development Commission (SEDC), neighbors and residents, others to be determined.

PROJECT UNDERSTANDING

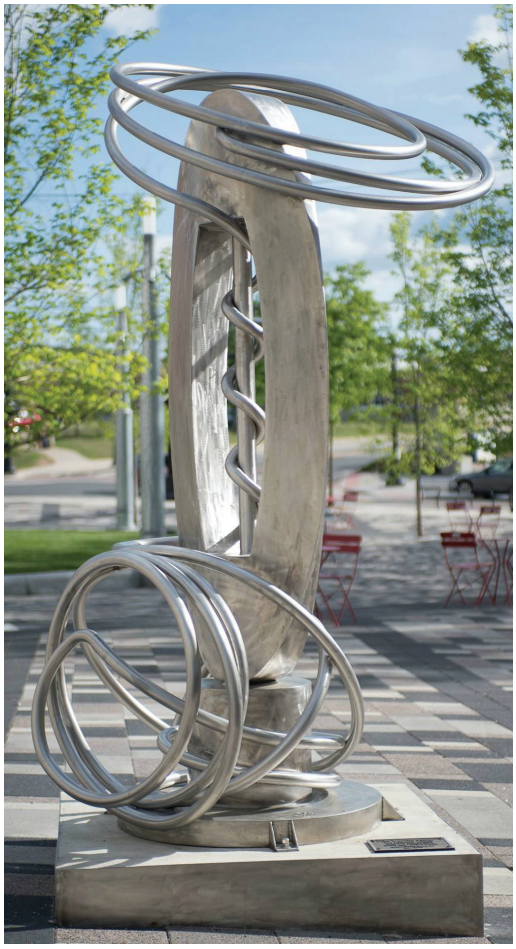
2. Restore the site's environmental integrity by removing debris, inappropriate construction materials, invasive species, and deleterious vegetation. Tell the story of the river from its pre-industrial wild state through today. Explain the issues of water quality, flooding, climate change and environmental threats. Stakeholders: Conservation Commission, DPW, others to be determined.

3. Uncover, repair, restore and interpret the extant historical features. Replace non-historic interventions such as the 40-year-old weir. Describe through visual storytelling the history of the place. Employ engaging exhibits, art, and signage. Tell the stories of people who lived and worked there. Stakeholders: Shelton Historical Society, SEDC, others to be determined.

4. Link the park to upper Canal Street thematically and physically with materials (paving, lighting, signage, landscaping) and design vocabulary. Develop programming including special events and amenities that stimulate responsible use including access to the river. Employ design strategies that enhance safety and security for park visitors. Stakeholders: SEDC, Parks and Recreation, Police and Fire Depts., others to be determined.

PROJECT APPROACH

The following narrative describes a project approach derived from our work on similar projects and our understanding of the opportunities and challenges of the Canal Locks Park master planning program. We offer this Scope of Work as a starting point for discussion about the most effective process for achieving the project goals. As we understand, these goals involve confirmation of the project's feasibility and cost effectiveness as a city-managed waterfront park. While our team includes engineers and historians, their technical expertise will be judiciously employed at the master planning level. This approach describes a thorough process including public/stakeholder outreach that results in a master plan embraced by the community. Its value will be to establish a compelling vision for the site that can be used to leverage further funding and support for subsequent investment including a Phase One implementation project in the near future.



The Storrs Center Weaving Shuttle is a perfect example of Creative Placemaking

Scope of Work

- Task 1 – Project Kickoff & Information Gathering
- Task 2 – Site Analysis
- Task 3 – Environmental Assessment
- Task 4 – Stakeholder Coordination and Public Involvement
- Task 5 – Conceptual Plan(s)
- Task 6 – Master Plan

Task 1 – Project Kickoff & Information Gathering

Within two weeks of the contract approval, the Kent + Frost team will conduct a Project Kick-Off meeting with Client to establish the project management including chain of communication. At this meeting we will set the schedule, discuss the success factors, set the goals and objectives, and determine the level of community input/ participation.

Task 2 – Site Analysis

Inventory of the Proposed Site and Surroundings
The Kent + Frost team will extensively document the existing conditions both natural and cultural through a review of pre-existing data, site inspection and inventory of relevant features including:

- Natural features such as topography, hydrology, soil types, vegetation
- Aesthetic resources such as views, vistas, and view sheds

- Assess existing and potential future adjacent land uses and zoning implications
- Existing Infrastructure and amenities
- Preliminary meeting with Client to discuss project challenges including maintenance and operations.

Upon completion of the inventory, we will conduct interviews with stakeholders to gain a greater understanding of how the site and amenities will be allocated and used. The completed Site Analysis will provide the basis for how we integrate the existing conditions into the proposed improvements.

Task 3 – Environmental Site Assessment

Wetland Analysis (if required)
Our engineering consultant will conduct a site walk of the property to field delineate the onsite inland wetland and watercourse boundaries as defined in Connecticut General Statutes §22a-38 and §22a-29 and identify the onsite upland and wetland soils. During the site investigation, a qualitative assessment of the capacity of the onsite inland wetlands will be provided to evaluate typical wetland functions and values as they may relate to the future development.

Task 4 – Stakeholder Coordination / Community Engagement

Our team believes that strong planning and good design are based on stakeholder and community input. Close interaction with Client, regulators, key stakeholders, and the public is a critical step in identifying the concerns, needs, and priorities of the project. We are sensitive to the opinions of all participants and conduct outreach in a manner to make all feel welcome to express their ideas. The Kent + Frost team includes professional facilitators that have facilitated many public meetings specifically for government agencies. Our team will work with Client to identify the best forums, dates, times and strategies to gain valuable input from a diverse representation of stakeholders.

Key Stakeholder groups may include, but are not limited to:

- Economic Development Corporation members
- City Staff
- Residents

- Parks & Recreation
- Conservation Commission
- Historical Society
- Neighborhood groups & Volunteer Organizations

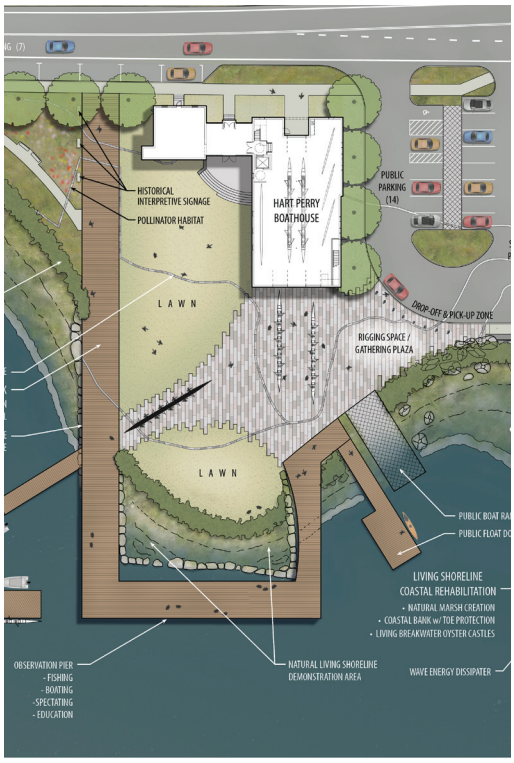
The K+F team has a long track record of successful community engagement, which has led to award winning projects. The success of this project will depend as much on its stakeholder and community participation, acceptance, and ownership, as it does on good planning and design.

Remote & alternative public participation: Our team fully appreciates the additional challenges we've all faced over the last year especially as it pertains public meetings and community participation. We are fully versed in digital remote public presentations, having conducted and participated in multiple meetings over the course of the last year and a half for our various ongoing projects. If remote meetings are required, we can certainly meet the needs of the project. We would also be interested in discussing alternative public participation sessions that may allow for in-person meetings, if all safety concerns can be met.

Task 5 – Conceptual Designs

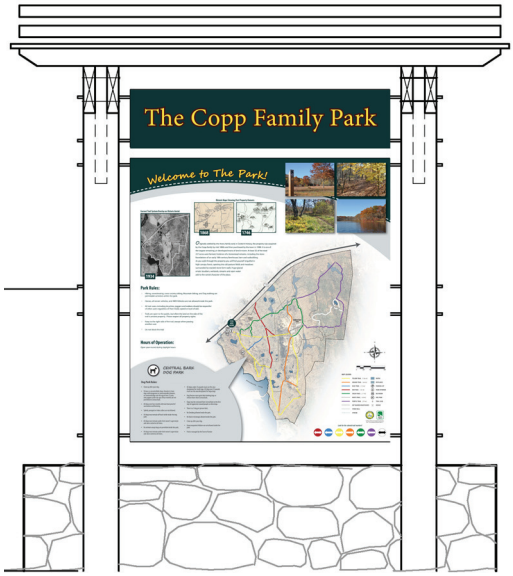
Conceptual Design and Alternatives

A skillfully executed planning process is critical to the success of the entire project since it will serve as the basis for all other project decisions and assumptions. The configuration of all built amenities will have a substantial impact on how the Park is experienced and used. Besides balancing environmental constraints and potential amenities, our primary goal will be the creation of a Meaningful and Memorable Park. We focus on the user experience, that is, how exterior spaces make people feel, whether you're immersed in them or viewing from afar. A successful site design is not something that is specifically noticed in itself. It allows each part of the total site development – be it pathway, furnishing or planting – to function and appear most fitting and appropriate. To be successful a site design must accomplish its orchestration at "eye level", anticipating the sequence of experience – from sense of arrival and clear wayfinding, through a safe and compelling environment. To this end we will develop and explore multiple configurations and will evaluate and present their pros and cons to Client.



PROJECT APPROACH

During this phase our team will also assess the cost implications of each alternative concept. Our design approach is to not only consider implementation costs but will also consider the lifecycle costs of the project. Our designs will be more cost effective, while providing greater value to the Client because we employ this strategy throughout the planning process. Additionally, we will consider and evaluate opportunities to use environmentally sustainable materials and construction technologies.



Identity – Design Vocabulary
Throughout the conceptual process we will work with Client to further develop the identity of the park. It is important to utilize the vision of the Client to develop a theme/brand that will become the project identity. This brand will become apparent in the physical design and its amenities. Using innovative design features, we will create memorable spaces and a distinct identity. This sense of place will be derived from key facets of the existing site and will become the recognizable features that define the Park and Canal Street district as a whole.

Technical / Engineering Design
All concepts will be based on sound engineering and technical specifications. Although flashy images often elicit enthusiasm, we find it imperative that from the earliest concept all designs are based in reality and conform to all applicable codes and regulations.

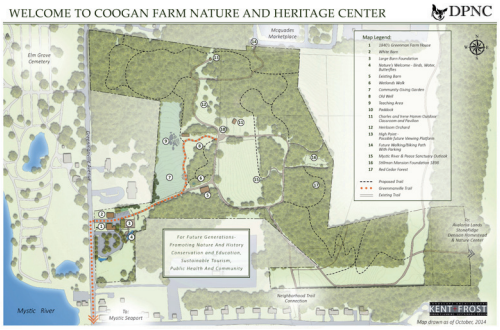
Conceptual Plans Presentation
Through the schematic design process our team will identify a variety of optional configurations and material considerations. These concepts will be developed into a coherent graphic presentation, that will visually illustrate the alternatives, key design elements, anticipated impacts to the community and environment, as well as appropriate solutions. These plans and graphics will be presented to the Client for evaluation. Depending on the consensus, these plans could be presented to the public, or the results could be focused into preparation of the Master Plan.

Task 6 – Master Plan

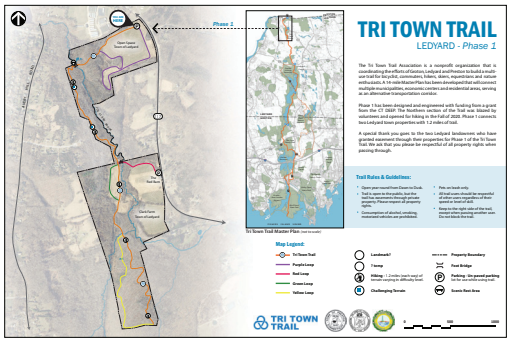
Upon the feedback garnered from the Concept design process, the K+F team will finalize the Park Master Plan. The final Master Plan will be a clear, coherent and comprehensive document that will

guide the client in sustainable and responsible the development. The Plan will include:

- Preferred design alignment(s) and design graphics at suitable scales
- Standards for Amenities and Materials
- Place-making, interpretive and informational signage standards
- Possible artistic Installations locations and requirements
- Cultural and Environmental Protection Standards
- Identification of new structural features
- Implementation/Phasing strategy
- Opinion of Cost – Budgets by Phase & Funding Opportunities



We will convey all information in the report through a presentation of the Final Master Plan utilizing attractive and easily understood graphics and documentation.



Future Work

Although not part of this initial scope of work, the K+F team is fully prepared to help guide the Client from planning through implementation. The following is a summary of future work our team could provide.

Construction Documents

The Kent + Frost team has successfully designed and constructed hundreds of projects throughout southern New England and Connecticut specifically. The key to a successfully built project is clear, concise, and well-crafted construction documents. We see the creation of well-crafted construction documents as much of an art form and the design itself. No detail is too small to examine for both its durability and aesthetic contributions to the project.

Bidding Services

Our teams experience in designing projects that range from some of the largest in the state to some of the smallest, allows us to uniquely adapt our drawings and bidding documents to the requirements of any given project. Our procedures are designed to be flexible, so that our biding documents can meet the requirements (regulatory or fiscal), but not exceed them, thereby saving precious construction dollars, expediting the process, and providing the greatest value for the project.

PROJECT APPROACH

Construction Observation
The K+F team has over twenty years' experience serving as Client's representative during project implementation. We are close enough to the site to make frequent inspections and are adept at anticipating and managing contractor coordination.

Concluding Statement

Kent + Frost would like to thank you again for the opportunity to submit our qualifications for the Canal Locks Park project. We have assembled a team that is uniquely qualified to complete this project in a thorough and expeditious manner. Our team is comprised of the most qualified consultants with direct and relevant expertise. The following are a few of the reasons that we believe set us apart from our competition.

- Our team has done extensive due diligence to develop an understanding of the site, the potential park program, and the surrounding community context.
- Our team has a breadth of experience within the realm of public park and place making projects that will be essential for this project.
- We love what we do and seek out projects with a clear public benefit. Assisting Connecticut communities in the creation on meaningful places that improve health and wellness, improve environment, and stimulate economic potential is our greatest motivation.

PROJECT EXPERIENCE

Mystic Seaport Museum

Master Planning Services

Location
Mystic Seaport Museum
Mystic, CT

Size
49 Acres

Completion
2010 - Present

Contact
Ken Wilson,
Director of Facilities
(860) 572-5381

Mystic Seaport Museum occupies a 19-acre campus on the bank of the Mystic River and is especially vulnerable to climate change. K+F has been the museum's master planner since 2010 and is now assisting the Museum with its most ambitious project yet: protecting the campus from sea level rise. The new plan will protect critical infrastructure, reorganize buildings on higher ground, and re-create historical coastal marshes to allow for the campus and shoreline to coexist.

K+F previously redesigned the Museum's North Campus including a transformation of Anchor Circle into a flexible, multi-use gathering space renamed McGraw Gallery Quad. The site was designed with for ADA accessibility and sustainability including native plantings and re-use of existing materials. Storm water is absorbed and treated through permeable paving, and rain gardens prior to discharge into the Mystic River. The new quad serves as nucleus and gateway to North Campus, hosting performances, educational and community events throughout the year.


THOMPSON EXHIBITION BUILDING
North Entrance
MYSTIC
SEAPORT
MUSEUM

Ocean Beach Linear Park

Nature Trail & Gateway Garden

Location
New London, CT

Size
45 Acres

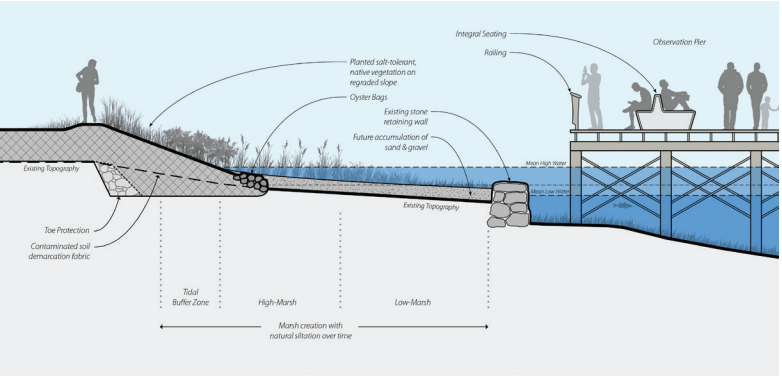
Completion
2006

Contact
David Sugrue
Manager Ocean Beach Park
(860) 447-3031

Funded by a Connecticut DEP grant, this coastal access project contributes to New London's renewed interest in its long neglected beachfront park.

Kent + Frost designed a 400-foot long handicap accessible stone dust trail that winds through mounded plantings of native grasses, Bayberry, Beach Plum and Rugosa Rose. An elevated platform rises above the surrounding Bayberry colonies revealing a striking panorama of Long Island Sound, Alewife Cove and Harkness State Park. The site had been degraded over the years by unrestricted access, dumping, vandalism and invasive plants. Native plants were relocated during construction to degraded areas along the path without the expense of new landscaping.

Kent + Frost provided design and construction oversight.



Mystic River Boathouse Park

Rowing Facilities & Public Park

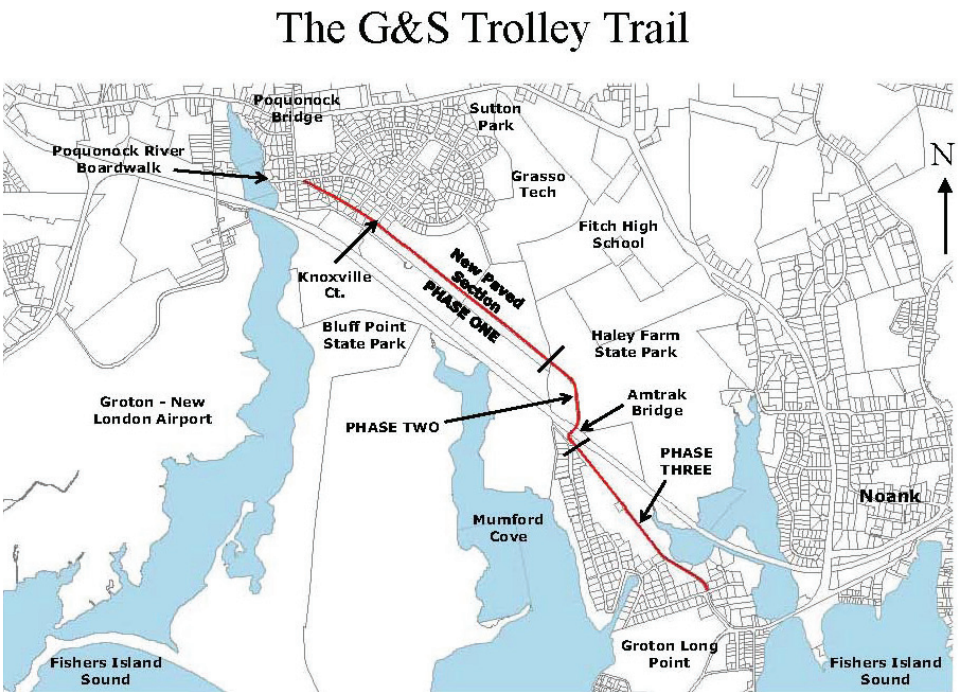
Location
Mystic, CT

Size
1.5 Acres

Completion
Ongoing

Contact
Mike O'Neill,
Project Manager
(860) 460-1887

Kent + Frost was selected to design this waterfront park for the Town of Stonington. The park will provide direct water access to the Mystic River with a floating dock, non-motorized boat ramp, and coastal classroom within the living shoreline. The park includes a boathouse for the high school crew team, passive recreational spaces, and a plaza with informal seating to take advantage of the views up and down the river. The program elements were carefully integrated into the site, to maintain and increase the environmental diversity. All stormwater is treated through permeable paving, biofiltration rain gardens, and infiltration systems.



G & S Trolley Trail

Multi-use Trail Master Plan & Phase 1 Construction

Location
Groton, CT

Size
2.5 miles

Completion
2009

Contact
Mark Berry,
Director of Parks and Recreation
(860) 536-5680

This 2.5-mile right-of-way is all that remains of a historic trolley line that once connected the Thames River landing in Groton, CT with Westerly, RI.

Kent + Frost prepared the corridor master plan to accommodate a paved multi-use trail and connections to adjacent parks and other destinations identified in the Town's Bicycle, Pedestrian & Trail Master Plan.

Despite its former use, the corridor contains significant challenges including coastal and inland wetlands, steep side slopes, protected species, an adjacent water treatment plant and the needs of several distinct stakeholder groups.

Phase One was awarded a CT DEP Long Island Sound Grant and constructed in 2009. Subsequent initiatives have created linkages to neighborhoods and parks. The proposed Eastern Shoreline Path from the RI line to New Haven will pass along the trail.

Bicentennial Pond Recreation Area

Universal Access Trail

Location
Mansfield, CT

Size
40 Acres

Completion
2017

Contact
Jennifer Kaufman,
Natural Resources and
Sustainability Coordinator
(860) 429-3015 (ext) 204

Kent + Frost was contracted by the Town of Mansfield to design a Universally Accessible Trail at Schoolhouse Brook Park. The goal of the project was to create a handicap accessible loop trail around Bicentennial Pond and employ interpretive signage to highlight the pond's ecology & historical significance.

The K+F team took steps to preserve and enhance existing trail areas where possible, paying careful attention to the ecological sensitivity of the site. The trail was designed to USDA Forest Service Trail Accessibility Standards. A reconditioning of an existing bridge was proposed as well as two ADA compliant fishing piers to access the pond. A complete Wayfinding & Interpretive Signage Program was designed to increase usability and provide a greater understanding of the cultural history and ecology of the area.

West Wharf Beach Park

Public Waterfront Park

Location
Madison, CT

Size
1.8 Acres

Completion
2014

Contact
Michael Ott,
Director of Engineering Services
(203) 245-5612

Approximately 1.8 acres in size, West Wharf Beach was once a shipbuilding site on Long Island Sound. Now owned by the town, the park features a renovated walking/fishing pier, roof top boat access, seasonal kayak rentals, a small swimming beach area, and 22 car parking lot.

The town of Madison engaged K+F to prepare a concept master plan for the popular park. The plan redesigned the parking area with permeable pavers and enlarged its capacity. Other improvements include a restroom, elevated observation deck, benches, bike racks, interpretive sign, landscaping, and lighting.

CITY OF NEW LONDON
BEST MANAGEMENT PRACTICE GUIDELINES
FOR THE TREATMENT AND CONTROL OF
INVASIVE PLANT SPECIES

Japanese Knotweed
Polygonum cuspidatum

Japanese Knotweed is a perennial, herbaceous shrub that grows very aggressively in disturbed areas. It is recognized by experts as the most aggressive and difficult to control invasive plant in New England. It can be found on many types of sites, and left unchecked can expand into large, dense colonies along roadsides, wetlands, woodland edges and river banks. The plant is well established and widespread in urbanized and disturbed sites making permanent eradication all but impossible.

Best management practices seek to identify early, remove young plants ahead of colony establishment, and monitor and treat infested areas on a sustained basis. Removal of established colonies can take up to five years of management and sustained monitoring. Root and stem fragments dispersed by flooding and careless handling can sprout and become established plants. Establishment from seed is also an enduring problem.

Established colonies are extremely challenging to control without use of herbicides due to extensive interconnected root systems. Control is labor intensive, especially if herbicides are not utilized. Where colonies overlap property boundaries, partial treatment on a single property has proven unsuccessful; reinvasion from an untreated adjacent property can be rapid.

FLOWERS: *Late Summer*
SEEDS: *September to October*

IDENTIFICATION:

- Grows up to 10 feet tall
- Hollow, bamboo-like stems
- Alternate, large, oval leave with square bases and pointed tips
- Small green-white flower clusters
- Plants turn brown and die back with the onset of frost

MECHANICAL CONTROL:

Cutting or mowing followed by soil solarization. Mow or cut to ground every 2-3 weeks for at least 2 years during the growing season.

Prevent viable seed production by cutting/mowing by mid August.




Photos credit: North Caroline State University Plan Extension, https://plants.ces.ncsu.edu

NATIVE ALTERNATIVES

Spicebush - *Lindera benzoin*
Buttonbush - *Cephalanthus occidentalis*

Invasive Plant Management Guide

Best Management Practice Guidelines

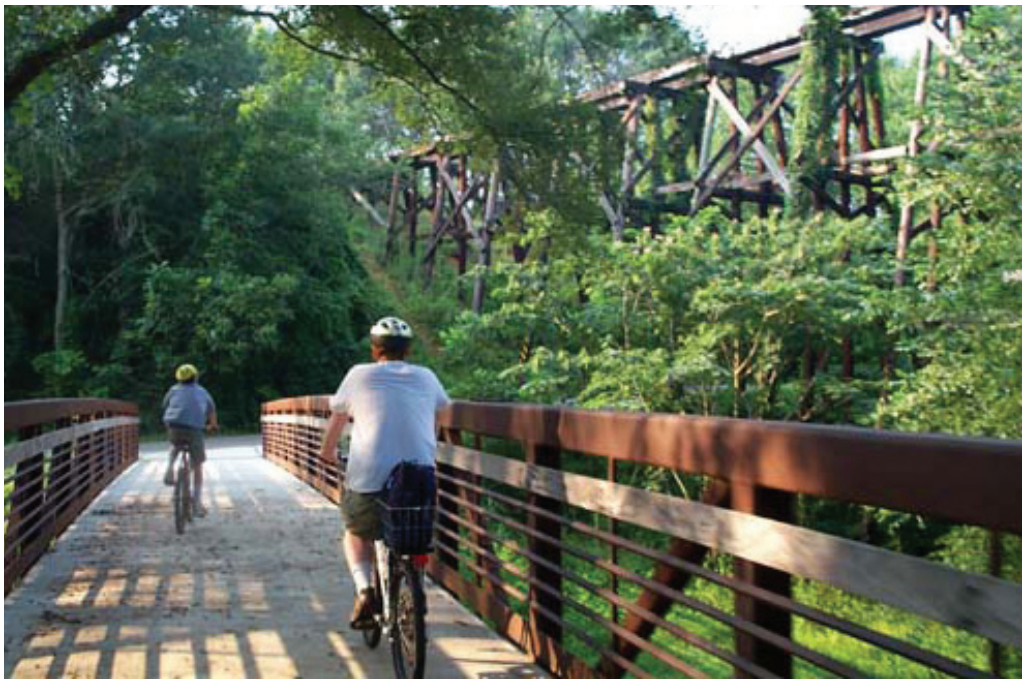
Location
New London, CT

Size
NA

Completion
2018

Contact
Sybil Tetteh,
City Planner
(860) 437-6380

The purpose of the guide is to provide City staff with background and guidance for the identification and management of the most common and pernicious invasive species occurring in the City of New London. Invasive plants are mostly non-native species which have adaptations that allow them to quickly out-compete natives. They tend to thrive on sites that have been disturbed by clearing, grading, filling, and dumping. Viable plant parts and seeds can be spread through pathways like animals, vehicles and equipment, people's shoes, or blown by the wind.



Oconee River Greenway

Greenway/Historical Multi-use Trail

Location
Athens, GA

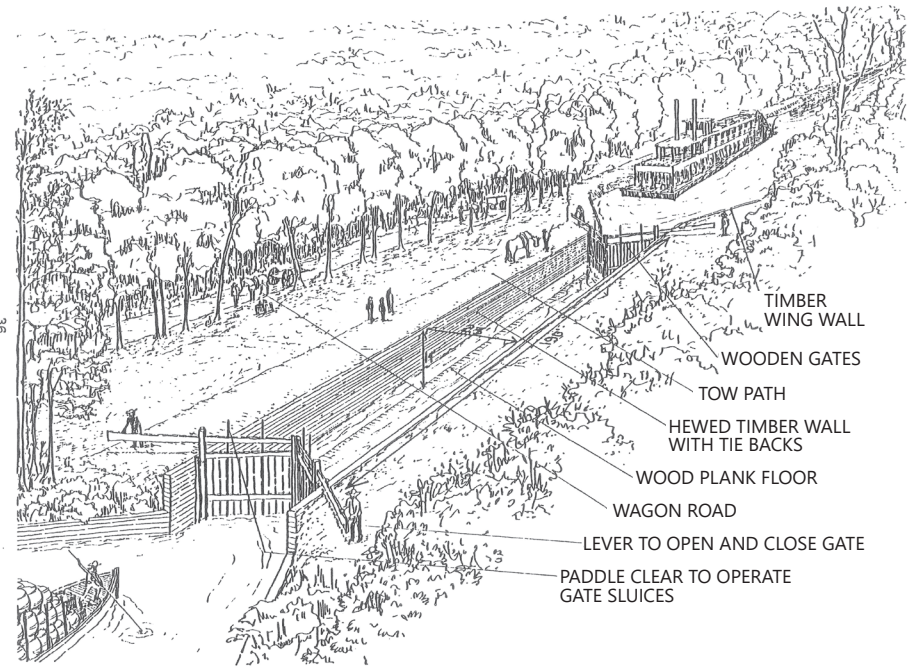
Size
5 Miles

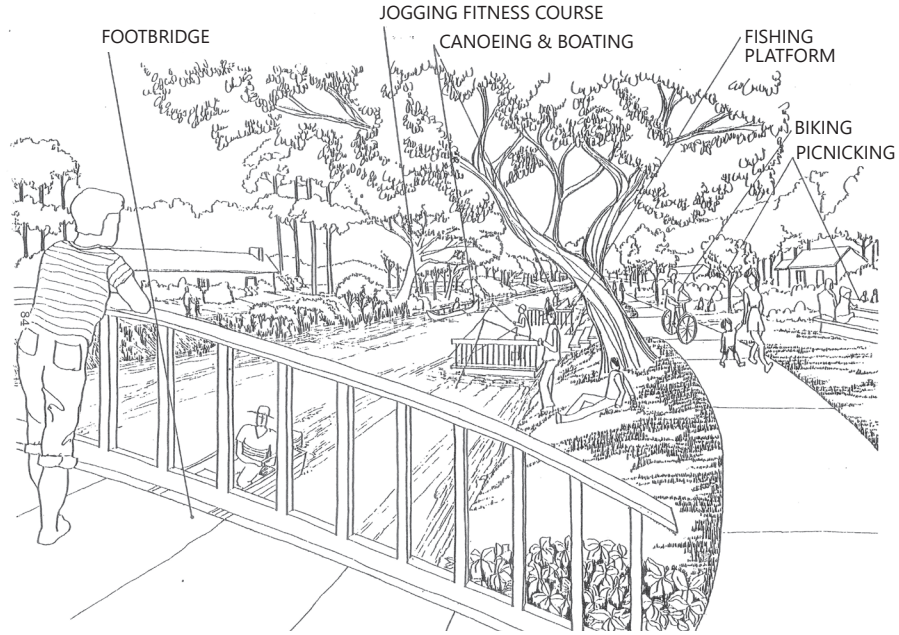
Completion
2005

Over twenty years of grass roots advocacy, planning and fund raising has resulted in the five mile long North Oconee River Greenway. Beginning at a regional park and nature center north of town, the greenway follows the eastern edge of downtown Athens and the University of Georgia. Future phases will continue the trail five more miles south to a protected forest owned by the UGA.

The 2.5 mile urban segment known as the Heritage Trail traces the history and ecology of the river through preserved natural environments, interpretive historic sites, recreational areas and cultural arts spaces.

Brian Kent served on the design team for the overall project master plan and Phase One while employed with Robinson Fisher Associates.





Brunswick-Altamaha Canal

Historical Report and Master Plan

Location
Brunswick, GA

Size
12 miles

Completion
Ongoing

The Brunswick-Altamaha Canal was constructed in the mid-19th century to move lumber and agricultural products from the Altamaha River to the Port of Brunswick. But like other projects of that era, by the time it was completed in 1854, railroads were already making the canal obsolete.

This study revealed the forgotten story of this historical artifact, documenting its remnant pieces, and suggesting ways to restore and convert the publicly owned corridor into a linear park and eco-tourism generator. Brian Kent started his career with Robinson Fisher Associates while this project was ongoing.

On Call Engineering Services

Tolland, CT

Client

Town of Tolland

Services

- Plan Review
- Civil Engineering
- Transportation Engineering
- Stormwater Management
- Structural Engineering
- Environmental Permitting

Project Overview. BSC is currently serving as the on-call consultant Town Engineer for the Town of Tolland. As an on-call service provider, BSC is called upon to perform a variety of assignments as needed by the Town. These have encompassed a full range of civil, transportation, and structural engineering services. Sample assignments are described below.

Baxter Street Mitigation. In BSC's role as the on-call consultant Town Engineer, we reviewed a previous conceptual design, prepared by another consultant, to resolve a drainage dispute between neighbors. BSC's review determined that the design was ineffective and burdensome to one of the neighbors. We proposed a solution that required less encroachment on private property, provided for water quality treatment of flow from a public street, and resolved the dispute between the neighbors.

Kent Road South Plan Review. BSC performed a peer review of a private subdivision to determine impacts on Kent Road South. Recommendations included changes to grading to improve stormwater management and prevent unsafe icing of the public roadway. Additional recommendations included safety enhancements to guide-rails, improvements to retaining walls, repairs to pavement, and improvements to a detention basin. BSC also performed a review of Low Impact Development methods and recommended enhancements to natural stormwater treatment measures, as well as invasive species management.

Browns Bridge Road over Charters Brook Bridge Repair Design. BSC designed repairs to a municipal, twin culvert bridge that had experienced deterioration of the masonry in several locations. BSC's role in the design included preparation of existing conditions plans, preliminary design plans, final design, and construction oversight. In addition to designing structural improvements to the bridge itself, BSC's design also incorporated stormwater management enhancements and provided recommendations for protection of wetland areas.

BSC GROUP

Shenipsit Lake Road over Charter Brook Bridge Repair Design. BSC provided design services for the repair of a single arched concrete bridge that had experienced significant erosion due to stormwater runoff. BSC's design, which took the project from existing conditions plans through construction oversight, incorporated both repair of the bridge and design of improved stormwater management measures to prevent future erosion.

South River Road Bridge Rehabilitation. In response to a CTDOT inspection recommending improvements to the South River Road Bridge, BSC Group designed improvements to address issues including scour that could present a problem during 10-year river flow events.

Review of Special Permit Application for the Midway Quarry. BSC supported the Town of Tolland in its review of a permit application to the Town's Planning and Zoning Commission. BSC's review considered specific conditions of the permit to determine the applicant's compliance, including review of the establishment of benchmarks and groundwater and sediment removal.

Development of Standard Specifications for Public Improvements. BSC prepared a comprehensive guide for developers, contractors, subcontractors and others involved in the construction and installation of improvements associated with roadways, utility systems, and incidental construction that is owned and/or maintained by the Town. Applying industry standards, accepted construction practices and the requirements of the Connecticut Department of Transportation, the standards were prepared for printing and posting on the Town's website. Topics addressed by the standards include standard specifications and materials for construction, design standards, and standard construction details.

Route 195 Peer Review. At the request of Town staff, BSC reviewed CTDOT plans and specifications for Project 142-146 Reconstruction of Route 195. BSC investigated and provided feedback to Town staff addressing concerns regarding project grading, closed drainage system and gutter flow, super elevation, fire station drive access and turning movement, and safety concerns regarding the elimination of the raised channelization island at Rhodes Road. BSC coordinated with CTDOT, Town, and design engineer representatives to determine the acceptable solutions and responses to the identified issues.

Route 31 Reconstruction

Coventry, CT

Client

Town of Coventry / Connecticut Department of Transportation (CTDOT)

Services

- Engineering Services/ Roadway Design
- Roadway Drainage
- Traffic Engineering (Calming)
- Landscape/Streetscape Enhancements
- Public Participation
- Section 4(f) Evaluation
- Permitting
- Public Participation
- Hydraulic Analysis
- Streetscape Design Improvements
- Regulatory Assistance

Project Overview. Route 31 Main St. is CTDOT's pilot Context Sensitive Solutions (CSS) project under the Federal Highway Administration's (FHWA) CSS program.This project reconstructed a section of Route 31 through the historic Coventry Village. Initially, the residents resisted the project, citing their desire to preserve the village's traditional appearance. The state then agreed to redesign the roadway in a manner that would enhance the village, not detract from it.

Roadway Design. Working closely with CTDOT and the town's agencies, BSC prepared and submitted a semi-final roadway design which addressed safety issues, provided a continuous sidewalk for the entire length of the project, solved longstanding drainage issues, and proposed areas for special gateway treatments to further enhance the aesthetics of the village.

Public Participation. The Town of Coventry, CTDOT, and BSC worked collaboratively to develop landscape/streetscape improvements that maintain the integrity of the village. Upon final agreement, the preliminary streetscape designs were presented to the larger community using an animation tool which allowed the details of the streetscape improvements to be clearly understood from a drive-through perspective.

Historic Sensitivity and Regulatory Assistance. The South Coventry Historic District is listed as a historic district on the National Register of Historic Places. In order to meet federal requirements, BSC prepared a Section 4(f) evaluation to document the project's impacts on the historic district and the properties that were considered to be contributing elements of the district. of the properties. The section 4(f) evaluation identified efforts taken during the project design to avoid and minimize impacts to contributing elements of the historic district.

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Hydraulic Analysis and Culvert Design. BSC Group performed a hydraulic analysis of both Mill Brook and the tributary using HEC-RAS. The proposed improvements included a pair of four-foot circular culvert under Route 31, a pair of box culverts under a parking lot (one to carry the low flow and the second for critter passage), and a 60-foot long stone lined culvert with step pools to support aquatic life.

Roadway Drainage Design. The work included replacing much of the existing drainage system with one that would collect the stormwater runoff in a more efficient way and help treat it before allowing it to be deposited into the adjacent brook and wetlands. The design included three gross particle separators, two rain gardens and a vegetated swale.

Streetscape Design Improvements. The project involved significant streetscape improvements, some of which were included in CTDOT's original scope of work and additional services that were performed on behalf of the town. The improvements were intended to respect and enhance the unique historic and cultural character of the village. Specific components included new ornamental lighting; concrete sidewalks with brick accent strips and textured crosswalks; ground covers; and street furniture.

Environmental Permitting. As part of the project design, BSC identified a permitting strategy to support project implementation. BSC prepared the following permit applications: CT Department of Environmental Protection (DEP); Wetlands and Watercourses Permit and Flood Management Certification; U.S. Army Corps of Engineers Category II Programmatic General Permit; DEP Discharge of Stormwater and Dewatering Wastewaters from Construction Activities Permit; and, DEP Stormwater pollution Control Plan (SWCP). BSC was also responsible for preparing an Environmental Report, Soils Report, Mitigation Report, and USACE delineation transect forms to support the required permit applications.

Oxoboxo Lofts

Uncasville, CT

Client

Dakota Partners, Inc.

Services

- Civil Engineering
- Transportation Engineering
- Landscape Architecture
- Permitting
- Wetland Delineation
- Dam Demolition Design

Project Overview. BSC provided civil engineering, transportation engineering, landscape architecture, and permitting services for the redevelopment of an historic, Civil-war era factory into approximately 70 residential units, including a mix of market rate and affordable. The project includes a total site redesign upgrade from existing overgrown and dilapidated conditions. Along with creating a functional site with required parking, circulation, drainage, utilities and ADA access, site amenities will include solar lighting, a basketball court, playground, walking trail, seating area and a series of metal stairs and walkways fitted with lighted handrails that help provide access throughout the site, which is very topographically challenging.

Site Design and Development. The drainage design included a detailed hydraulic analysis of the Oxoboxo Brook, which runs through the site and under the existing buildings. Other complexities of the project include site redesign around active on-site soil remediation, wetlands, and historic considerations.

Dam Demolition Design. To address potential flooding issues, the project also includes the removal of an historic dam located on the other side of Route 32, which abuts the western border of the property. The dam demolition design included hydraulic analyses of the existing training walls, construction access, water managements, erosion control, and stream restoration, all to meet CT DEEP's requirements.

Local, State, and Federal Permits. The project required a variance from the Montville Board of Appeals as well as the following permits:

- Wetlands Permit - Montville Inland Wetlands Commission
- Site Plan Approval - Montville Planning and Zoning Commission
- Flood Management Certification - CT DEEP
- Dam Construction Permit and 401 Water Quality Certification - CT Department of Energy and Environmental Protection
- General Permit 10 Aquatic Habitat Restoration, Establishment and Enhancement Activities - Army Corps of Engineers

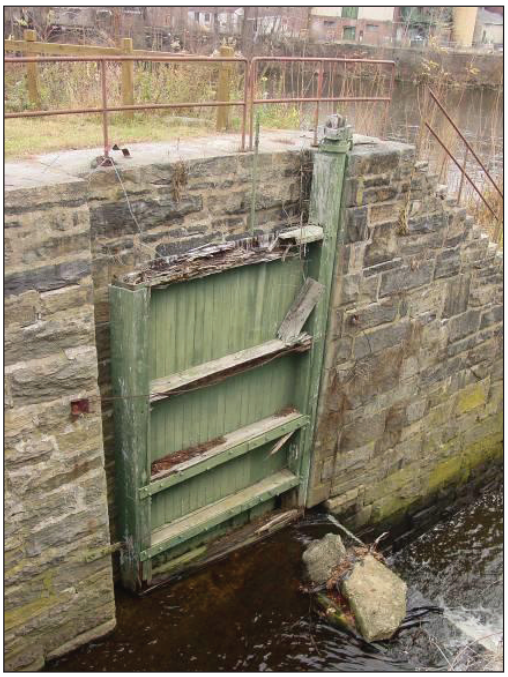
BSC GROUP

Phase I Reconnaissance Survey:
Shelton River Walk
Shelton, Connecticut

In connection with a proposed multi-use trail along the Naugatuck River, AHS conducted a Phase I Reconnaissance Survey of historic and archaeological resources that potentially could be impacted by trail construction. Although archaeologically the area was found to be too disturbed to merit further investigation, numerous features of historic interest were photographed and described in the report.

This tailrace arch, one of many still in place on the river side, was associated with the Star Pin Company's factory.

The construction of the Derby-Shelton dam and canals, one of the state's largest 19th-century engineering undertakings, was the reason Shelton developed into a small industrial city after completion of the project in 1870. Today significant industrial remains include the dam, headgates and canals on either side of the river, several tailraces on the Shelton side, a retaining wall along the bank on the river's west side, and several historic factory complexes in Shelton. The proposed River Walk lies within the Shelton Canal Industrial District, which has been determined to be eligible for the National Register of Historic Places.



The canals provided 22 feet of fall for the factory sites along the river banks and enough water to generate 2,400 horsepower during all but two months of the summer, when the available power dropped to 1,725 horsepower. At one time, more than 1,000 workers were employed making flatware, textiles, corsets, fasteners, and other products in the Shelton-side factories.

The canal was primarily conceived as an industrial-power facility, but two locks on the Shelton side allowed small vessels to bypass the dam and thereby continue navigating the Naugatuck River. In addition, a basin was constructed at the southern end of the canal to accommodate waiting vessels.

Wooden gate still in place at one of the locks, folded back into its mortise.

Cape Cod Canal Transportation Study
Bourne, Sandwich and Plymouth, Massachusetts

As part of the 2016 Cape Cod Canal Transportation Study, AHS prepared a report that identified and evaluated cultural resources that may be affected by the project. The Cape Cod Canal is located at an eight-mile isthmus separating Buzzard's Bay from the Cape Cod Bay. After a series of attempts to build a canal in the late 18th and early 19th centuries, the canal was completed in 1914 as a privately-owned toll waterway. Dredging continued until 1916 to increase the canal depth to 25 feet. Original canal crossings included ferry service, two highway drawbridges, and a railroad drawbridge. The current Bourne and Sagamore bridges, designed by Fay, Spofford, and Thorndike and architectural firm Cram and Ferguson, were completed 1934-35. The Buzzards Bay Railroad Bridge, a vertical lift bridge designed by Parson, Klapp, Brinckerhoff and Douglas in collaboration with the architectural firm of McKim, Mead & White, was finished in 1935.

The Cape Cod Canal and its associated structures are potentially eligible as a NRHP historic district. The Bourne and Sagamore bridges have been identified as eligible for individual listing in the NRHP. In the towns of Bourne, Sandwich, and Plymouth, the project area contains NRHP-listed and eligible buildings and districts.

The project area is also rich in Native American archaeological and cultural resources. The river, marsh, and coastal resources available on the Cape made the area a prime location for Native American settlement for thousands of years. Archaeological evidence of villages was found during the construction of the canal, confirming oral tradition among the Wampanoag tribes, and subsequent archaeological surveys have identified dozens of archaeological sites. Areas of cultural importance to the Wampanoag tribes are present in numerous locations in the project area. Historic-period Euro-American sites are also likely present, associated with the colonial settlement on the Cape in the early 17th century.

AHS CULTURAL RESOURCE MANAGEMENT

Canal Line Rails-to-Trails
Southington, Connecticut

To comply with SHPO recommendations, the Town of Southington retained AHS to survey, photograph, and prepare state-level documentation of historic features along a two-mile segment of the former Canal Line railroad right-of-way. AHS's historian and historical archaeologist walked the entire length of the project in the field; last used for freight in 1999, the line, which will become a pedestrian and bike path, was heavily overgrown. Track maps, archival photographs, and four separate railroad bridge lists were consulted to ensure that no feature was overlooked. The project documented six culverts, two plate-girder bridges, a steel-stringer cattle pass, a "subway" (an undergrade pedestrian passage built by a trackside hardware factory), and a small former freight and passenger station. The documentation also included minor rail-related features such as ties and tie-plates left in place (the rails themselves were salvaged), a semaphore signal mast, and remnants of adjacent freight sidings.

Plate-girder bridge, 1914, fabricated by Boston Bridge Works.

Brownstone box culvert, probably part of the original (1847) construction.

Two of the brownstone culverts probably date from the line's original construction in 1847 by the New Haven and Northampton Company, which earlier had operated a canal along the route. The station was built in 1894, when the route was part of the New York, New Haven & Hartford system. In the early 20th century, the line was upgraded to handle the heavy steam engines of the period, necessitating improvements such as the replacement of earlier bridges by heavy plate-girder structures.

The documentation is permanently archived as part of the Connecticut Historic Preservation Collection at the Dodd Research Center, University of Connecticut.

Former Milldale Station, 1894.

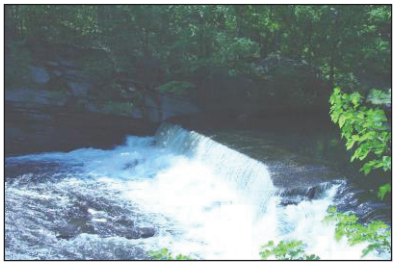
Replacement of Cranberry Highway Millpond Bridge and Dam
Over the Agawam River
Wareham, Massachusetts

Under a task-order contract with Massachusetts Department of Transportation (MassDOT), AHS conducted an archaeological reconnaissance/site assessment survey of the replacement of the historic Cranberry Highway Dam and the stone-lined herring run integrated into the dam, which carries the Cranberry Highway over the Agawam River. The dam and herring run are contributing resources within the historic Agawam Village. Since the 17th century, the towns of Plymouth and Wareham have maintained an annual agreement to maintain a fishway here and to auction the rights to collect fish. AHS's role in this project was to conduct intensive documentary research into the dam and fish run, as well as historic resources once in the project area, such as mills and residences, and to assess the National Register of Historic Places eligibility of the extant historic resources. The dam and associated mill complex, and the 1000-foot-long stone-lined fish run, were photo-documented. An archaeological assessment of a proposed wetland replication area was also conducted to determine the potential of this part of the project area for containing significant archaeological resources. The herring run was constructed ca. 1836 by Samuel T. Tisdale, around the time he built the Agawam Nail Company, which formerly operated on the site. Tisdale was an early innovator in American pisciculture. The project involved extensively consultation with the Wareham Herring Warden and Assistant Herring Warden, as well as the Mashpee Wampanoag Tribe. Ethnographic data on herring collection and preparation, and the importance attached to the fish, was gathered from written sources and interviews. The herring run complex was assessed as a National Register-eligible Traditional Cultural Property based on its cultural and historical importance to the local Mashpee Wampanoag tribe and to the non-Native Wareham-area population. The Massachusetts Historical Commission has concurred with this assessment.

AHS CULTURAL RESOURCE MANAGEMENT

Phase I and Industrial
Fish and Kayak Passage Feasibility Study
Bridge Street Dam
Willimantic (Windham), Connecticut

A local nonprofit organization received funding for studying the feasibility of modifications to the Willimantic River for the purposes of improving fish passage upriver and developing recreational opportunities, specifically, a whitewater canoe and kayak course. The chief activity anticipated by the project was the partial or entire removal of the stone dam just downstream from Bridge Street, a structure generally known as the Smithville Dam. Access areas would also be created at points along the riverbanks.

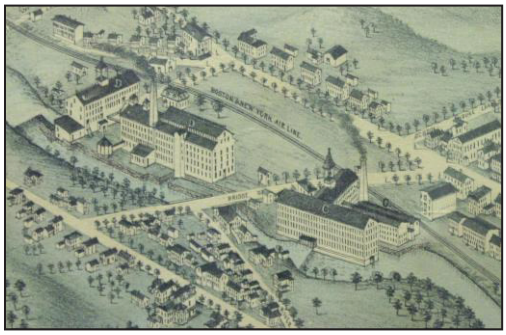


Smithville Dam.

Adjacent mill foundation with arch for headrace.

AHS Historian Bruce Clouette and Historical Archaeologist Ross K. Harper began the assessment with historical background and site file research and then conducted an on-site inspection in order to identify existing and potential historical and archaeological resources. Extensive foundation remains associated with early textile manufacture were found immediately adjacent to the project area, as well as headrace and waste-gate structures at the north end of the dam. The dam, including the associated structures, was judged to be eligible for listing on the National Register of Historic Places based upon its local significance in recalling the importance of textile manufacture in the economic development of Willimantic. The report further recommended that the removal of the dam be preceded by state-level recording of the existing structure, as well as the associated mill ruins. Finally, it was recommended that the design phase should consider the economic feasibility and public-safety implications of leaving portions of the dam along the two riverbanks intact, which would at least partially retain the historic resource.

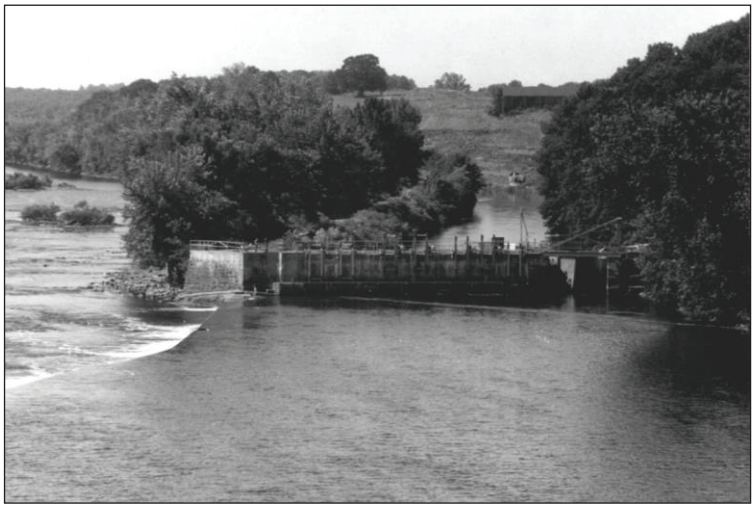
The background research and field inspection showed that nearly all of the river's steep, rocky banks, which have been extensively disturbed by quarrying, mill construction, and erosion, had minimal archaeological sensitivity.



Bird's-eye view of the project area, 1876.

National Register Nomination: Windsor Locks Canal (Enfield Canal) Suffield and Windsor Locks, Connecticut

As part of an ongoing contract to prepare documentation for nominating Connecticut properties to the National Register of Historic Places, AHS Senior Historian Bruce Clouette researched, photographed, and wrote a descriptive essay and statement of significance for the Windsor Locks Canal, more formally known as the Enfield Canal (because its purpose was to bypass the Enfield Rapids that impeded navigation in the Connecticut River).



Dam and gate at the northern end of the canal, 1975, as included in the National Register nomination document.

The Hartford merchants that made up the Connecticut River Company, the entity that built the canal, were eager to improve their access to upriver trade, especially because of a competing canal that went from New Haven to Northampton, Massachusetts. The company sent a scout to England to assess an alternative emerging technology, locomotive-hauled carriages on rails, but concluded that a canal would be more practical. Construction took place between 1827 and 1829, using some of the first immigrant labor in Connecticut (from Ireland). Unusual for its day, the canal was entirely lined with stone set in hydraulic cement, a factor that allowed not only horse-drawn canal boats but faster steam-powered ones as well. In addition to traditional freight-carrying flatboats, the canal accommodated passenger packets; according to Charles Dickens, who published a scathing description of traveling the canal in 1842, the passenger canal boats were extremely uncomfortable.

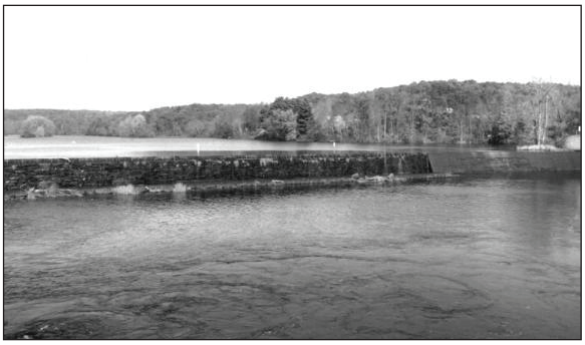
The Stony Creek aqueduct, 1975, as included in the National Register nomination document; the aqueduct is no longer extant.

From the outset, the proprietors envisioned using the water from the canal to power factories sited between the canal and the river, a function that long outlived the 15 years or so of profitable navigation.

AHS CULTURAL RESOURCE MANAGEMENT

National Register of Historic Places Nomination Form
Occum Hydroelectric Plant and Dam
Norwich, Connecticut

As part of a re-licensing process, the City of Norwich, working with the Connecticut State Historic Preservation Office, arranged for AHS Senior Historian Bruce Clouette, Ph.D., to prepare a National Register of Historic Places nomination form for its hydroelectric facility located in the Occum section of Norwich. In addition to a small early 20th-century brick powerhouse, the complex included a stone dam and headgate structure that had been built in 1865 to power a nearby textile mill. The dam's spillway is 450 feet in length and is constructed of large granite blocks; some 170 feet were washed away by the Hurricane of 1938 and rebuilt using reinforced concrete.

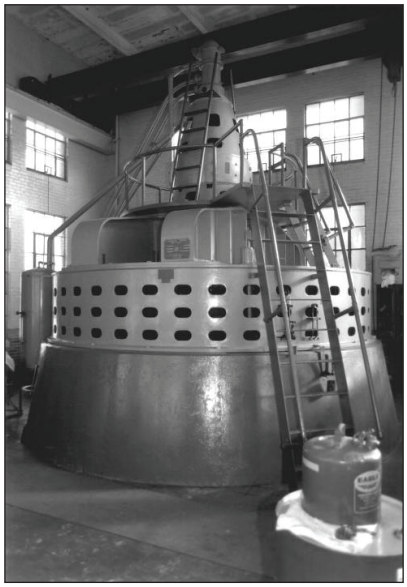


The Occum dam (1865), with the portion rebuilt in concrete after the 1938 Hurricane on the right.

Powerhouse, 1934.

The National Register document explains the property's significance as an example of 19th-century civil engineering by a prominent Connecticut engineer, Henry T. Potter (1821-1897); as a historic resource that recalls the all-important role played by the textile industry in the economic history of eastern Connecticut; and as an example of early 20th-century hydroelectric engineering practice.

Following approval of the nomination by the Connecticut State Historic Preservation Board, the property was listed on the National Register on December 6, 1996 as a complex that included the dam, headgates, powerhouse, and internal machinery and fixtures.



The powerhouse contains a single generating unit,an 800kw alternator made by the Electric Machine Manufacturing Company of Minneapolis.

AHS CULTURAL RESOURCE MANAGEMENT


1902

PROFESSIONAL QUALIFICATIONS

KENT + FROST

LANDSCAPE ARCHITECTURE
URBAN PLANNING

WHO WE ARE

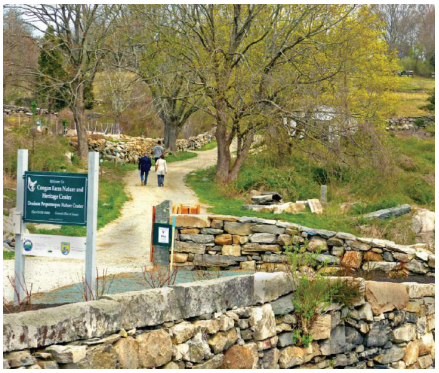
Kent + Frost, LLC is a professional landscape architecture and planning firm located in Mystic, Connecticut specializing in planning, design, and project management. The firm was founded in 2000 by Brian Kent, a graduate of the University of Georgia and registered landscape architect since 1985. Chad Frost, a graduate of the University of Connecticut and registered landscape architect joined the firm in 2003 and became partner in 2007. The firm has completed a wide variety projects including town-wide master plans, streetscapes, parks, municipal facilities, commercial developments, and private residences. Our most successful projects are notable for their collaborations with architects, engineers, artists, open-minded clients and stakeholders.

Master Planning	Bike/Ped Planning	Creative Placemaking
Landscape Design	Sustainable Design	Shoreline Resilience
Recreation + Wellness	Athletics	Streetscapes + Corridors
Historic Preservation	Parks + Public Space	Landscape Art

WHAT WE DO

Kent + Frost has developed a balanced approach to landscape architecture that incorporates art and science in the creation of environments that are meaningful, memorable, and sustainable. We believe in the ability of ecologically based design to accommodate both site development and environmental conservation. Our work is grounded by the particular essence of place found in a site, neighborhood or community. We learn about the places where we practice by listening carefully to the residents and stakeholders that live and work there, and by digging deeply into the cultural and physiographic context.

A healthy and sustainable landscape that incorporates healthy human activities is an intrinsically beautiful balance of people and place. K+F specializes in the navigation of the barriers and bureaucracy that inadvertently suppress this balance. Our solutions emphasize walkability, placemaking, and options for mobility like interconnected sidewalks, multi-use pathways, and bicycle accommodations.



CLIENTS

Mystic Seaport Museum

Coogan Farm Nature & Heritage Center

U.S. Coast Guard Academy

Lyman Allyn Museum

Smilow Cancer Hospital

Mitchell College

University of New Haven

Mansfield Downtown Partnership

Local small businesses & non-profits

Town of Chester

Town of Collinsville

Town of Groton

Town of Ledyard

City of New London

Town of Stonington

BRIAN KENT

PLA, ASLA

Brian Kent is a landscape architect and founding principal of Kent + Frost Landscape Architecture. He began his career in Athens, Georgia after graduating from The UGA School of Environment Design in 1984. While practicing in Georgia, he worked on plans for the 1996 Atlanta Olympic Games, National Park Service cultural landscapes, campus planning, urban streetscapes, parks, greenways and public gardens. Since relocating to Connecticut in 1998, his work has encompassed parks and recreation planning, mixed-use master planning, trails and greenway design, public and private gardens including the Mystic Seaport Museum, Mansfield Town Square, Smilow Cancer Hospital Care Center Healing Garden, and Bike/Ped/Complete Streets master plans for Groton, Middletown and Portland, CT. 2019 projects include a regional bike and pedestrian plan for southeast Connecticut, streetscape re-designs in Canton and Chester, and various projects at the US Coast Guard Academy, New London, Groton, Stonington and Westerly, RI.

His professional work is based on solid research and analytical techniques that integrates environmental, social, economic, and operational requirements. He has particular expertise in physical master planning techniques, land assessment, grounds management, and use of design guidelines. Brian's experience provides him with a broad understanding of multi-discipline project management and he routinely works with architects, engineers, contractors, natural scientists, resource managers, state, and local officials, nonprofit organizations, and building committees. He is a registered landscape architect in Connecticut, Rhode Island and Massachusetts.

A founding board member and president of the adcovacy group Bike Groton, he is an advocate for sustainable communities that incorporate Complete Streets, low impact development and historic preservation. Brian is Vice-Chair of the Connecticut Bicycle and Pedestrian Advisory Board.

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Education

Bachelor of Landscape Architecture - University of Georgia 1984
Sigma Lambda Alpha, National Honor Society of Landscape Architects

Professional Practice

Partner, Kent + Frost Landscape Architecture
Principal, Brian Kent Associates
Landscape Architect, Robinson Fisher Associates, Athens, Ga.
Landscape Architect, Jordan Jones & Goulding Engineers, Athens, Ga.
Landscape Architect, John Edgar Associates, Baton Rouge, La.

Professional Registrations & Credentials

Professional Landscape Architect:
Connecticut #876
Rhode Island #345
Massachusetts #1553
American Society of Landscape Architects
Association of Pedestrian & Bicycle Professionals
Bike/Walk Connecticut
CT Bicycle Pedestrian Advisory Board

Academic Experience

Faculty, University of Georgia Center for Continuing Education, ***Introduction to Landscape Design***
Lecturer, Connecticut College, ***Environmental Sustainability***

Community Participation

New London Landmarks, Inc. Former Board Member
Mystic Community Bikes, Inc. Founding Board member
Mystic Multi Modal Transportation Study Advisory Committee

Lectures and Presentations

Gardens That Heal **-** 2017 Health of Place Conference, Yale University
Trail Stories - Collinsville, CT & East Burke, VT **-** 2016 CT Greenways Council Trails Symposium
Bikenomics: How Well-Planned Trails Stimulate Economic Revitalization – 2016 CT ASLA "Designing Trails & Greenways: Pathways for Success" symposium on the planning, design, construction, and management of linear transportation corridors.
Sustainability in Landscape Design - Mystic Seaport Garden Days, August 2009
Southeast Connecticut Eastern Shoreline Trail **-** 2019 Sustainable CT Symposium, Yale University

Publications

- Kent, Brian ***Mansfield Town Square***, Landscape Architect and Specifier News, February 2016
- Kent, Brian ***Hygienic Art Park***, CT Landscape Architecture magazine, October 2010
- Kent, Brian ***Hygienic Art Park,*** Landscape Architect and Specifier News, April 2009
- Kent, Brian ***The Cost of Sprawl***, New London Day

Notable Projects

Collinsville Village Center Streetscape Master Plan, Canton, CT
Village Center Master Plan, Chester, CT
Mystic Seaport Museum Gallery Quad, Mystic, CT
Mansfield Town Square, Mansfield, CT
Bike, Pedestrian & Trail Master Plan, Groton, CT
System Master Plan, Groton Parks & Recreation
SCCOG Regional Bike & Pedestrian Plan, Southeastern CT
New London Bicycle Signage & Wayfinding Plan, New London, CT
Hodges Square Landscape Beautification, New London, CT
Hodges Square Placemaking Master Plan, New London, CT
University Of New Haven Sculpture Plaza, West Haven, CT
Smilow Cancer Hospital Care Center Healing Garden, Waterford, CT
Hygienic Art Park, New London, CT
Ocean Beach Alewife Cove Trail, New London, CT
Complete Streets Policy & Master Plan, Portland, CT
Complete Streets Master Plan, City of Middletown, CT

Honors and Awards

2015 Award of Excellence in Planning from the CT Main Street Center for ***Storrs Center***,
2010 Award of Excellence from the American Society of Landscape Architects, Connecticut Chapter for the ***New London Hygienic Art Park***,
Awards with Robinson Fisher Associates:
Honor Award from the American Institute of Architects, GA Chapter, and the Georgia DOT for the ***Capitol Avenue Streetscape,*** Atlanta 1996 Olympic Games
Award of Excellence from the Atlanta Urban Design Commission for the ***Folk Art Park***, a non-traditional park showcasing regional folk art 1996
Merit Award from the American Society of Landscape Architects, Georgia Chapter, for an ecologically based garden at the UGA 1998

CHAD FROST

PLA, CTGBC

Chad Frost is a landscape architect and principal with Kent + Frost Landscape Architecture, located in Mystic, Connecticut. Upon graduation from the University of Connecticut he began his career in Avon, Connecticut. While practicing in Avon, he worked on plans for university & college campuses, medical institutions, parks, and public performance gardens. Since joining Kent + Frost, his work has encompassed mixed-use developments, urban streetscapes, waterfront developments, public parks, trails and greenway design, public and private gardens.

Chad practices landscape architecture as the creation of social art, founded on skillful analysis, blended with architectural aesthetic and environmental sensitivity to create living spaces that enrich our lives. With keen respect for the essence of place, he responds to client aspirations with craftsmanship attention to detail.

His dedication to the preservation of the environment, and the principals of sustainability are embodied in all of his work. Chad is known for his artful integration of sustainable methodologies that lead to beautiful and functional spaces that enhance environmental quality, and connect people with their surroundings. His particular expertise has been instrumental in the firm's innovative design solutions to complex physical, fiscal and regulatory challenges.

Creating meaningful and memorable environments to enhance our cultural and ecological relationship with nature.

Kent + Frost, LLC
Landscape Architecture
1 High Street
Mystic, CT 06355

T (860) 572-0784
cfrost@kentfrost.com
www.kentfrost.com

Education
Bachelor of Science - Landscape Architecture - University of Connecticut 1999

Professional Practice
Partner, Kent + Frost Landscape Architecture
Landscape Architect, Brian Kent Associates, Mystic CT
Adjunct Faculty, University of Connecticut
Landscape Architect, Richter & Cegan Avon CT
Assistant Landscape Architect, Sarah McCracken, Lyme CT

Professional Registrations & Credentials
Professional Landscape Architect in Connecticut #952
Connecticut Green Building Council

Academic Experience
Adjunct Faculty, UCONN, ***Construction III, Materials & Methods (2012)***
Adjunct Faculty, UCONN, ***Golf Course Design (2008 & 2009)***

Community Participation
Connecticut Green Building Council – Advisor to the Board of Directors
Bluff Point to Preston Trail Committee

Lectures and Presentations
***Sustainability in Landscape Design* – LEED Certified Home –** Channel 3 News, April 2009
Groton Parks & Recreation Master Plan and Sutton Park Master Plan - 2009
Tri-Town Trail – Future potential - 2009

Awards
Award of Excellence, Connecticut Main Street Center
Excellence In Design, Unilock Paving
CTASLA, Award of Excellence, Hygienic Art Park, 2010
BAEC, Home of the Year, 2006

Publications
LEED Homes, New London Day. Nov. 2008

Notable Projects
Ledyard Center Streetscape, Ledyard, CT
Eugene O'Neill Municipal Parking Lots, New London, CT
Coogan Farm Nature & Heritage Center, Groton, CT
Copp Family Park, Groton, CT
Tri-Town Trail, Groton-Ledyard-Preston, CT
Bicentennial Pond Recreation Area, Mansfield, CT
Mystic River Boathouse Park, Mystic, CT
Mystic Seaport Master Plan, Mystic, CT
Mitchell College Master Plan, New London, CT
Mitchell College Athletic Complex, New London, CT
Veterans Field Master Plan, New London, CT
Ledyard Town Green, Ledyard, CT
Mystic Coastal Access Plan, Mystic, CT
G & S Trolley Trail, Groton, CT
Ledyard Police Station, Ledyard, CT
Connecticut College – Smith Burdick Quad, New London, CT
Mitchell College Student Center, New London, CT
Allen Spool Mill Restoration, Stonington, CT
Coast Guard Alumni Center, New London, CT
Coca-Cola, Waterford, CT
Ocean Marine Yacht Center, Portsmouth, VA
Hygienic Art Park, New London, CT
Bike, Pedestrian & Trail Master Plan, Groton, CT
System Master Plan, Groton Parks & Recreation
University of Connecticut, Neag School of Education & CUE Building, Storrs, CT
University of Connecticut, Advanced Technology Institute Building, Storrs, CT
Norwalk Community College, West Campus, Norwalk, CT
Harold Leever Regional Cancer Center, Waterbury, CT

TIM MAGEE

PLA, Project Manager

Timothy Magee is a project manager at Kent + Frost Landscape Architecture, located in Mystic, Connecticut. He began his career in Philadelphia, PA after graduating from Temple University with a degree in Landscape Architecture. While practicing in Philadelphia, he managed the design and construction of projects including urban streetscapes and plazas, athletic fields, public parks and gardens, residential housing, and elementary and collegiate campuses.

Since relocating to Connecticut in 2014, Tim has continued to build upon his project management experience through the successful completion of a wide variety of projects where creative design, attention to detail and problem solving have been crucial to their success. His knowledge of construction methods and documentation, specification writing and ability to maintain close coordination with other design professionals and clients is what sets him apart.

Tim's love for nature, planting and sustainable design are evident in all of his work. He believes that for landscapes to be successful, they must be functional and inviting for whom they are designed while seamlessly blending the natural environment with the built.

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Education

Bachelor of Science in Landscape Architecture - Temple University 2008
Associates of Art in Graphic Design - Rowan College at Burlington County 2004

Professional Practice

Project Manager, Kent + Frost Landscape Architecture
Project Manager, Sikora Wells Appel,
Philadelphia, PA

Professional Registrations & Credentials

Professional Landscape Architect:
Connecticut #1432

Academic Experience

Portfolio Review, University of Connecticut
Guest Lecturer, Temple University, *Digital Rendering Techniques*

Notable Projects

Ledyard Center Streetscape, Ledyard, CT
Eugene O'Neill Municipal Parking Lots,
New London, CT
New London Bicycle Signage & Wayfinding Plan, New London, CT
George Washington Monument & Plaza at the USCG Academy, New London, CT
Alexander Hamilton Monument & Plaza at the USCG Academy, New London, CT
Mitchell College Athletic Fields, New London, CT
Mystic River Boathouse Park, Mystic, CT
Coogan Farm Nature & Heritage Center, Groton, CT
Mystic Seaport Museum Gallery Quad, Stonington, CT
Mansfield Town Square at Storrs Center, Mansfield, CT
Tri-Town Trail, Groton-Ledyard-Preston, CT
Downtown Collinsville Complete Streets, Canton, CT
L&M Healing Garden, Waterford, CT
Mitchell College Master Plan, New London, CT
East Lyme Schools Renovation, East Lyme, CT
Eugene O'Neil Municipal Lots, New London, CT
Ledyard Police Station, Ledyard, CT
Ledyard Center Streetscape, Ledyard, CT
Longwood Gardens East Conservatory Plaza, Kennett Square, PA
League Island Park, Philadelphia, PA
Philadelphia 911 Memorial, Philadelphia, PA
Temple Judea Synagogue, Doylestown, PA
Hunting Park - Michael Vick Field, Philadelphia, PA
West Point Military Academy Visitors Center, West Point, NY
Villanova Central Quad Improvements, Radnor, PA
Rutgers University SWM and Landscape Master Plan, Piscataway, NJ
Rutgers University Signage and Wayfinding Master Plan, Piscataway, NJ
Village of Arts and Humanities Master Plan, Philadelphia, PA
Main Street North Brunswick, North Brunswick, NJ

Honors and Awards

Excellence In Design, Unilock Paving
Award of Excellence, Connecticut Main Street Center

ELISA MAGEE

Associate Landscape Designer

Elisa is an associate landscape architect with Kent + Frost Landscape Architecture. Since graduating from the University of Connecticut in 2011 she has worked in several states, including Pennsylvania, New Jersey, and Connecticut. Her experience is broad, spanning the realms of urban streetscapes, public parks and private gardens.

Elisa's intelligent design and graphic sense make her an asset on any project that comes through the office. Whether it's an artistic rendering or technical construction documents and specifications she masters the balance required to guide a project from concept design to finished construction.

Elisa believes that there is value and potential in every outdoor space. Whether the project is to preserve, reuse, or create from scratch, with a thoughtful weaving of sustainability, landscape context, and design any landscape can become one to remember.

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emagee@kentfrost.com
www.kentfrost.com

Education

Bachelor of Science - Landscape Architecture - University of Connecticut 2011

Professional Practice

Associate Landscape Designer, Kent + Frost, Mystic CT
Landscape Designer, Sikora Wells Appel, Haddonfield, NJ
Landscape Architecture Intern, University of Connecticut
Department of Planning, Storrs CT
Landscape Gardener, Terra Firma, Stonington CT

Community Participation

New London Landmarks, 2012
CTASLA, Student Chapter, Vice President, 2010-2011
Village of Soroni Historical Documentation, Rhodes Greece, 2010
Mystic Multi Modal Transportation Study, group participant, 2010

Notable Projects

Collinsville Village Center Streetscape, Collinsville, CT
Chester Village and Center District Master Plan, Chester, CT
Jewett City Streetscape Master Plan, Griswold, CT
New London Placemaking Williams Street Vision Plan, New London, CT
Bicentennial Pond Recreation Area, Mansfield, CT
Copp Family Park Trail Improvements, Groton, CT
Tri-Town Trail, Groton-Ledyard-Preston, CT
Coogan Farm Nature and Heritage Center, Mystic, CT
Mystic River Boathouse Park, Mystic, CT
Mystic Coastal Access Plan, Mystic, CT
Avery Copp Museum Master Plan, Groton, CT
Invasive Plant Management Guide, New London, CT
Lyman Allyn Museum Master Plan, New London, CT
Veterans Memorial Field, New London, CT
Riverside Park Master Plan & Phase 1 Improvements, New London, CT
Mystic Seaport Museum Gallery and Quad, Mystic, CT
Storrs Center Square , Mansfield, CT
Beebe Pond Park Trail Improvements, Groton, CT
Merritt Property Athletic Complex, Groton, CT
Stenton Avenue Streetscape, Philadelphia, PA

Honors and Awards

Excellence In Design, Unilock Paving
Award of Excellence, Connecticut Main Street Center

BSC GROUP

WWW.BSCGROUP.COM

AT A glance

OFFICE LOCATIONS

HEADQUARTERS
BOSTON, MA

ANDOVER, MA
WEST YARMOUTH, MA
WORCESTER, MA
GLASTONBURY, CT
MANCHESTER, NH

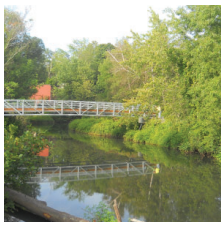
1965
BSC FOUNDED

160
TEAM MEMBERS

CORE SERVICES

Planning & Design
Engineering
Ecological Science & Permitting
Land Survey
GIS & Software Solutions

Shaping our communities together.



ENR TOP 500

PARTNERS IN YOUR SUCCESS

At BSC, we partner with our clients to deliver creative and practical transportation, land development, and environmental solutions.

- Clients trust BSC to work with them to expertly guide siting, strategically navigate regulatory processes, and holistically design infrastructure to help achieve their vision
- BSC's engineers, planners, and scientists take pride in their ability to respond nimbly to move projects forward
- The purpose of our work is to improve the quality of life in and around our communities
- We are committed to sustainability through implementation of a variety of green technologies for stormwater management, ecological restoration, and climate resiliency planning

WORKING WITH BSC GROUP

Our greatest strength lies in our collaborative approach to projects, involving all members of our multidisciplinary staff as necessary, leading to better and more creative solutions throughout the life of the project. We also encourage the involvement of our clients in every step of the process, resulting in high quality planning and design that is technologically and environmentally sound, economically feasible, and aesthetically pleasing.

BSC IN CONNECTICUT

Transportation engineers

Civil engineers

Land surveyors

Ecological, environmental, and wetland scientists

Climate adaptation planners

GIS and custom software specialists

BSC GROUP

Melissa
Kaplan, PWS

Project Manager & Wetland Scientist
Senior Associate

YEARS OF EXPERIENCE
18

EDUCATION
MS, Marine Biology
Nova Southeastern University

BS, Zoology
University of Florida

REGISTRATIONS
Professional Wetland Scientist, Society of Wetland Scientists

- CT #2327 (2013)

CERTIFICATIONS
- OSHA 10-Hour Construction Safety and Health
- Open Water SCUBA
- NAUI 1999; APM Project Management Master
- Florida Wetland Delineation
- FWC Certified Authorized Gopher Tortoise Agent

AFFILIATIONS
- Association of Massachusetts Wetland Scientists
- New Hampshire Association of Natural Resource Scientists (Certified Active Member)
- Connecticut Association of Wetland Scientists
- Connecticut Power & Energy Society
- Environmental Business Council of New England
- Native Plant Trust, PCV Program Rare Plant Volunteer Surveyor

MEET MELISSA
Melissa has extensive environmental and biological consulting experience and specialization in federal, state, and local environmental permitting throughout New England (MA, CT, NH, and RI); NEPA documentation, including Environmental Assessments and Environmental Impact Statements; construction inspections; threatened and endangered species surveys; and mitigation design and habitat restoration. She has worked on numerous projects from the early coordination phase to biological assessments and permitting phases, and to the final construction and wetland monitoring phase, including public and private development, natural gas pipeline, electric utility, solar, and transportation projects.

PROJECT EXPERIENCE HIGHLIGHTS

Kensington Avenue Culvert Replacement Project, Meriden, CT
Wetland Scientist

Responsible for the local, state, and federal permitting of a culvert replacement along Kensington Avenue. Conducted field work and prepared the USACE wetland data forms for permitting. Managed preparation and submittal of the USACE Pre-Construction Notification Form application, CT DEEP NDDB Project review checklist for rare species, CT DEEP Individual Section 401 Water Quality Certification, and USFWS Section 7 consult through IPaC.

Eversource, West Brookfield Reliability Project, Brookfield, CT
Project Manager

Responsible for assisting in and overseeing permitting, rare species, siting, and construction oversight services for the West Brookfield Reliability Project. The project consisted of the reconductoring of 1.4 miles of the existing 1887 Line, pole replacements, and structure installation projects. Melissa assisted with the NDDB rare species approvals and Connecticut Siting Council petition filing. The project is currently in construction and Melissa is coordinating with various Eversource representatives and teammates to ensure construction compliance with permits and approvals. Other project tasks include coordinating rare species avoidance and turtle sweeps during construction.

Eversource, 1310/1635/1763/3557 Structure Replacement Project, South Windsor, CT
Project Manager

Responsible for the environmental permitting of the replacement of several structures along the 1310/1635/1763/3557 Transmission Lines in South Windsor, CT. Responsibilities included preparing the NDDB state-listed species review, USACE Self-Verification Forms, and Connecticut Siting Council sub-petition narrative for the project; coordinating with the cultural consultant on historic and archaeological assessments of the project area; and leading and coordinating rare species survey for the portion of the line located in rare plant and animal habitat.

Eversource, 3424 Transmission Line Structure Replacement Project, Manchester, Glastonbury, and Portland, CT
Project Manager

Provided management services for the environmental and siting permitting of the replacement of 28 structures along the 3424 Transmission Line. Project responsibilities included drafting the Connecticut Siting Council Petition narrative and coordination and reviewing the petition mapping; preparing the USACE Self-Verification forms and the NDDB state-listed species review for the project; and coordinating with the cultural consultant on historic and archaeological assessments of the project area.

Eversource, 1050/1620 Structure Replacement Project, Middletown and Haddam, CT
Project Manager

Responsible for the environmental and siting permitting of the replacement of 42 structures along the 1050 and 1620 Transmission Line. Responsibilities included drafting the Connecticut Siting Council Petition narrative and coordination and reviewing the petition mapping; preparing the USACE Self-Verification forms and the NDDB state-listed species review for the project; and coordinating with the cultural consultant on historic and archaeological assessments of the project area.

National Grid, N-192 Cable Replacement Project. Salem and Beverly, MA
Project Manager

Responsible for the local, state, and federal permitting for an asset condition/replacement project in Salem and Beverly, MA. Responsibilities included working with the engineering team on means and methods to determine permitting impacts and approach; coordinating with National Grid Legal on Chapter 91 and MEPA strategies; and coordinating with local conservation commissions on preliminary permitting.

Crooked Springs Dam and Pond Feasibility Assessment and Alternatives Analysis, Chelmsford, MA
Project Manager

Responsible for completion of a feasibility assessment and alternatives analysis to provide potential options for the failing 30-year-old Crooked Spring Dam and Pond. Oversaw the ecological reconnaissance and drafted an ecological assessment for each of the alternatives, which included the identification of environmental study needs and permitting requirements. BSC helped compile the feasibility study report for the Town.

National Grid, Stream Crossing Project Near Concord Road, Chelmsford, MA
Project Manager

Responsible for coordination with the Chelmsford Conservation Commission and Conservation Agent and drafting a response to comments from the Conservation Commission and MassDEP. BSC was asked to step in to respond to requests for additional information and comments on a Notice of Intent Application submitted by another consultant. Melissa coordinated with the engineers and compiled the response document that satisfied both the MassDEP and the Chelmsford Conservation Commission. The project was approved and allowed to proceed.

Watch City Ventures, LLC, Watch Factory Docks, Waltham, MA
Project Manager & Wetland Scientist

Responsible for performing a site assessment and complex permitting for dock construction along the Charles River. Melissa completed and submitted a Notice of Intent and Section 10 USACE permit applications for the project. Other project responsibilities included helping to strategize, prepare, and review the Chapter 91 license application; preparing and submitting a PNF; and coordinating with the Massachusetts Historical Commission for the work located within the Watch Factory historic area. Work also included coordination with engineers on structure locations, design, and permitting strategy for obtaining the Order of Conditions, USACE Section 10 permit, and Chapter 91 license.

BSC GROUP

Micah
Morrison, PE, SE

Civil Engineer
Senior Associate

YEARS OF EXPERIENCE
21

EDUCATION
MS, Civil Engineering, University of Massachusetts Amherst

BS, Civil Engineering, Worcester Polytechnic Institute

REGISTRATIONS
Professional Engineer

- MA #46726
- CT #30602
- VT #9034
- NH #16431
- HI #14238

MEET MICAH
Micah's comprehensive background in structural design and analysis, combined with his strong project management skills, enables him to provide municipalities and state agencies with practical and thoughtful bridge design, rehabilitation, and replacement services.

Micah works collaboratively with environmental, permitting, and roadway colleagues to approach projects in an integrated fashion, facilitating permitting, environmental mitigation, and efficient construction. Micah is passionate about helping clients secure grant funding for infrastructure improvements and regularly supports municipalities with successful funding applications for both design and construction.

PROJECT EXPERIENCE HIGHLIGHTS

Foster Hill Road over Coys Brook Bridge Replacement, MassDOT, West Brookfield, MA
Senior Structural Engineer

To increase bridge longevity and decrease construction duration, designed replacement with prestressed concrete spread deck beams and integral abutments. A temporary pedestrian bridge was also detailed and designed to allow constant pedestrian crossing throughout the construction duration. Provided structural engineering calculations, cost estimate, specifications, and drawings. Design was in accordance with AASHTO LRFD and the MassDOT LRFD bridge manual.

East New Lenox Road over Sackett Brook Bridge (No. P-10-055) Replacement, MassDOT, Pittsfield, MA
Senior Structural Engineer

Evaluated three cross section and three span length alternatives to optimize the design to provide safe travel accommodations, minimize impacts to existing right of way, ease of construction, construction cost, and construction duration. existing bridge is approximately 22.5 feet long and carries a 26-foot width over the span of the bridge. This project encompasses the replacement of the existing superstructure and abutments.

MICAH WORKS COLLABORATIVELY WITH ENVIRONMENTAL, PERMITTING, AND ROADWAY COLLEAGUES, FACILITATING AN INTEGRATED APPROACH TO PROJECTS.

North Royalston Road Bridge over Tarbell Brook Bridge Replacement, MassDOT, Winchendon, MA

Senior Structural Engineer

Under MassDOT master service agreement, completed detailed analyses of structure types to determine the optimum full replacement bridge to be built at this rural, historical, and environmentally sensitive site. The design specified precast/prestressed concrete Northeast Extreme Tee (NEXT) F Beams, for the bridge superstructure to reduce costs and decrease construction time. Used state of the art techniques and specifications to reduce maintenance, conform to hydraulic analysis, and meet federal guidelines.

MassDOT Summit Hill Road Superstructure Replacement, Washington, MA

Project Manager

Modified superstructure design through value engineering. The revised design eliminated the need for a 600-ton crane and avoided utility relocations. The new design allowed for accelerated construction and achieved substantial cost savings to MassDOT and the contractor.

Stafford Street Over I-90 East & West, MassDOT, Charlton, MA

Senior Structural Engineer

Designed replacements for low clearance stringers damaged by multiple truck collisions. Designed the height of the continuous stringer replacements to be substantially less to reduce the potential for future collisions.

MUNICIPAL EXPERIENCE

Plummer Spring Road over the Artichoke Reservoir Bridge Replacement, Newburyport and West Newbury, MA

Project Manager

Designed a 45-foot spread box beam stringer bridge on integral abutments to replace the closed stone arch bridge. The project scope also includes hydraulic analysis and environmental permitting. Experience understanding community size and the types of grants available, helped both communities obtain at total of $1,500,000 in grant funding for the project. Construction anticipated Spring 2021.

Willow Street over South River Bridge Replacement, Marshfield, MA

Project Manager

Worked closely with the town to scope the bridge replacement, including the preliminary design that specifies a single span 40-foot structure to accommodate the natural flow regime and increase hydraulic capacity. Helped town with grant application, which was recently awarded, allowing the next phase of the design to move forward.

Interlaken Road over Larrywaug Brook Bridge (No. S-26-008) Replacement, Stockbridge, MA

Project Manager

Prepared drawings, specifications, cost estimates, structural calculations, and final design plans for MassDOT Chapter 85 approval. The design specified a 42-foot precast arch in addition to a temporary 130-foot utility bridge, to accelerate construction. Guided client through the Massworks and Small Bridge grant process resulting in $1.5 million in grant funding. Also consulted on contracting process.

County Road over Ironworks Brook Bridge and Culvert Replacement, Sheffield, MA

Project Manager

Comprehensive scope including roadway design, scour protection, and environmental permitting, including an NOI, 401 Water Quality Certificate, and 404 Army Corps Permit to replace the bridge and a 60-inch pipe culvert at a second location. The bridge and culvert were designed in accordance with AASHTO and the MassDOT Bridge Manual and were approved through MassDOT Chapter 85 Structural Review. The replacement bridge is a 16-foot span pre-cast frame and precast footing, with cast-in-place wing walls.

High Street Bridge over the Millers River, Winchendon, MA

Project Manager

Designed steel string repairs which allowed the bridge to be reopened to vehicular traffic. Structural repairs replaced the extensive material lost through deterioration; design approved through MassDOT Chapter 85 Structural Review.

BSC GROUP

Robert
Newton, PE, LEED AP

Senior Civil Engineer
Associate

YEARS OF EXPERIENCE
25

EDUCATION
BS, Civil Engineering
Union College

REGISTRATIONS
Professional Engineer

- CT #20662
- MA #49276

LEED Accredited Professional

AFFILIATIONS
- American Society of Civil Engineers
- U.S. Green Building Council

MEET ROB
Rob has extensive civil engineering experience, especially in the areas of site and roadway design, hydraulic analyses, and permitting support for municipalities, private entities, and government organizations, including both the Connecticut Department of Transportation (CTDOT).

Accustomed to leading teams of engineers, planners, surveyors, and scientists in the delivery of cohesive and exemplary projects, Rob combines his technical expertise with best management practices. He has also developed flood protection systems along several major bodies of water within the state, including the Connecticut, Hockanum, and Westfield Rivers.

PROJECT EXPERIENCE HIGHLIGHTS

CIVIL/SITE DESIGN

Windsor Police Facility, Windsor, CT
Project Manager

Responsible for managing the site and traffic engineering services associated with the design of a new Police Headquarters. This adaptive reuse of an existing office/warehouse building provided much needed space and technologic upgrades for the department and their staff. Access and security control upgrades were of particular concern to the town. Rob was responsible for the stormwater and site utility upgrades for the renovated facility.

Windsor Fire Facility, Windsor, CT
Project Manager

Responsible for the site and traffic engineering services associated with the design of an expanded Fire Department facility. This renovation of the previous fire/police facility was made possible by the police department relocation. The project included an addition for the fire apparatus and complete renovation of the interior space. Rob worked closely with the Town to redesign the site for proper vehicle circulation and utility relocations. Stormwater management was of particular concern to the town and CTDOT as the site drains to the state roadway.

ROB'S EXTENSIVE EXPERIENCE ON SITE/CIVIL, ROADWAY, WATERWAY, AND OTHER PROJECT TYPES THROUGHOUT CONNECTICUT PROVIDES IMMENSE VALUE TO CLIENTS.

HIGHWAY/ROADWAY/TRAILS

Stratford Complete Streets, Stratford, CT

Project Manager

Responsible for coordination with MetroCO), the Town of Stratford, and CTDOT; preparation of construction cost estimates; management of planning and design efforts; and roadway design, public outreach, and QA/QC services associated with the preparation of contract documents for pedestrian and cyclist safety improvements along a heavily travelled corridor. Included in the planning phase were surveys and attendance at stakeholder meetings. Design improvements included sidewalks, ADA accessibility, lane arrangements, bicycle lanes, signage, on-street parking, and other safety improvements

Williams Street Improvements, New London, CT

Project Manager

Responsible for the pedestrian connectivity project coordinating the design between the City of New London, Connecticut College, and CTDOT. The improvements along a 1.5-mile section of Williams Street included new sidewalks, bike lanes, intersection improvements, pedestrian level lighting, and enhanced landscaping. The goal of these improvements was to provide a safe and enjoyable connection from Connecticut College into the downtown area.

Mountain Rd Culvert Replacement, Somers, CT

Project Manager

Managed the replacement of six hydraulically inadequate culverts. Rob provided overall project management, QA/QC services, and roadway/civil engineering. The scope of work included a topographic survey for roadway and drainage improvements, utility location, and establishment of right of way for the entire project area. Rob performed hydraulic cross sections used in culvert design. Roadway profile improvements were designed to accommodate the larger three-sided box culverts. Guiderails were also added to improve safety.

ON-CALL

East Hartford On-Call Engineering Services, East Hartford, CT

Project Manager

Responsible for managing various engineering projects for over a decade. Designed to support town staff, these services included traffic management, GIS mapping update, environmental studies, pavement evaluation, FEMA map revisions, geotechnical services, engineering reviews, utility design, structural inspections, hydraulic analyses, flood protection system design and maintenance, surveying, and construction engineering/inspection.

Springfield On-Call Engineering Services, Springfield, MA

Project Manager

Responsible for management for on-call services contract for over a decade. Designed to supplement the City's staff and expertise, the contract encompassed survey; full civil engineering services; roadway design; traffic engineering; flood control system design, inspection, and maintenance; and infrastructure inspection. Rob oversaw all assignments associated with this contract.

WATERWAYS

East Hartford Flood Protection System Comprehensive Inspection and Improvements, East Hartford, CT

Project Manager

Responsible for the preparation of a comprehensive inspection of approximately 20,000 feet of earthen dike, 750 feet of concrete floodwall, and related ancillary features of the East Hartford Flood Protection System along the Connecticut and Hockanum Rivers for the US Army Corps of Engineers (USACE). Repairs were required at three pumping stations and appurtenant drainage structures and facilities. Rob provided also provided site and civil engineering and QA/QC services.

South Meadows Dike Impervious Shell Evaluation and Repair, Hartford, CT

Project Manager

Oversaw all aspects of coordination, securing and monitoring all subconsultants, and providing QA/QC services. Tasks involved included investigation and review of documents (including review of historical records, analyses, and reports; field inspections and subsurface explorations; and soils laboratory testing), survey mapping, seepage and stability analysis of representative levee sections, semi-final design and USACE review, permitting and coordination, and final design and preparation of construction documents.

AHS CULTURAL RESOURCE MANAGEMENT

COMPANY PROFILE

I. INTRODUCTION

AHS is based in Storrs, Connecticut. The firm is an affiliate of the nonprofit 501(c)(3) organization Public Archaeology Survey Team, Inc., established in 1976 at the University of Connecticut in Storrs. PAST is one of New England's oldest and most respected archaeological and historical research organizations. By 1995 PAST's commercial projects had begun to outnumber its grant-funded research projects. In that year, PAST's managing director, Mary Harper, incorporated a separate for-profit company, AHS, which would assume most of PAST's commercial business, while PAST focused on its original mission of research and public education. Ms. Harper is the sole owner of AHS, which has been classified as an affiliate of PAST by the State of Connecticut because both firms are managed by Ms. Harper and the firms share staff and office space. AHS and PAST now occupy their own office building located one half mile from the University of Connecticut campus.

AHS was certified as a Disadvantaged/Women-Owned/Minority Business by the Connecticut Department of Administrative Services and Connecticut Department of Transportation in 1995, and by the Rhode Island Department of Administrative Services in the same year. In 2007 AHS was certified as a DBE/WBE by the State of Massachusetts (SDO/SOMWBA). AHS is self-certified with the CCR (Cage #4KSK9) as a Small Disadvantaged Business and Women-Owned Business under NAICS codes 541790, 541720 and 712120. AHS staff have over 30 years of experience in performing cultural resource management studies. Our clients include state and federal agencies, municipalities, engineering and design firms, and other entities. Our public-sector work has required a full range of services: archaeological reconnaissance, intensive and data recovery surveys; state and federal-level documentation of parks, landscapes, bridges, and residential, industrial and engineering structures; Native American cultural heritage research and consultation; preparation of Environmental Assessment, Environmental Impact Statement, Section 4(f), and *de minimus* impact documentation; archaeological and architectural preservation planning; heritage planning; preparation of technical reports, and the writing and design of public-oriented booklets, web sites and interpretative signage.

II. QUALIFICATIONS

Key elements of our work are familiarity with state and federal regulations and practices, the experience and skill to handle effectively <u>any</u> type of cultural resource management project, the capacity to respond quickly and to develop solid innovative survey and impact mitigation designs to avoid project downtime, the ability to handle multiple simultaneous task orders at various locations, a strong track record of producing exemplary products, and administrative competence in maintaining tight control of fiscal and project records to ensure no management-related delays. AHS presents exceptional qualities that allow it to expeditiously fulfill project responsibilities regarding archaeological and historic resources:

- *Knowledge of Relevant Regulatory Procedures.* AHS staff are thoroughly familiar with relevant Northeast state and federal regulations, practices and procedures, including the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act of 1966, Section 4(f) of the US DOT Act, the eligibility criteria of the National Register of Historic Places regarding all cultural

resource types, and Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER) program standards. We are well-versed in USACE review and operational procedures, having worked directly with USACE personnel on various projects.

- *Breadth and Depth of Experience.* In each of the categories of our work — Phase I archaeological reconnaissance (intensive/locational) surveys, Phase II intensive (site examination) archaeological surveys, Phase III data-recovery programs, industrial archaeology, National Register of Historic Places and National Historic Landmark documentation of historic buildings, structures and landscapes, research and data gathering, heritage/preservation planning, laboratory processing, report writing, and electronic media presentations — AHS can point to not just one or two examples but dozens and even hundreds, from the recent past to 30 years ago, that have been successfully completed.

- *Exemplary Products*. AHS work products are known for their quality. No product of any kind has failed to readily pass state or federal review. The National Park Service regularly uses our National Register of Historic Places inventory forms as workshop model examples, as does the HAER. Our Rochambeau/Revolutionary War Route project in Connecticut and New York was recently used by the National Park Service as the model for expansion of the study into other states.

- *Advantageous Size and Facilities.* AHS is a mid-sized firm, which has several advantages. We own our 16-room building, which houses office space, laboratories, library, and specialized storage. Our full time staff of 20 archaeologists, historians, and laboratory technicians are all based in our Storrs office. Seasonal staff is drawn from the nearby University of Connecticut. We are large enough to handle virtually any size or type of cultural resource management project in-house and respond quickly, but we are small enough to maintain tight quality control and keep our overhead low.

- *Efficient Project Management.* AHS has a strong corporate conscience and understands that the public expenditure for cultural resource management deserves the highest-quality product at a reasonable price. We work very efficiently and have repeatedly proven our ability to complete projects on time and within budget, on multiple task orders in various locations.

- *Multiple Task-Order Capability*. AHS is accustomed to simultaneously handling numerous survey assignments, in different areas of New England. Often the parallel assignments have been quite large, but our flexible staffing arrangement is designed to accommodate multiple task-order demands.

III. EXPERIENCE AND SERVICES OFFERED

AHS staff have completed over 600 archaeological and historical projects for state and federal agencies, municipalities, museums and private parties. We regularly team with architects, landscape designers, and engineers to handle multi-faceted jobs. AHS has repeatedly demonstrated its ability to handle every conceivable type of archaeological or historical project, to complete projects efficiently under tight schedules, and to handle numerous projects simultaneously, while maintaining high quality.

- *Archaeological Assessment Survey*. AHS combines historical document research, archaeological site file and cultural resource management report research, environmental context review and walkover inspection to assess the potential of a project area for containing significant prehistoric or historic-period archaeological resources. This sometimes involves the evaluation of engineer-derived soil borings to assess below-ground soil conditions, and in some urban cases we have hired Geoprobe rigs to conduct continuous soil borings that maximize our ability to determine whether intact deep-soil pockets have survived development. In the downtown-Hartford Adriaen's Landing development project, AHS successfully used Geoprobe sampling to identify intact areas of potential early prehistoric

soils; it was effective and efficient because it permitted the rapid development of impact-avoidance and mitigation plans.

- *Archaeological Reconnaissance (Intensive/Locational) and Intensive (Site Examination) Surveys.* Our Phase I and II survey projects range from small-lot studies to large and complex projects. For example, one archaeological survey of a proposed multi-alternative cross-country eight-mile-long highway extension involved the excavation of over 7000 test pits and identification of over 40 pre-Colonial Native American archaeological sites determined to be eligible for the National Register of Historic Places. In addition to a technical report, we prepared a cultural resource management plan for preservation or mitigation of impacts to over three dozen sites, including an archaeological district composed of the remains of an 18th and 19th-century village. The project was compressed into a 16-month time frame. For an example of a multi-site pre-Colonial Native American site project, see AHS's website on a cluster of sites identified along the Quinebaug River (www.ahs-inc.biz/Quinebaug).

- *Archaeological Monitoring*. We have also undertaken many industrial, commercial and urban archaeology projects in which the archaeology has been interleaved with demolition/construction to expedite the project. In many of these projects, standard subsurface testing was precluded by pavement, traffic or demolition/construction schedules and issues. On-site monitoring of pavement and fill removal substituted for typical archaeological testing.

- *Phase III Data Recovery*. In instances in which avoidance of impact to a National Register-eligible archaeological site was neither prudent nor feasible, AHS has conducted extensive excavations of a wide variety of prehistoric and historic-period sites. Examples include Late Archaic-period pit-houses and early colonial-period houses. For an example of the latter, see AHS's website on the Phase III excavation of a 1705 house buried in the path of a highway in Andover, Connecticut (www.ahs-inc.biz/Sprague/).

- *Laboratory Processing*. All artifacts and ecofacts are cleaned, catalogued and curated in AHS's laboratory facilities. Items of exceptional importance are conserved in our dedicated conservation laboratory. Botanical analysis is conducted by our own staff expert Katharine Reinhart.

- *Remote Sensing*. AHS staff capably conducts high-end metal-detecting, which was the ideal instrument for identifying, with minimal intrusion or damage, the locations of Revolutionary War army camps as well as World War II plane crash sites, where the debris fields were large. For identification of possible graves and other buried features we use Ground Penetrating Radar, with our own state-of-the-art equipment.

- *Underwater Remote Sensing/Archaeology*. AHS staff has used traditional methods of low-tide observation via kayak/canoe to identify and document submerged 18th-century wharves, dikes and other structures. Three staff members are certified SCUBA divers and have identified underwater resources. We use our GPR in flat-bottomed boats for shallow water. For deep underwater remote sensing or more sophisticated archaeology, we would rely on the experts at Fathom Research, LLC, who specialize in New England underwater cultural resource management.

- *Technical Report Writing*. Our projects have required AHS to prepare professional technical reports that formed the basis for review by the USACE, FHWA, National Park Service, various State Departments of Transportation, Environmental Protection, Economic and Community Development, Public Works, State Historic Preservation Offices, and other regulatory agencies. AHS prepares technical reports geared to the appropriate state or federal agency, ranging from end-of-fieldwork memoranda to comprehensive reports on Phase I, II and III archaeological surveys. We also write the

relevant sections on archaeological and historical resources for NEPA/Section 106 and Section 4(f) documents.

- *National Register of Historic Places Documentation of Archaeological Resources*. AHS has prepared successful National Register of Historic Places documentation for over 150 archaeological properties, including large thematic prehistoric and historic districts, as well as individual sites. Properties range from a prehistoric rockshelter in western Connecticut to ironworks and mill sites. Our archaeological nominations are regularly used by National Park Service staff as models in instructional seminars across the country.

- *National Register of Historic Places and National Historic Landmark Documentation*. AHS personnel have undertaken dozens of documentation projects in a variety of formats: National Register of Historic Places nominations of historic bridges, mill sites, dams, water wheels, and lighthouses, the latter for the U.S. Coast Guard. We have also prepared historical documentation of a number of state parks, including the National Register-listed Putnam Memorial State Park in Redding, Connecticut, and the National Historic Landmark Spring Grove Cemetery and Arboretum in Cincinnati, Ohio. AHS's Director of Historical Services Bruce Clouette co-authored, with Boston National Park Service staff, the National Historic Landmark documentation for the Coltsville complex in Hartford, Connecticut. He also wrote the National Register of Historic Places documentation of the Hartford Union Station. In addition, AHS completed the National Historic Landmark nomination for the U.S. Coast Guard cutter *Eagle*.

- *Traditional Cultural Properties Documentation*. PAST cultural anthropologist and historian Mary G. Harper, along with archaeologists Brian Jones and Ross Harper, prepared an exhaustive documentation of Fort Hill, a cultural property critical to the Mohegan Tribe that was threatened by a private developer. The documentation has served as a model for other states' State Historic Preservation Offices and for the National Park Service.

- *HABS/HAER Documentation*. AHS has completed dozens of HABS and HAER documentations. Examples include houses (HABS No. CT-439 in Wallingford, HABS No. CT-462 in Plainville), the Connecticut State Pier (HAER No. CT-141), and many railroad and highway bridges.

- *Historic Preservation Planning/Impact Mitigation Planning*. AHS has worked closely with state agencies, municipalities and private firms to create development plans that provide measures for avoiding and/or mitigating impacts on archaeological and historical resources. Our plans meet the U.S. Secretary of Interior's *Standards for Preservation Planning* and are sympathetic to archaeological, historic architectural and engineering resources, and to historic rural or designed landscapes. For the 500-acre former Norwich State Hospital property in Preston, Connecticut, we developed a cultural resource management plan for the State of Connecticut that encompassed dozens of prehistoric and historic archaeological sites, as well as historic resources ranging from the former Hospital buildings to remnants of the Norwich and Westerly Railroad, Thames River Dikes, and components of the Norwich State Hospital water-supply system.

  For a large prehistoric site along the Pootatuck River terrace in Newtown, Connecticut, we worked with designers of a sewer system to avoid the most significant portions of the site, and we undertook Data Recovery at the few portions that could not be avoided. We then designed a six-panel two-kiosk educational exhibit on the site, which is permanently on display in Newtown.

- *Historic Structure Reports and Evaluations*. AHS has collaborated with architects and engineers as the preservation consultant on many historic structure evaluations. The goal of these projects has been to assess the architectural integrity, code compliance, and structural condition of historic buildings and

recommend appropriate modern uses. Examples include a Historic Structure Report (HSR) for the Bolton Heritage Farm, a town-owned house and barn, the Tahara House in Waterford, and the Willington Tavern (all in Connecticut). We also worked on the award-winning restoration of the pavilion at Putnam Park in Redding, and a feasibility study for the Webb-Deane Stevens Museum in Wethersfield (also in Connecticut). Other evaluations include a barn on the Prudence Crandall museum property in Canterbury, Connecticut, and four historic houses as part of Connecticut Department of Economic and Community Development's Resident Curator Program: the Worthen House in Granby, the Ostrom Enders House in Waterford, the Averill House in Pomfret, and the Forster House in Killingworth.

- *Historic Building Rehabilitation and Historic Tax Credits*. AHS staff have participated as preservation consultants on over $100 million worth of historic-building rehabilitations. Projects include large-scale conversions of former factories, schools, commercial and office buildings, a U.S. Post Office, and a downtown hotel to new, economically viable uses. In each case, the project required identifying character-defining features and working with the developer, architect, and government reviewer, creating appropriate solutions that would both preserve the essence of the historic building and allow it to serve a modern purpose. Architectural historians Marguerite Carnell and James Sexton have extensive experience with federal and state historic tax credit projects for a wide range of building types.

- *Historic Landscapes*. AHS has extensive experience documenting and evaluating historic landscapes. Clouette prepared National Historic Landmark designation documentation for the Grove Street Cemetery in New Haven, and the Philip Johnson estate in New Canaan, both of which had landscape-design significance. Many of the properties for which he has prepared National Register of Historic Places registration forms also had important historic-landscape components, including the Bush Hill Historic District in Brooklyn, Connecticut, listed as a rural historic landscape; Eolia, the Harkness Estate in Waterford; Rockwell Park in Bristol; and the Norwich State Hospital in Norwich and Preston.

  Cultural landscapes which are considered rural historic/archaeological landscapes have also been documented at the National Historic Landmark 18th-century Samuel Huntington House in Scotland, Connecticut, and at the c. 1814 Sylvester Judd Jr. House in Westhampton, Massachusetts.

- *Historic Bridge Studies*. AHS historian Bruce Clouette was the co-director of statewide historic bridge surveys in Connecticut, Vermont, and Rhode Island, and he compiled a complete inventory of historic resources in Connecticut, Rhode Island and Massachusetts for AMTRAK's Boston-New Haven electrification project (1993). Clouette completed evaluation and documentation of over 170 bridges and railroad resources in 2011/2012 as part of the New Haven-Hartford-Springfield High-Speed Rail Project. In a recent nationwide evaluation of state historic bridge plans, the Transportation Research Board cited four plans as notable; Clouette's plans were three of the four. He wrote three books on the surveys, two for Connecticut and one for Rhode Island. In addition, he prepared National Register nominations for groups of Berlin Iron Company bridges and open-spandrel bridges; see our website www.past-inc.org/historic-bridges/ for a presentation on one bridge survey.

  Clouette also has extensive experience in advising on historically appropriate/sympathetic repairs and renovations of historic bridges. Currently, Clouette and architectural historians Marguerite Carnell, James Sexton, and industrial historian Edward Connors are updating Connecticut's 1991 Statewide Historic Bridge Inventory for the CTDOT. Clouette and Connors recently completed a stateside update of Rhode Island's historic bridges as well.

- *Heritage Planning*. AHS regularly works with state agencies, municipalities and private organizations to develop plans to inform the public about historic buildings, landscapes, and archaeological sites. We

are working with RIDOT to design the content (text and graphics) of signage regarding the Revolutionary War route of Rochambeau's army across Rhode Island. Currently, we are also developing interpretive exhibits to be installed in rail stations and wayside locations for the New Haven-Hartford-Springfield Rail Project. We are also working with a number of historic house museums.

- *Public-Oriented Writing and Electronic Media Presentations.* AHS staff have produced dozens of public-oriented books and electronic media presentations (web sites). AHS historian Bruce Clouette is the co-author of the book *Connecticut's Historic Highway Bridges*, and the sole author of its recent companion volume on movable bridges, *Where Water Meets Land*. Clouette and AHS principal Mary Harper are also co-authors of a book on the Revolutionary War march of the French army in New England and New York. AHS Senior Historic Archaeologist Ross Harper and Clouette have produced several public-oriented booklets, including the *Cady-Copp Homestead*, *World War II "Hellcat" Sites, Peter Grohman House and Cigar-Making Shop Archaeological Site*, *The Clark Farm Tenant House Archaeological Site*, and *The Ebenezer Story Homestead and Tavern Site*, among others.

- *Websites*. AHS staff have prepared website presentations for many archaeological/historical projects, including a mill town (www.past-inc.org/Willimantic), the Peter Grohman Cigar Shop (www.past-inc.org/Grohman/), the Clark Farm Tenant House Site (www.past-inc.org/TenantHouse/) and the Daniels Homestead Site (www.ahs-inc.biz/Daniels/).

- *Museum Exhibits*. AHS co-wrote and designed a permanent museum exhibit in Fort Trumbull State Park in New London, Connecticut, about 19th-century torpedo boats discovered in an archaeological survey along the Thames River (we used remote sensing to identify the submerged and buried hulls). Clouette designed an exhibit on Connecticut's legislative history at the state capitol, another on the history of mental health treatment, and one on immigrant/factory labor, all permanent installations.

- *Native American Coordination*. AHS staff have maintained excellent working relationships with the local Native American community. For over 15 years we conducted all of the archaeological research for the Mashantucket Pequot Tribal Nation. Director Mary Harper and Senior Historic Archaeologist Ross Harper were responsible for assembling the Mashantucket Pequot Museum and Research Center's large collection of Woodland Indian material culture. We work frequently and directly with the Mohegan, Gay Head and Mashpee Tribes and with the Narragansett Tribe, and have earned their respect. Director Mary Harper and Senior Historic Archaeologist Ross Harper wrote their theses on New England and Northeast Native American cultures and understand Native American traditions and concerns regarding archaeological sites and Traditional Cultural Properties. We also understand and keep up to date with the concerns of United South and Eastern Tribes (USET).

IV. PERSONNEL

AHS's staff structure has four components: 1) a strong and diversely talented group of 16 full-time specialists in Northeast prehistoric and historic archaeology and historical research and documentation; 2) full-time field, laboratory and conservation staff; 3) a cadre of 4-12 seasonal field workers made up of University of Connecticut undergraduate and graduate students who have been trained by and have worked for AHS for years; and 4) management which permits AHS to conduct numerous projects simultaneously and efficiently.

- *Senior Staff.* AHS president and owner Mary G. Harper, RPA, has extensive experience in cultural resource project management, having directed over 600 projects in her 33 years with AHS/PAST. The

Director of Archaeological Research at AHS, she holds a Master's degree in archaeology and cultural anthropology from the University of Connecticut and is a National Park Service 36 CFR 61-certified prehistoric and historic archaeologist, historian, and cultural anthropologist. Ms. Harper, a working principal, directly oversees all archaeological projects, working with the Senior Archaeologists to develop, implement and complete archaeological surveys. She has also written hundreds of technical reports, National Register nomination forms and public-oriented books and articles; supervised the in-house preparation of numerous web sites; and prepared the text and design for several museum exhibits, including a permanent installation at Fort Trumbull State Park in New London, Connecticut. As an administrator, Ms. Harper has a long track record of efficient project management, with the proven ability to handle many diverse projects at a time, keep overhead costs low, and yet produce award-winning products.

Historian and Director of Historical Research Bruce Clouette holds a Ph.D. in history from the University of Connecticut. His doctoral dissertation was on Hartford's immigrant population. Dr. Clouette is a National Park Service-qualified historian, architectural historian, and industrial archaeologist. He has produced hundreds of cultural resource management products, has written or contributed to several books on New England history, and has designed numerous museum exhibits. In addition to his 35 years of experience in documenting historic buildings and properties, Dr. Clouette is an expert in evaluating and documenting historic landscapes, bridges, industrial and railroad structures, and waterpower and maritime features.

Ms. Harper and Clouette coordinate closely with AHS's Senior Historic and Senior Prehistoric Archaeologists, crew chiefs, and lab technicians, and are assisted by clerical staff that perform data entry and report-production tasks. A project management schedule is maintained and meetings are held regularly to ensure that all projects area on track.

Senior Historic Archaeologist Ross Harper, Ph.D., RPA, is a former staff archaeologist at Colonial Williamsburg and the Mashantucket Pequot Museum. A National Park Service-qualified historical archaeologist, historian and curator, he is an expert in the colonial-period history, archaeology, and ethnography of Native and Euro-Americans. Dr. Harper is responsible for designing and directing AHS's historical archaeology surveys and data recovery projects. His work overseeing the excavation and analysis of 18th-century homestead sites is widely respected. He has authored numerous reports and articles on historic-period archaeology in New England, and is co-author of a new book on 18th-century domestic lifeways based on the data recoveries. He is certified in hazardous waste operations and emergency response (HAZWOPER) for the investigation of archaeological resources in hazardous environments.

Senior Archaeologist and GIS Specialist David E. Leslie, Ph.D., holds a B.A. in Anthropology and Sociology from West Virginia University, an M.A. in Anthropology from Florida Atlantic University, and a Ph.D. in Anthropology from the University of Connecticut. Prior to working at AHS, Dr. Leslie was a staff archaeologist at the Mashantucket Pequot Museum, Research Scientist at the University of Connecticut, and Adjunct Instructor at Manchester Community College, the University of Connecticut, and Southern Connecticut State University. He is a National Park Service-qualified archaeologist, 40-hour OSHA-HAZWOPER certified, and serves as the firm's Health and Safety Officer. Dr. Leslie has over 10 years of geoarchaeological and environmental archaeological experience, collaborating on academic projects in the Northeastern United States, Kenya, and Europe. Dr. Leslie's academic work has been published in anthropological and geological journals, integrating environmental, geological, and archaeological datasets. At AHS, he manages projects that involve significant components of GIS, geoarchaeological, and environmental data sets, such as our intensive study of the paleoenvironment in areas in Connecticut, Massachusetts and Rhode Island. Dr. Leslie is also an expert in Ground Penetrating Radar.

Senior Historian Marguerite Carnell, M.Phil., brings additional expertise in architectural history and historic preservation to AHS as a National Park Service-qualified architectural historian and historian. Following her passion for design and architecture, she graduated summa cum laude from the University of Connecticut with a B.S. in Design and Resource Management. She went on to receive her M.Phil. in American Civilization from the George Washington University, with interdisciplinary studies in architectural history, material culture, religious history, and women's history. She also completed coursework in architectural conservation at Columbia University. With over 20 years of experience, Ms. Carnell has spent much of her career documenting, preserving, and restoring historic buildings and structures. She has worked on historic commercial and institutional buildings, mills, factories, houses, churches, theaters, schools, and bridges. Since joining AHS in 2014, she is responsible for researching and writing cultural resource management reports, historic resource surveys, environmental compliance reviews, National Register nominations, and historic tax credits.

Architectural Historian James Sexton, Ph.D. has over 20 years of experience in the investigation and documentation of historic properties, and has an excellent understanding of the regulatory environment for above-ground cultural resources and the necessary skills to perform survey and documentation studies. He is a National Park Service-qualified architectural historian and historian. Dr. Sexton holds a B.A. and Ph.D. in the History of Art from Yale University, with a dissertation focusing on changes in community structure as reflected in the buildings of seventeenth- and eighteenth-century Guilford. He has completed many nominations to the National and Connecticut State Register of Historic Places, as well as Historic District Study Commission Reports for proposed historic districts. He also prepared the National Historic Landmark nomination for the Harriet Beecher Stowe House in Hartford, CT. Dr. Sexton has extensive experience with historic building assessment, with more than 20 Historic Structure Reports. He also has experience with large-scale survey projects and environmental compliance reviews.

- *Crew Chiefs*. AHS's three senior crew chiefs have been with the company for between 10 and 20 years. They work closely with the Senior Historic and Senior Prehistoric Archaeologists, as well as with Ms. Harper, to direct our field archaeologists, and frequently operate parallel crews on different projects. The crew chiefs maintain daily contact with the Senior Historic or Senior Prehistoric Archaeologists, who report to Ms. Harper. The crew chiefs are responsible for cross-checking field paperwork to minimize the possibility of errors.

- *Laboratory Staff.* Our dedicated laboratory staff at our Mansfield office have extensive experience processing and curating New England artifacts. The inventorying, conservation, and curation of artifacts at AHS are overseen by laboratory supervisor James Poetzinger and conservator Robyn Beausoleil. Mr. Poetzinger, National Park Service-qualified as a curator, supervises the artifact processing in our wet and dry laboratories, overseeing the field archaeologists who are cross-trained as laboratory workers, maintaining the site database on our server, and referring identification challenges to the appropriate senior staff. Ms. Beausoleil, National Park Service-qualified as a conservator and curator, is responsible for implementing technical procedures in our conservation laboratory, to clean and stabilize fragile artifacts, assuring their long-term preservation.

- *Field Crew.* AHS maintains a core staff of southern New England-specialized field archaeologists as permanent employees, rather than relying on contract labor or people hired for one or two projects or pulled in from another part of the country. As a result, AHS has a very low turnover rate; most of the field-crew archaeologists have been with the company for ten years or more. The low turnover is a key factor in quality and efficiency because our experienced people know how to coordinate their efforts. Accustomed to working closely together, the staff tackle tasks quickly and smoothly, with no down time or duplication of effort. To augment our staff of 7 full-time field archaeologists (exclusive of crew

chiefs), we maintain a pool of four to 12 UConn student interns and part-time/seasonal employees who are trained one-on-one by an AHS staffer to ensure that they fit in seamlessly and that quality is maintained.

- *HAZMAT Training.* Staff archaeologists have completed the OSHA 40-hour HAZWOPER course, and three staffers are Supervisor-trained. David Leslie serves as the company Health and Safety Officer. Our Health and Safety Plan was completed by consultant Andre Chiardia, in consultation with AHS staff. Mr. Chiardia also conducts our update training.

V. FACILITIES

AHS maintains extensive office, laboratory, and curation facilities in the Storrs section of Mansfield, staffed by our core employees and supplemental archaeologists. The facilities, housed in a 4,000-square-foot building set on two acres, include all that is needed for fieldwork, artifact processing and conservation, site research, data analysis, report preparation, and short- and long-term storage of archaeological materials:

- *"Wet" Laboratory.* The 1,000-square-foot wet lab is where artifacts are washed, dried, and rebagged after being brought in from field projects. The wet lab is equipped with large washing sinks with specialized silt traps, as well as custom-made drying and sorting racks and other necessary tools. A specially-built concrete flotation area is attached to a large outbuilding on our 2-acre property, allowing for the recovery of very small artifacts and ecofacts from soil samples. The flotation area is suitable for cold-weather flotation.
- *"Dry" Laboratory.* Artifacts are identified, catalogued, inventoried and then packed for permanent curation in the 1,000-square-foot dry lab. Computer work-stations in the lab allow personnel to enter detailed information about each artifact into our exclusive artifact inventory program. The program, developed specifically for New England prehistoric and historic-period artifacts, incorporates a custom user-interface that greatly increases the speed and reliability of inventory processes. Directly linked to AHS's GIS and other software, it enables flexible and precise spatial analysis of archaeological data and other relevant geospatial information, and it promotes accuracy, speed and efficiency.
- *Conservation Laboratory.* A dedicated conservation lab allows AHS to ensure that artifacts discovered in the course of the work will be processed to the highest professional standards. The lab is equipped with a stereoscopic microscope, digital scale, vacuum chamber, digital conductivity meter, wax-impregnation equipment, rotary and air abrasion tools, a dual-channel pH/ion meter, and other specialized apparatus that permits AHS to conserve a wide range of materials.
- *Computer Network.* A network of 16 computers provides all staff members with access to Internet resources and to AHS's site-based artifact database; the computer network also allows multiple staff members to collaborate in data analysis and report preparation, creating significant advantages in efficiency and quality control. Engineering data from other consultants can be imported and exported in a variety of GIS and CAD formats. Other computer-based capabilities include web-development tools and publication software (Adobe InDesign™).
- *Storage Facilities.* AHS has over 1,000 square feet of curation space, in which we house, in secure and climate-controlled conditions, artifacts collected in surveys until permanent repositories are designated. In addition to extensive shelving for storing standard-sized acid-free waterproof boxes, facilities include long-term refrigerated storage for core samples. A three-car garage and loft, plus two barns, permit storage of our large custom-built winter-weather excavation tent, screens, shovels, sheet plastic, and safety cones/barrels/signs.

- *Field Equipment.* AHS owns a fleet of three field trucks, all of which can accommodate both gear and crew. In addition to the usual tools, field crews are equipped with Total Station surveying equipment, GIS locators, and digital cameras.

VI. CONTACT INFORMATION

For additional information, contact Mary Harper, President, at 860-429-2142, mharper@ahs-inc.biz or 569 Middle Turnpike, P.O. Box 543, Storrs, CT 06268.

Bruce Clouette, Ph.D.

Director of Historical Services

Archaeological and Historical Services, Inc.

***Professional Licenses/Registrations*:** NPS (36 CFR 61) qualified Architectural Historian, Historian, and Industrial Archaeologist; Connecticut, Rhode Island, Massachusetts, New Hampshire, Vermont, and New York SHPO-approved consultant since 1976.

***Experience and Qualifications*:**

A New Hampshire native, Dr. Clouette has been involved in research and writing about New England architectural history and history since 1975, first as an independent consultant, then as a principal in Historic Resource Consultants, Inc., and since 1998 as Senior Historian with AHS. He holds a Ph.D. in History from the University of Connecticut, where he was inducted into Phi Beta Kappa. Although not a full-time academic, he has taught college-level courses at the University of Connecticut, Eastern Connecticut State University, and Mattatuck Community College, as well as numerous teacher-training institutes.

Dr. Clouette's activities as a historic-preservation professional include:

- National Register of Historic Places nomination forms for hundreds of individual buildings, structures, objects, historic districts, landscapes, and archaeological sites, as well as dozens of multiple-property submissions. Included are numerous buildings of outstanding architectural significance, as well as properties with industrial, engineering, transportation, and social-history significance. Dr. Clouette has prepared National Register nominations for properties in New Hampshire, Massachusetts, Connecticut, New York, New Jersey, and Delaware.

- National Historic Landmark studies for the Philip Johnson Glass House, Grove Street Cemetery, Oliver Ellsworth House, Coltsville Historic District, and U. S. Coast Guard cutter *Eagle*, all in Connecticut, and the Spring Grove Cemetery in Cincinnati, Ohio.

- Preparation of cultural resource management components of dozens of state and federal-level Environmental Assessment and Environmental Impact Evaluation studies, for several governmental agencies including the Federal Railroad Administration, the Federal Aviation Authority, and departments of transportation in Massachusetts, Rhode Island and Connecticut.

- Evaluation and documentation of historic engineering structures and features for dozens of projects, including electrical-generating stations in Maine, Massachusetts, and Connecticut, and dams, railroad lines, and bridges in New Hampshire, Maine, Massachusetts, Connecticut, and Rhode Island.

- Historic building assessment studies. Working with teams that include architects, engineers, and landscape specialists, Dr. Clouette has provided historical research, identification of character-defining features, analysis of building sequence, and development of preservation strategies for a number of historic Connecticut buildings, including the Old State House restoration in Hartford.

- Lead historian for dozens of trail projects, inclusive of industrial and railroad feature identification and assessment, including the New Haven-Hartford-Springfield rail project.

- Historic-preservation consulting for projects that rehabilitate historic buildings for new uses.

- Historic American Building Survey (HABS) and Historic American Engineering Record (HAER) documentations for more than two dozen properties in Maine, Massachusetts, and Connecticut.

- Specialized surveys of historic resources to identify eligible properties and devise preservation/mitigation strategies, including statewide historic-bridge surveys in Connecticut, Rhode Island, and Vermont; historic lighthouses in three states for the U.S. Coast Guard; and historic factory buildings in Bridgeport, Connecticut.

- Connecticut state-level recording of over 100 historic properties.

- Townwide surveys of architectural and historic resources, as well as specific-area surveys, for numerous Connecticut municipalities.

Among the book-length publications of which Dr. Clouette is the author or co-author are *Connecticut: An Inventory of Historic Engineering and Industrial Sites* (1981); *Bristol, Connecticut: A Bicentennial History* (1984); *The Historic Highway Bridges of Rhode Island* (1988), *Connecticut's Historic Highway Bridges* (1991); *Hartford Hospital, the first 150 Years* (2004), and *Historic Movable Bridges of Connecticut* (2004). He wrote the introductory essay for *Carriages and Clocks, Corsets and Locks: The Rise and Fall of an Industrial City, New Haven 1850-1950* (2004), *Pathways to the Past: Transportation, Heritage and the Twenty-First Century* (2010), and *Highways to History* (2014). Dr. Clouette also is the author of several public-oriented educational booklets on historic sites such as *Clark Farm Tenant House Archaeological Site* (2009), *Peter Grohman House and Cigar-Making Shop Archaeological Site* (2009), and *Ebenezer Story Homestead and Tavern Site* (2010). Articles by Dr. Clouette have appeared in *CRM - Cultural Resource Management*, *Connecticut History*, *Connecticut Medicine*, and the Society for Industrial Archaeology Newsletter.

Public-education activities include scripts for Connecticut's 350th anniversary aired on Connecticut Public Radio and several museum exhibits, such as the permanent installation on the history of the Connecticut Legislature in the Legislative Office Building in Hartford. He wrote text for and supervised the preparation of eight Web sites in connection with cultural resource management projects, such as Willimantic's Frog Bridge (www.past-inc.org/Willimantic/).

Dr. Clouette is a frequent speaker at local historical societies and museums, where he has delivered presentations on 18th-century colonial homesteads, turn-of-the-century farm work, railroad roundhouse archaeology, Connecticut River crossings, industries of the agrarian economy, historic bridges, the Central Vermont Railroad, and other topics. He has given papers at the conferences of the Vernacular Architecture Forum, Society for Industrial Archeology, the Association of American Geographers, the New England Archivists, the Association for the Study of Connecticut History, and other organizations of professional scholars.

James Sexton, Ph. D.
Architectural Historian
Archaeological and Historical Services, Inc.

Professional Licenses/Registrations: NPS (36 CFR 61) qualified Architectural Historian; Connecticut SHPO-approved consultant since 2005, Maine-SHPO approved since 2008, and New Hampshire SHPO-approved since 2012. Also worked as lead architectural historian on projects in California, Delaware, Florida, Illinois, Kansas, Louisiana, Massachusetts, Minnesota, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Texas, Virginia, West Virginia (states that do not have lists of approved architectural historians).

***Experience and Qualifications*:**

A native of coastal Connecticut, Dr. Sexton has spent much of his professional life pursuing research in New England, with a concentration on Connecticut. A college career at Yale College introduced him to the excitement of architectural history. While there he received the A. Conger Goodyear Award for his Senior Essay on the cultural exchange between the Dutch and English cultural hearths, as demonstrated by timber framing techniques in eighteenth-century coastal Connecticut. After that he spent a year receiving a practical education in architectural history while disassembling and moving historic buildings for the New Jersey Barn Company. He then returned to Yale University to receive a Ph. D. in the History of Art, with a dissertation focusing on changes in community structure as reflected in the buildings of seventeenth- and eighteenth-century Guilford. With more than twenty-five years of experience in the investigation and documentation of historic properties, he has an excellent understanding of the regulatory environment for above-ground cultural resources and the necessary skills to perform survey and documentation studies. Professional affiliations include the National Trust for Historic Preservation and the Vernacular Architecture Forum.

Dr. Sexton's professional experience and qualifications include:

- Highly skilled in the analysis and documentation of historic buildings, with experience in a wide variety of building types, including single and multi-family housing, industrial buildings, churches, rural buildings, military installations, and commercial and civic buildings.

- Knowledge of state and federal regulations, practices, and procedures for historic properties in Connecticut. Excellent working relationship with the Connecticut State Historic Preservation Office (SHPO) and the Connecticut Trust for Historic Preservation (CTHP).

- Preparation of individual and district nominations for National Historic Landmarks, the National Register of Historic Places, and the State Register of Historic Places. Properties include the NHL nomination for the Harriet Beecher Stowe House, Hartford, CT, home of the world-renowned author in Hartford; the Wall Street National Register Historic District, Norwalk, CT, a city center district in coastal Fairfield County, with residential, commercial, and ecclesiastical buildings; the Five Mile River Landing Historic District, Rowayton, CT, a small village district in coastal Fairfield County that includes residential, commercial, and ecclesiastical buildings; Mystic Bank, Old Mystic, CT, a nineteenth-century bank in New London County; Bethel A.M.E. Church, Greenwich, a historically black church in coastal Fairfield County, the Elam Ives House, Hamden, CT, a small late eighteenth-century house with unusual design and construction elements in New Haven County; Trinity-on-Main, New Britain, CT, a large historic church in a city center designed by Amos P. Cutting using the Akron Plan; the Abijah Comstock House, New Canaan, CT, a late eighteenth-century house with a well-documented history of housing enslaved

people. He has also completed a State Register nomination for the Twitchell Homestead, Oxford, CT, a rural complex with a late eighteenth-century house and two nineteenth-century barns; the St. Thomas Aquinas School, New Britain, CT, a complex that grew from a small nineteenth-century public school into a large parochial school and convent by the early 1960s; and the Jonathan Selleck House, New Canaan, CT, an early nineteenth-century house that was demonstrated the early twentieth-century trend of New Yorkers moving to Fairfield County to restore and improve historic buildings; Uncasville Mill, Montville, CT, a historic district including twelve industrial buildings, industrial infrastructure, and company housing. He has assessed the National Register and State Register eligibility of thousands of buildings in ten states.

- Successful completion of both state and federal tax credit applications. These applications have supported the rehabilitation of industrial, commercial, residential, and educational buildings in both urban and rural settings throughout Connecticut. Projects have included large-scale redevelopment of multiple building factory sites, the renovation of an entire city block, and the repurposing of a parochial school complex for housing.

- Extensive experience in large-scale survey projects. He has undertaken historic resources inventories for the Towns of Clinton, East Windsor, Lyme, New Fairfield, and Redding, and updated the photographic portion of the Town of Madison's town-wide survey. He served as the lead architectural historian for the initial phases of the Connecticut Trust Barns Survey and the Connecticut Trust Greens Survey. Outside of Connecticut he has served as the sole investigator for large-scale historic building surveys in California, Kansas, Maine, New Jersey, New York, and Pennsylvania, which have documented more than 5000 buildings over the course of twelve years.

- Successful completion of Historic District Study Commission Reports for proposed districts in Greenwich, Hamden, Madison, New Haven, and Norwalk.

- Decades of experience in historic building assessment, with more than 20 Historic Structures Report for buildings with many of these located in coastal Connecticut. He also served as the architectural historian for the New Canaan, Norwalk, and Madison Historical Society plaque programs, where he provided non-invasive assessments to support documentary research undertaken by others.

- Recent environmental review experience includes CT Green Bank/CEFIA, a program for residential solar panels and energy upgrades, and Section 106 reviews prepared in support of disaster recovery programs in New Jersey funded by CDBG-DR grants awarded under the Disaster Relief Appropriations Act, 2013 (Pub. L. 113-2, enacted January 29, 2013) for Hurricane Sandy, Hurricane Irene, and Tropical Storm Lee. He also prepared Tier 2 reviews of historic-age properties in New York state that were slated to undergo rehabilitation, reimbursement, buyout, and acquisition but required review to meet HUD's Section 106 requirements.

Marguerite Carnell, M.Phil.

Senior Historian/Architectural Historian

Archaeological and Historical Services, Inc.

Professional Licenses/Registrations: NPS (36 CFR 61)-qualified Architectural Historian; Connecticut and Massachusetts SHPO-approved consultant since 2013, and New Hampshire and Rhode Island SHPO-approved since 2015.

Experience and Qualifications:

A native of coastal Connecticut, Ms. Carnell brings expertise in architectural history and historic preservation to AHS. Following her passion for design and architecture, she graduated summa cum laude from the University of Connecticut with a B.S. in Design and Resource Management. She went on to receive an M.Phil. in American Civilization from the George Washington University, with interdisciplinary studies in architectural history, material culture, religious history, and women's history. She has also completed coursework in architectural conservation at Columbia University. Professional affiliations include the National Trust for Historic Preservation, Association for Preservation Technology, Connecticut Trust for Historic Preservation, and the Hartford Preservation Alliance. She is the Chair of the Simsbury Historic District Commission, on which she has served since 2013, and she received a community service award from the town in 2017. She was appointed to the Connecticut Historic Preservation Council in 2018 and to the Council's Executive Committee in 2019.

Ms. Carnell's professional experience and qualifications include:

- Over 20 years of experience in historic resource assessment, restoration, and rehabilitation. Services include historical research, identification of character-defining features, analysis of construction sequence, and development of preservation strategies. Projects involve dozens of properties on the National Register of Historic Places, including single-family dwellings, multi-family housing, churches, libraries, performing arts facilities, civic buildings, and cultural landscapes such as parks and cemeteries.

- Highly skilled in the analysis and documentation of historic buildings, with experience in a wide variety of building types, including single and multi-family housing, industrial buildings, churches, libraries, performing arts facilities, schools, and commercial and civic buildings.

- Knowledge of state and federal regulations, practices, and procedures for historic properties in Connecticut. Excellent working relationship with the Connecticut State Historic Preservation Office (CTSHPO) and Preservation Connecticut.

- Preparation of nominations for the National Register of Historic Places, including the South Willington Historic District in Willington, CT; the American Thread Mill in Willimantic, CT, a large 19th-century industrial complex; and Hampton National Historic Site in Towson, MD, an early 19th-century estate plantation. Currently preparing a nomination for the Oil Mill Historic District in Waterford, CT, which includes architectural and archaeological resources.

- Extensive experience regarding cultural landscapes, including environmental compliance review and advising on the current Resilient Bridgeport project's effects on Seaside Park and other cultural resources in the South End Bridgeport, Connecticut. Designed by Frederick Law Olmsted and Calvert Vaux, Seaside Park is slated for modifications related to storm-surge protection. Other cultural landscape projects include review of proposed renovations to Harkness

Memorial State Park in Waterford, CT; and documentation of cemeteries in Chelmsford and Peabody, MA.

- Evaluation of NRHP eligibility of a historic cemetery and surrounding buildings and features (bridges and retaining walls) in Norfolk, CT, including extensive research in related African American and abolitionist history.

- Extensive experience with federal and state historic tax credit programs. Projects include dozens of rehabilitations of historic houses, apartment buildings, hotels, and industrial and commercial buildings, from early 19th-century vernacular through mid-20th-century Modern buildings.

- Identification and evaluation of impacts on the pending replacement of the 19th-century National Register-eligible Norwalk River Railroad swing bridge, including resource-dense historic districts, bridges, and character-defining elements such as retaining walls. Prepared sections of EA/EIE and coordinated public outreach and stakeholder contact.

- Project manager for three successive on-call historic preservation contracts for the Connecticut State Capitol. Projects involved an inventory of historic building archives, comprehensive building assessment, ADA accessibility, lighting upgrades, and design for a major exterior masonry cleaning and restoration project.

- Townwide inventory of architectural and historic resources for Stow, MA. Updates and expansion of a 1980s historic resource inventory, including archival research and writing property histories.

- Lead architectural historian for historic building and district assessment and impact evaluation on the 2017 Cape Cod Canal transportation improvement feasibility study.

- Preparation of Massachusetts Historical Commission documentation Form A for areas in Bridgewater and Chicopee; Form B for buildings in Bernardston and Northampton, and Form E for cemeteries in Chelmsford and Peabody, all for the MA Department of Transportation.

- Environmental review experience includes CT Green Bank/CEFIA, a program for residential solar panels and energy upgrades. Prepared and reviewed reports for over 1,000 properties. Current work includes Section 106 and 4F compliance project for the 1896 Norwalk River Railroad Bridge and the Route 7/15 interchange, both in Norwalk.

- Successful grant applications for a variety of historic preservation projects, including Connecticut SHPO's Historic Restoration Fund (HRF) grants and CTHP's Historic Preservation Technical Assistance Grants (HPTAG).

- Architectural conservation experience includes hand-on finish analysis and preparation of conservation reports and treatment plans for architects, conservators, owners, and contractors. Projects include many National Register-listed properties, such as the Waterbury, CT, City Hall, Gasson Hall at Boston College, South Church on Nantucket, the Waterville, ME, Opera House and City Hall, and National Historic Landmark finish conservation projects includes the Eisenhower Executive Office Building and United States Capitol in Washington, DC.

Project Organization Chart

City of Shelton

Economic Development Corporation

Kent + Frost, LLC

Brian Kent, PLA, Principal-In-Charge
Lead Planner (Point of contact)

BSC GROUP

Engineering Services

AHS CULTURAL RESOURCE MANAGEMENT

Architectural Historian

REFERENCES

Kent + Frost Client References:

Mystic Seaport Museum
Mr. Ken Wilson , Director of Facilities Management
75 Greenmanville Ave
Stonington, CT 06355
(860) 572-5381

Town of Groton, CT
Mr. Jonathan Reiner, Director of Planning
Email: jreiner@groton-ct.gov
(860) 446-5970

Stonington Crew Boathouse Park
Michael O'Neill, Director of Stonington Crew
Mike.Oneill@egreenbuilt.com
(860) 460-1887

City of Shelton
54 Hill Street
Shelton, Conn. 06484

203-924-1555
Fax: 203-924-4273

August 4, 2021

ADDENDUM # 1

BID# 42-06: RFQ Engineering Services For Shelton Canal Locks Park

Please note a date change on the 12th page into the bid packet (last page prior to the pictures),which read that:

"Letters of interest and corresponding documents must be received no later than 11:00 AM on **Thursday September 2, 2021**. Reponses received or postmarked after this date will not be considered."

The correct date is **Friday, August 27, 2021**, no later than 11:00 AM local time. Please complete and sign below and submit this Addendum # 1 with your sealed Bid to the City.

Sincerely,

Paul H. Hiller, Director of Finance
City of Shelton
203-924-1555 x 1318
p.hiller@cityofshelton.org

I have received Addendum # 1 to Bid # 42-06

Company Name: Kent + Frost, LLC

Contact name (PRINT) : Brian Kent

Contact Signature: BKent

Date: 8/26/2021

NON-COLLUSION AFFIDAVIT

CITY OF SHELTON
54 HILL STREET
SHELTON, CT 06484

State of (Connecticut):

County of (New London):

I state that I am the Principal (Title) of Kent + Frost, LLC (Name of Firm)

And that I am authorized to make this affidavit on behalf of my firm, its owners, directors and officers. I am the person responsible in my firm for the price (s) and the amount of this proposal.

I state that:

(1) The price and the amount on this proposal has been arrived at independently and without consultation, communication, or agreement with any other bidder/proposer.

(2) Neither the price(s) nor the amount of this proposal and approximate price(s) nor approximate amount of this proposal has been disclosed to any other firm or person who is a bidder/proposer and that no disclosure of these items will be made prior to proposal openings.

(3) No attempt has been made or will be made to induce any firm or person to refrain from proposing on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally higher or non competitive proposal.

(4) Neither the said Bidder nor any of its officers, partners, owners, representatives, employees or parties in interest, including this affidavit, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or for any other Bidder, or to fix any overhead, profit or cost element of the Bid price or the Bid price of any Bidder, or to secure through any collusion , conspiracy, connivance or unlawful agreement any advantage against the City of Shelton, owner, or any person interested in the proposed Contract.

(5) The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complimentary or other noncompetitive proposal.

(6) I state that Kent + Frost, LLC (Name of Firm) understands and acknowledges

That all representations of this affidavit are material and important, and will be relied on by the City of Shelton in awarding a contract for which this is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the City of Shelton of the true facts relating to the submission of proposals/bids for this contract.

Signature of Proposer

Sworn to and subscribed before this 25th day of August, 2021

(Notary Public)

My Commission Expires: 8/31/2023

KERRI MCGRATH
Notary Public
My Commission Expires 8/31/2023