



PROPOSAL

REPLACEMENT OF BUNKER HILL ROAD BRIDGE OVER HOP RIVER
BRIDGE #04583
RFP AN-2024-25 01 BRIDGE CONSTRUCTION INSPECTION SERVICES
ANDOVER, CONNECTICUT



Submitted To:

Jeffrey Maguire, First Selectman
Town of Andover
17 School Road
Andover, CT 06232

TECTONIC PN 24-0203

Submitted By:

Jeffrey A. Scala, P.E., NBIS
Vice President & Project Manager
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Suite 201
148 Eastern Blvd,
Glastonbury Ct 06033
tectonicengineering.com



Mr. Jeffrey Maguire, First Selectman
Town of Andover
17 School Road
Andover, CT 06232

February 22, 2024

Re: RFP – AN-2024-25 01 – Replacement of Bunker Hill Road Bridge over Hop River Bridge #04583

Dear Mr. Maguire,

TECTONIC has many years of experience performing CEI services directly relevant to the Upland Road Bridge Reconstruction. We have performed construction inspection on several similar projects for municipalities across Connecticut and for the Connecticut Department of Transportation, following CTDOT policies and procedures while using prescribed CTDOT, MSAT and LOTCIP documentation. **All of our staff proposed have CTDOT experience and we have the available resources and leadership to provide outstanding services to the Town in this capacity.**

If selected for this assignment, **all work will be performed out of our Glastonbury, CT office** with Connecticut-based staff. The accompanying materials document our experience, qualifications, and capacity to see the project through to completion in a professional and comprehensive manner. We possess a thorough understanding of roadway construction and have the overall depth of resources and equipment to undertake this project. Personnel proposed for this project possess the requisite experience, knowledge, and credentials meeting CTDOT requirements. Our proposed team is intimately familiar with oversight, reporting, and documenting procedures including use of CTDOT's 4-book system procedures. All staff exceed the requirements outlined in the RFQ.

Please see our Technical Approach and detailed Scope of Services proposed for your project in Section H of the SF 330.

We look forward to the opportunity to meet with your selection panel to discuss our qualifications, relevant experience, and project approach in further detail. If you require additional information, please contact us at 860-563-2341.

Sincerely,

TECTONIC Engineering Consultants, Geologists & Land Surveyors, D.P.C., Inc.



Jeffrey A. Scala, PE, NBIS
Senior Vice President



GENERAL FIRM INFORMATION

TECTONIC Engineering Consultants, Geologists & Land Surveyors, D.P.C., Inc. (Tectonic) offers a full spectrum of professional engineering and design services to match its clients' growing needs. Established in 1986, Tectonic has grown to become a multi-disciplined engineering firm with a staff of approximately 500. As one of the top 500 Engineering News-Record engineering design firms, since 2001, Tectonic is committed to providing a well-organized, thorough, and practical team that delivers a timely, economical, and quality work product offered from offices located in the Northeast.

Tectonic's mission is to provide the highest level of quality and service; therefore, we concentrate our services on market sectors that reflect the strength and talent of our staff. Our core services include civil, structural, geotechnical, environmental, and transportation engineering, surveying, cultural resource management, design engineering (including planning and permitting), construction management, construction inspection and materials testing.

From our 35 years of experience supporting local communities with various engineering and construction inspection services, we understand the fiscal constraints the local communities are operating under and bring that sensitivity to your project. Time, cost, and quality control are the major objectives of every client, and each construction project requires specialized project management activities to meet these goals. Our personnel have the technical knowledge, as well as the practical experience, to provide solutions before a problem impacts the project schedule or budget.

In addition, Tectonic maintains two fully equipped in-house materials testing laboratories that comply with ASTM E329, and are AASHTO accredited. Our materials testing division is one of a few laboratories between Boston and Washington, D.C. operated as part of a professional engineering company, which has proven to provide a higher level of quality and integrity over the long term.

Our unique blend of engineering expertise, management experience, environmental awareness, and construction specialties enables our firm to handle projects from concept through completion, efficiently and effectively.

Tectonic is honored as one of Engineering News-Record's Top 500 Design Firms since 2001 and has garnered numerous Engineering Excellence Awards from the American Council of Engineering Companies (ACEC).

ARCHITECT – ENGINEER QUALIFICATIONS

PART I – CONTRACT SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION (City and State)

Town of Andover

Replacement of Bunker Hill Road Bridge over Hop River Bridge #04583 - Construction Inspection Services

2. PUBLIC NOTICE DATE

January 24, 2024

3. SOLICITATION OR PROJECT NUMBER

RFP AN-2024-25 01 Bridge Construction Insp. Services

B. ARCHITECT – ENGINEER POINT OF CONTACT

4. NAME AND TITLE

Jeffrey A. Scala, PE, Senior Vice President

5. NAME OF FIRM

Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C., Inc., Glastonbury, CT 06033



6. TELEPHONE NUMBER

(860) 563-2341

7. FAX NUMBER

845.534.5999

8. E-MAIL ADDRESS

jscala@tectonicengineering.com

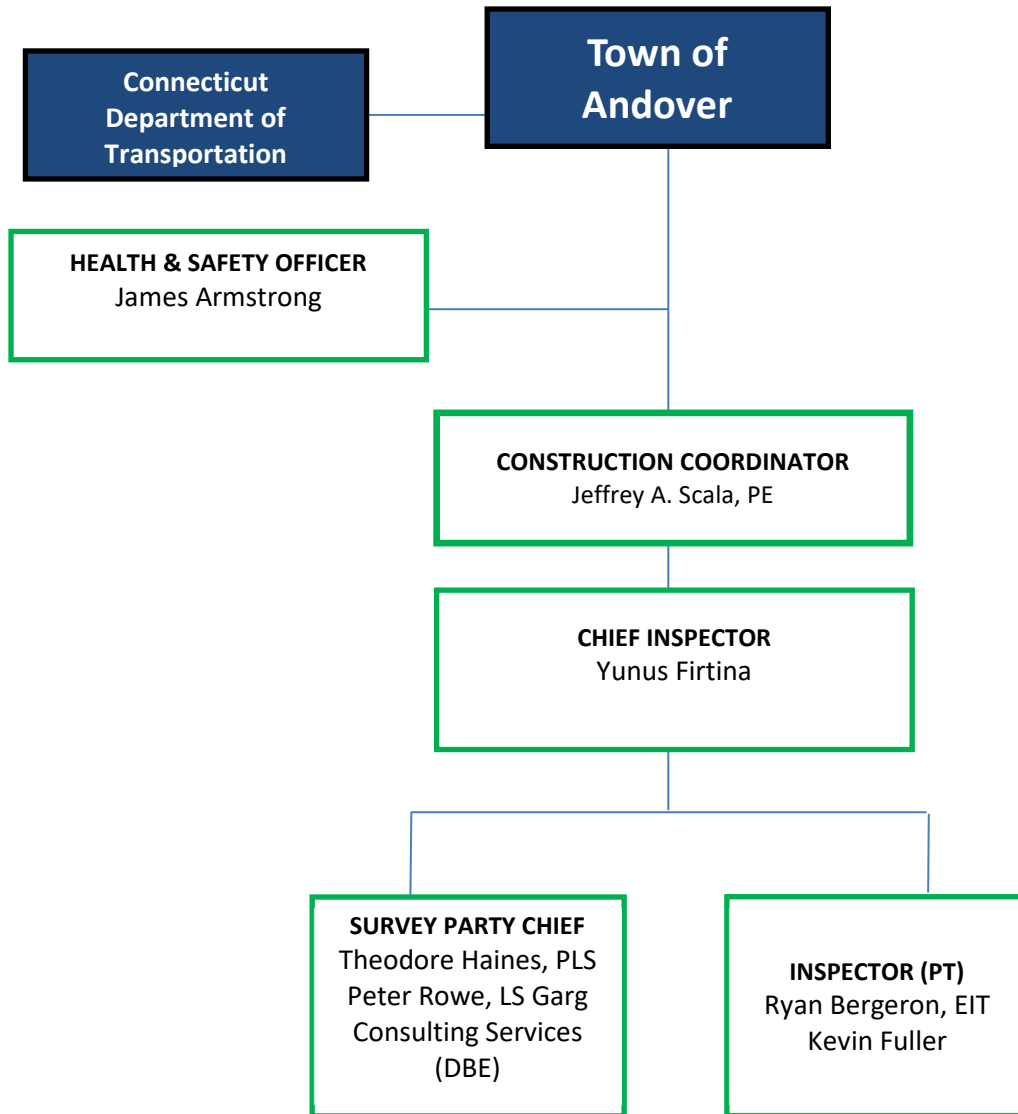
C. PROPOSED TEAM

(Complete this section for the prime contractor and all key subcontractors.)

	(Check)			9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
	PRIME	J-V PARTNER	SUBCON-TRACTOR			
a.	X			Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C., Inc. (TECTONIC) <input checked="" type="checkbox"/> CHECK IF BRANCH OFFICE	148 Eastern Boulevard, Suite 201 Glastonbury, CT 06033	Construction Coordination, Construction Inspection, and Construction Administration
b.			X	Garg Consulting Services Inc <input type="checkbox"/> CHECK IF BRANCH OFFICE	2053 Silas Deane Highway Rocky Hill CT 06067	Construction Survey
c.				<input type="checkbox"/> CHECK IF BRANCH OFFICE		
d.				<input type="checkbox"/> CHECK IF BRANCH OFFICE		
e.				<input type="checkbox"/> CHECK IF BRANCH OFFICE		
f.				<input type="checkbox"/> CHECK IF BRANCH OFFICE		

D. ORGANIZATIONAL CHART OF PROPOSED TEAM

☒ (Attached)



LEGEND

TECTONIC STAFF

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Jeffrey A. Scala, P.E., NBIS	13. ROLE IN THIS CONTRACT Project Manager	14. YEARS EXPERIENCE	
		a. TOTAL 35	b. WITH CURRENT FIRM 15
15. FIRM NAME AND LOCATION (City and State) Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C., Inc., Glastonbury, CT 06033			
16. EDUCATION (DEGREE AND SPECIALIZATION) B.S., Engineering, University of Rhode Island; South Kingstown, RI (1988)		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Engineer in CT (# 17919), NJ (# GE43680), MD (# 28741), NY (# 4704625), RI (# 8923). NCEES Registration; NBIS	
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) ASCE, NCEES, ACEC, CCSU Industry Advisory Board, Storm Water Quality Design, FHWA – AASHTO Roadside Design, FHWA – Design and Operation of Work Zone Traffic Control, FHWA – Geometric Design of Roadways, IRWA – Legal Aspects of Easements and Property Acquisition, Impact Mitigation			

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State) 170 Byram Lake Road Culvert Replacement, New Castle, NY	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2022-Ongoing	CONSTRUCTION (if applicable)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm		
a. This project involve the replacement of an existing culvert at 170 Byram Lake Road in New Castle, NY. Tectonic is providing full consultant engineering services to the Town for the replacement, including: topographic survey, , structural design, hydraulic analysis, permit preparation, geotechnical investigatio, traffic control, and water handling. Mr. Scala is the Project Manager overseeing the project and managing the project staff.		
(1) TITLE AND LOCATION (City and State) North Main Street Over West Branch of Trout Brook, West Hartford, CT	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2017	CONSTRUCTION (if applicable) 2022
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm		
b. Providing complete survey and bridge design services to fully rehabilitate the bridge. This triple arch structures rehabilitation includes uncovering the arches to provide repairs and waterproofing, removal of the end sections to rebuild the headwalls and parapets, partial and full depth patching on the insides of the arches and installation of scour countermeasures. Safety upgrades, utility coordination and property acquisition are also being provided. Construction Coordinator during the construction phase.		
(1) TITLE AND LOCATION (City and State) Rehabilitation of Tuckahoe Road Bridge over the Bronx River, Yonkers & Tuckahoe, NY	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2018-Ongoing	CONSTRUCTION (if applicable)
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm		
c. Project Manager - The \$1M rehabilitation design of the bridge carrying Tuckahoe Road over the Bronx River (BIN 3364940), at the town line of Tuckahoe and Yonkers, New York. The scope of work consisted of the removal and replacement of pavement, curbs and sidewalks; excavation and removal of materials to expose the top of the rigid frame; cleaning, repairing and waterproofing the rigid frame; major resetting and repointing of the stone parapets and wingwalls; and possible relocation of the existing gas mains and telephone ducts. Scour countermeasures were also required to ensure long-term durability of the structure.		
(1) TITLE AND LOCATION (City and State) Design and Construction Inspection for the Rehabilitation of Crosby Street Bridge over Padanaram Brook, Danbury, CT	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2015	CONSTRUCTION (if applicable) 2016
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm		
d. As part of Tectonics' On-Call Bridge Engineering Services for Danbury, Tectonic provided full rehabilitation design for the Crosby Street Bridge over Padanaram Brook near the center of the city. The existing two span stone masonry arch bridge was built in 1899 and is listed by the Connecticut Department of Transportation as an historic bridge. The existing bridge has a roadway width of 31.8' which is adequate for two lanes of one-way traffic. Construction Coordinator during the construction phase.		

(1) TITLE AND LOCATION <i>(City and State)</i> Replacement of the Bigelow Hollow Access Road Culvert over Bigelow Brook Union, Connecticut.	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2011 CONSTRUCTION <i>(if applicable)</i> 2013	
(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Tectonic provided on-call engineering services for this bridge design. The assignment was the replacement of the Bigelow Hollow Access Road Culvert that was damaged during heavy rain in October of 2005. The existing bridge consisted of a 60-foot long, 54" diameter steel pipe of riveted steel plates with four (4) foot long 48" diameter RCP at both ends. The endwalls and headwalls were constructed of mortared stone masonry, except for the southeast wingwall which was constructed of 6.0' x 3.0' x 2.5' concrete blocks. The new structure entailed replacing the culvert long pipe culvert with a 6'x5' precast concrete box culvert, including approximately 36 ft. long walls at each end of the culvert. Tectonic was responsible for all design activities, including, survey, stage construction, geotechnical investigation and report, hydrology, hydraulic and scour analysis reports. Construction Coordinator during the construction phase.		
(1) TITLE AND LOCATION <i>(City and State)</i> ConnDOT – (SPN 0102-0348) Construction Engineering and Inspection Services for Bridge #00059, I-95 “Yankee Doodle Bridge” over Norwalk River and Hendricks Avenue; Norwalk, CT	(2) YEAR COMPLETED PROFESSIONAL SERVICES CONSTRUCTION <i>(if applicable)</i> 2018 - Ongoing	
(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager: The project goal is to rehabilitate the bridge to provide a safe structure for the traveling public. The existing seven (7) span structure, built across the Norwalk River, is 911 feet long, 121 feet 8 inches wide and carries four lanes of traffic in each direction (average daily traffic is 149,400). The rehabilitation includes repair and painting of the deteriorated and deficient structural steel, replacement of the navigation lighting, repair of box beam approach guide rail, replacement of deck expansion joints, repair of the deck and substructure concrete, stabilization of the west abutment embankment and installation of a sedimentation pond, upgrades to the parapet and median barrier, maintenance of the existing sidewalk, diamond grinding of the latex modified concrete wearing surface, cleaning of the bridge deck scuppers, and replacement of bridge drainage. Tectonic provided construction engineering and inspection, construction management, contract administration, technical inspection, and processing all payment estimates to the contractor. The total cost is an estimated \$27.5 Million. The anticipated completion date is September 2022. Construction Project Manager during the construction phase.		
(1) TITLE AND LOCATION <i>(City and State)</i> ConnDOT – (SPN 0063-0633) Route 44 (Albany Avenue) Operational, Safety, and Streetscape Improvements Project; Hartford, CT	(2) YEAR COMPLETED PROFESSIONAL SERVICES CONSTRUCTION <i>(if applicable)</i> 2020	
(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager: The project spanned a 1.14-mile section of Albany Avenue and was constructed to improve safety for vehicles and pedestrians. Extensive streetscape work addressed accessibility, connectivity, vehicle access, and operations; minor drainage modifications were also included. The project included intersection improvements, realignments, and modifications to the traffic flow. Traffic signal improvements included the replacement of seven (7) existing signals, the installation of four (4) new signals, and the removal of one (1) signal. Milling and overlaying of all of the roadways within the project limits was performed, which was more than 6,000 feet on Albany Avenue and side streets. Operations included the installation of new granite curbing, concrete sidewalks, paver bandings, bulb outs, crosswalks, ornamental lighting, extensive street trees and other plantings, bus shelters, and other site amenities. Tectonic provided construction engineering and inspection, construction management, contract administration, technical inspection, and processing all payment estimates to the contractor. Total cost of the project is \$22M. Substantial completion: November 2020. Construction Project Manager during the construction phase.		
(1) TITLE AND LOCATION <i>(City and State)</i> ConnDOT – (SPN 0085-0142) Pavement Preservation of I-395; Norwich, CT	(2) YEAR COMPLETED PROFESSIONAL SERVICES CONSTRUCTION <i>(if applicable)</i> 2013	
(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager: This 7-month \$11M project started in May 2013 and was completed in November 2013. This project included the resurfacing of approximately 18 miles of I-395 from Interchange 79A (Route 2A) in Montville to Interchange 83 (Route 97) in Norwich. The work included milling off 3" of existing pavement and placing a 1" lift of HMA S0.25 leveling course and a 2" lift of PMA S0.5" (polymer modified asphalt) surface course. Five (5) bridges were located within the project limits. Bridgework included minor partial depth patching of deck slabs, milling, bituminous concrete wearing surface, placement of asphaltic plug expansion joints and joint sealing. The majority of the work was done at night to minimize impacts to traffic operations.		

i.	(1) TITLE AND LOCATION <i>(City and State)</i> ConnDOT –Pavement Rehabilitation I-91 Hartford and Windsor; Hartford/Windsor, CT	(2) YEAR COMPLETED PROFESSIONAL SERVICES CONSTRUCTION <i>(if applicable)</i> 2016	
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager: Responsible for this CEI project involving milling and paving operations, surface patching, installation of catch basins, inspection of asphaltic plug joints, expansion joints on both NB and SB of 9 bridges along I-91, and pavement markings. Also responsible for daily work reporting in Site Manager, approval of contractor pay items, and coordination with DOT operations center on a daily basis as well as oversight of MPT operations. The total cost of the project was \$14 million. Construction Project Manager during the construction phase.		
j.	(1) TITLE AND LOCATION <i>(City and State)</i> Town of Rocky Hill; Design and Construction Inspection for the Old Main Street over Goff Brook; Rocky Hill, CT	(2) YEAR COMPLETED PROFESSIONAL SERVICES CONSTRUCTION <i>(if applicable)</i> 2009	
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager: Supervised an in-depth inspection of the bridge including material sampling and testing and condition evaluation report preparation. Tectonic was commissioned by the Town of Rocky Hill to design corrective measures to mitigate the bridge's deficiencies. These measures included partial replacement of the bridge slab, substructure repairs, installation of new concrete parapets and approach guide rails. The work also included the design and reconstruction of approximately 200 linear feet of approach roadways. Tectonic also provided construction inspection services. The total cost of this project was \$165,000. Construction Coordinator during construction phase.		
k.	(1) TITLE AND LOCATION <i>(City and State)</i> Design and Construction Inspection for the Replacement of South Maple St. Bridge, and Roadway Reconstruction of South Maple St. and Powder Hill Road, Enfield, CT	(2) YEAR COMPLETED PROFESSIONAL SERVICES CONSTRUCTION <i>(if applicable)</i> 2011	
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager: Provided design services for the replacement of the substandard South Maple Street Bridge over the Scantic River and the reconstruction of the South Maple Street and Powder Hill Road roadway approaches to provide adequate travel lanes and shoulders between the new bridge and the existing road. Tectonic performed bridge condition inspection of existing structure, prepared the preliminary bridge design report, design development drawings and prepared preliminary and final PS&E bid documents. Construction support include bid phase services, shop drawing review and processing RFI's. The Project was constructed in only 4 months. Tectonic provided periodic inspection at critical points during construction. Construction Coordinator during construction phase.		
l.	(1) TITLE AND LOCATION <i>(City and State)</i> Upper Collinsville Dam, Canton, Connecticut.	(2) YEAR COMPLETED PROFESSIONAL SERVICES CONSTRUCTION <i>(if applicable)</i> 2022	
	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager: This project is for the re-development of the dam that was started in 2015 for the town with Canton Hydro LLC as the project's developer and WWS Wasserkraft as the turn-key solution provider. Tectonic was hired as the design build engineering and inspection consultant in 2018. It is a 1 megawatt (MW) hydroelectric facility and is projected to generate an average 4.3 million kWh of renewable energy annually into the grid. Tectonic provided the structural design for the new one-story fish monitoring building and the powerhouse building modifications, including reinforced concrete floor slab design for the turbine equipment, reinforced concrete slab bridge design for vehicular access to the building, mass reinforced concrete beam design, turbine draft tube reinforced concrete design, concrete transformer pad design, and stability analysis. All the design was performed following the Federal Energy Regulatory Commission (FERC) Engineering Guidelines, AASHTO LRFD, ACI-318, ACI-350 (for under water concrete), ASIC Steel Manual, and FHWA-IF-99. Tectonic also provided survey and construction inspection for the entire project, including grouted rock anchor inspection, grouted rock anchor testing, reinforcement inspections prior to concrete pours, concrete pour testing and sampling, coordination and management of the contractor's activities, and shop drawing review and approval. Total project cost was \$10 million. Construction Coordinator during construction phase.		

	(1) TITLE AND LOCATION <i>(City and State)</i> Project L128-0001 Multi-use Trail Project from Bloomfield to Tariffville in Simsbury.	(2) YEAR COMPLETED PROFESSIONAL SERVICES	CONSTRUCTION <i>(if applicable)</i> 2023
m.	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager: LOTCIP Project L128-0001 is a Bloomfield to Tariffville (Simsbury) Multi-Use Trail Connector. The Project is approximately .87 miles of paved 10-foot-wide recreational trail along Route 189, with intersection improvements and related work which connects to an existing multi-use trail in Bloomfield. This project includes roadway reconstruction and roadway widening, storm drainage structure installation, as well as construction of new sidewalks and ADA compliant ramps for better pedestrian access. A section of the roadway (Route 189) was milled and widened to provide a superelevated right lane to accommodate the new multi-use trail. There are major intersection improvements to improve the alignment and accommodate the traffic lane shifts and numerous pedestrian traffic control devices are to be installed. Construction Coordinator during construction phase.		
	(1) TITLE AND LOCATION <i>(City and State)</i> Project L128-0002 Hop Meadow Street Connectivity, Simsbury.	(2) YEAR COMPLETED PROFESSIONAL SERVICES	CONSTRUCTION <i>(if applicable)</i> 2024
n.	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager: LOTCIP Project L128-0002. This project involves furnishing all labor, materials, equipment necessary for the construction of a sidewalk corridor along the west side of Hopmeadow Street beginning at the southern end at Hoskins Road and continuing north to the CTDOT Storage Facility/Park n' Ride. The design will include a 5ft wide concrete sidewalk along Hopmeadow Street that is approximately 4,400 LF with a varying snow shelf for a majority of the project area. Construction Coordinator during construction phase.		
	(1) TITLE AND LOCATION <i>(City and State)</i> Project L093-0001 Maple Avenue and Robbins Avenue Complete Streets Improvements, Newington, Connecticut.	(2) YEAR COMPLETED PROFESSIONAL SERVICES	CONSTRUCTION <i>(if applicable)</i> 2023
o.	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager: LOTCIP Project L093-0001. This project involves resurfacing of approximately 8,400 linear feet of Maple Hill Avenue and Robbins Avenue beginning at New Britain Avenue (CT Route 174) and ending at Main Street (CT Route 176). Work includes, but is not limited to, milling of the existing pavement, crack sealing, repaving with hot mix asphalt, minor roadway widening, installing new catch basins and pipes, replacing catch basin tops, sidewalk and accessible curb ramp improvements, traffic signal improvements, pavement markings, replacing and resetting signs, landscaping and other necessary appurtenances such as maintenance and protection of traffic. Construction Coordinator during construction phase.		
	(1) TITLE AND LOCATION <i>(City and State)</i> Baker Hollow Road – Construction Inspection Services, Windsor CT	(2) YEAR COMPLETED PROFESSIONAL SERVICES	CONSTRUCTION <i>(if applicable)</i> 2024
p.	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager: This project involves the construction of Baker Hollow Road from Old Poquonock Road to Marshall Phelps Road. The project will include a 30 foot wide paved road with an adequate drainage system, curbing, water and sewer systems, and sidewalks throughout. Construction Coordinator during construction phase.		
	(1) TITLE AND LOCATION <i>(City and State)</i> Project L164-0007: International Drive Improvements- Construction Inspection Services, Windsor CT.	(2) YEAR COMPLETED PROFESSIONAL SERVICES	CONSTRUCTION <i>(if applicable)</i> 2023
q.	(3) BRIEF DESCRIPTION <i>(Brief scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager: LOTCIP Project. This project involves resurfacing of approximately 4,800 linear feet of roadway work along the northbound lanes of the roadway. Work includes, but is not limited to, full depth reconstruction, milling and paving, installing new catch basin tops and curbing. Construction Coordinator during construction phase.		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Yunus Firtina, P.E.	13. ROLE IN THIS CONTRACT Chief Inspector	14. YEARS EXPERIENCE	
		a. TOTAL 8	b. WITH CURRENT FIRM 2
15. FIRM NAME AND LOCATION (City and State) Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C., Inc., Glastonbury, CT 06033			
16. EDUCATION (DEGREE AND SPECIALIZATION) Master of Engineering Civil Engineering, University of Hartford, West Hartford, CT		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Engineer: CT #0032502	
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) ACI –Concrete Field-Testing Technician, NETTCP – Soils and Aggregate Inspector			

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State) ConnDOT – (SPN 0042-0317) Resurfacing, Bridge, and Safety Improvements of Route 2; East Hartford, CT	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable) 2022-ongoing
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm a. Senior Inspector: Project involves extending the service life of Route 2 and improving safety and traffic operations within the section of Route 2 from Maple Street to Pitkin Street (approx. 2.8 miles). The proposed scope of work includes the rehabilitation of the underlying concrete pavement and resurfacing with an asphalt overlay on the mainline and ramps; bridge deck repairs; two (2) bridge deck replacements; parapet and guiderail upgrades to current standards; drainage modifications and upgrades including the replacement of two (2) outfalls into the Connecticut River and jacking approximately 150' of 48" RCP under Route 2; and reconstructing the median to install a concrete barriers and provide wider shoulders. Overhead sign supports and luminaires will be replaced. The project also includes Incident Management System (IMS) upgrades along Route 2 and Route 3. The total cost is estimated at \$62 million. The anticipated completion date is August 2024.		
(1) TITLE AND LOCATION (City and State) CTDOT – (SPN 0063-0703 and 0159-0191) Charter Oak Bridge – Relocation I-91 NB Interchange Exit 29 and Widening of Widening of I-91 NB and RT 5/15 NB to I-84 EB. Hartford, East Hartford, CT & Wethersfield	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable) 2022
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm b. Senior Construction Inspector: This project consists of the Relocation of Interstate 91 (I-91) Northbound Exit 29 and widening of I-91 Northbound and Routes 5/15 Northbound to I-84 Eastbound as well as the Resurfacing, Bridge and Safety Improvements on I-91. Responsibilities included performing inspections such as earthwork, concrete placement, structural steel, reinforcing steel, drainage (catch basin, manhole, concrete pipe, end wall etc.) installation, precast/cast-in-place barrier installation, paving roadway/bridges, traffic sign foundation, highway line striping, electrical related works such as lightening, IMS, camera, cable in duct, rigid metal duct inspections. Conducted field measurements to establish quantities for pay item documentation. Used surveying equipment, Trimble GPS, to collect accurate location data. Created daily reports using DOT Site Manager to document all quantities, equipment, and labor. Reviewed plans, shop drawing and approved submittals for construction. Performed complex quantity and engineering computations.		
(1) TITLE AND LOCATION (City and State) CTDOT – (SPN 0063-0703 and 0159-0191) Charter Oak Bridge – Relocation I-91 NB Interchange Exit 29 and Widening of Widening of I-91 NB and RT 5/15 NB to I-84 EB. Hartford, East Hartford, CT & Wethersfield	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable) 2020-2022
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input type="checkbox"/> Check if project performed with current firm c. Construction Inspector: Performed inspection such as Earthwork, Concrete Placement, Structural Steel, Reinforcing Steel, Drainage (Catch Basin, Manhole, concrete pipe etc.) installation, Precast/Cast-in-Place Barrier installation, paving roadway/bridges, Traffic sign foundation, electrical work etc. <ul style="list-style-type: none"> • Conduct field measurements to establish quantities for pay item documentation • Create daily reports using DOT Site Manager to document all quantities, equipment and labor • Review drawings to prepare for the inspection • Perform complex quantity and engineering computations. 		
(1) TITLE AND LOCATION (City and State) c. Advanced Engineering Technology Inc. New Haven, CT Materials Testing Inc	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable) 2014-2020

**Special Inspector**

- Prepare special inspection statement
- Follow up and coordinate special inspections
- Perform special inspection such as construction monitoring, inspection of soils, aggregates, cold form framing, wood framing, reinforcement steel, structural steel, pile driving, asphalt inspection, masonry inspection
- Create interim reports as related to progress and issues
- Design shallow foundation, deep foundation, slab, beam, grade beam, column, retaining wall etc under supervision of professional engineer.
- Conducting subsurface investigations in connection with residential building, commercial building and infrastructure projects.
- Generate structural drawing and detailing using Autocad
- Develop proposals and determine cost and schedule for investigation
- Analyse soil samples prepare reports detailing the results
- Visit job sites, determine stability of soil and evaluate bearing capacity for bottom of footing
- Prepare complex engineering reports give professional opinions and find practical geotechnical solution.
- Determine and analysis vertical and horizontal loads that acting over structural elements and foundation.
- Review and interpret drawings and specifications
- Prepare geotechnical engineering reports based on project parameters and site conditions discovered during geotechnical investigations
- Review submittals and RFI
- Provide technical support and solve technical problems
- Work with foreman to ensure structures are built in conformance with the contract requirements

Involved several project but not limited to:

1. Q bridge on I-95
2. Moses Wheeler Bridge on I-95
3. Intersection improvement route 74 & route 195 CT DOT#142 Tolland, CT
4. Thames Street rehabilitation City project, Groton, CT
5. Aetna insurance parking lot, Hartford, CT
6. Meriden DOT Garage
7. Waterbury Train Station road and parking project
8. City of New Haven Q House
9. Natural gas line in Wallingford and Southington, CT
10. VA Hospital Road and sanitary project
11. Cell Tower projects at various locations in CT and MA
12. Rowland Tech in Wallingford, CT
13. Yale Residential College, New Haven, Soil, concrete, structural steel, masonry, etc
14. University of Hartford Dormitory project
15. Ansonia Police Station
16. CVS-Shelton
17. CVS-Trumbull
18. CVS-Hamden
19. Metro Star Residential Project-Milford, CT
20. Carter Mario Law office
21. Naugatuck Community College - New Building project

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Ryan Bergeron, E.I.T.		13. ROLE IN THIS CONTRACT Bridge Engineer		14. YEARS EXPERIENCE a. TOTAL 7 b. WITH CURRENT FIRM 3	
15. FIRM NAME AND LOCATION (City and State) Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C., Inc., Glastonbury, CT 06033					
16. EDUCATION (DEGREE AND SPECIALIZATION) B.S. Civil Engineering University of Connecticut, Storrs, CT			17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) EIT.0011543, Connecticut (Exp: 1/12/2026)		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) OSHA 10-Hour Safety for Construction, Troxler Nuclear Density Gauge Certification. ACI Concrete Field-Testing Technician-Grade 1, NETTCP HMA Paving Inspector, NETTCP Soils & Aggregate Inspector, ATTSA -Traffic Control Supervisor (Pending), QCIS – Qualified Compliance of Stormwater					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State) West Hartford North Main Street Bridge Design; West Hartford, CT		(2) YEAR COMPLETED PROFESSIONAL SERVICES 2017		CONSTRUCTION (if applicable) 2022
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Staff Engineer / Inspector - Bridge design services to fully rehabilitate the bridge. The work provided on the triple arch structures rehabilitation includes inspection of the uncovering the arches to find areas that need repairs and design of the concrete parapet for site conditions. Provided Dailey inspection of work including on site Concrete and HMA testing.				
b.	(1) TITLE AND LOCATION (City and State) ConnDOT – (SPN 0102-0348) Construction Engineering and Inspection Services for Bridge #00059, I-95 “Yankee Doodle Bridge” over Norwalk River and Hendricks Avenue; Norwalk, CT		(2) YEAR COMPLETED PROFESSIONAL SERVICES 		CONSTRUCTION (if applicable) 2022
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Staff Inspector - The project goal is to rehabilitate the bridge to provide a safe structure for the traveling public. The rehabilitation includes repair and painting of the deteriorated and deficient structural steel, replacement of the navigation lighting, repair of box beam approach guide rail, replacement of deck expansion joints, repair of the deck and substructure concrete, stabilization of the west abutment embankment and installation of a sedimentation pond, upgrades to the parapet and median barrier, maintenance of the existing sidewalk, diamond grinding of the latex modified concrete wearing surface, cleaning of the bridge deck scuppers, and replacement of bridge drainage. Tectonic provided construction engineering and inspection, construction management, contract administration, technical inspection, and processing all payment estimates to the contractor. The total cost is an estimated \$27.5 Million.				
c.	(1) TITLE AND LOCATION (City and State) Upper Collinsville Dam, Canton, Connecticut.		(2) YEAR COMPLETED PROFESSIONAL SERVICES 		CONSTRUCTION (if applicable) 2022
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Staff Engineer / Inspector - Provided structural engineering related to the reinstallation of a new turbine into the existing historic powerhouse building, new concrete slab bridge, new concrete fish ladder, modification of the intake race dam, new retaining walls and other elements necessary. Work also involved construction oversight of the contractor's operations to ensure the quality meets FERC requirements. Concrete and grout material testing was also provided on all key structural components of the job. This testing also involved inspecting the placement of the rebar and concrete forms before the concrete placement.				
d.	(1) TITLE AND LOCATION (City and State) ConnDOT – (SPN 0042-0317) Construction Engineering and Inspection Services for the Resurfacing, Bridge, and Safety Improvements of Route 2; East Hartford, CT.		(2) YEAR COMPLETED PROFESSIONAL SERVICES 		CONSTRUCTION (if applicable) Ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Inspector - The project goal is to rehabilitate the bridge to provide a safe structure for the traveling public. The rehabilitation includes repair and painting of the deteriorated and deficient structural steel, replacement of the navigation lighting, repair of box beam approach guide rail, replacement of deck expansion joints, repair of the deck and substructure concrete, stabilization of the west abutment embankment and installation of a sedimentation pond, upgrades to the parapet and median barrier, maintenance of the existing sidewalk, diamond grinding of the latex modified concrete wearing surface, cleaning of the bridge deck scuppers, and replacement of bridge drainage. Tectonic provided construction engineering and inspection, construction management, contract administration, technical inspection, and processing all payment estimates to the contractor. The total cost is an estimated \$27.5 Million.				
e.	(1) TITLE AND LOCATION (City and State) Culvert Repairs for Braeburn Road over West Branch Trout Brook - Bridge No. 06076; West Hartford, CT.		(2) YEAR COMPLETED PROFESSIONAL SERVICES 2016		CONSTRUCTION (if applicable) 2017

<p>(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE</p> <p>Staff Engineer - performed an inspection of the culvert to identify the critical issues. A survey was performed of the project site, with the rights-of-way and wetlands delineated. A hydrologic and hydraulic analysis was performed which included a scour analysis for the existing and proposed repair conditions. Additional services included completing and submitting environmental permits, traffic and staging plans, design specifications and special provisions, and a construction cost estimate. During construction he performed site visits to inspect the quality of work.</p>	<input checked="" type="checkbox"/> Check if project performed with current firm					
<p>(1) TITLE AND LOCATION (City and State)</p> <p>Hudson Valley Shakespeare Festival/Snake Hill Road Access Bridge, Garrison, NY</p>	<p>(2) YEAR COMPLETED</p> <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION (if applicable)</td> </tr> <tr> <td>Ongoing</td> <td></td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)	Ongoing	
PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)					
Ongoing						
<p>f. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE</p> <p>This project involves the design of a new access bridge to the Hudson Valley Shakespeare Festival site in Garrison, NY. Tectonic is providing consultant engineering services for the client for the design of the 130ft long bridge. The bridge will be designed to support traffic loadings per AASHTO LRFD Bridge Design Specifications. Based on preliminary concept, prefabricated bridge superstructure will be used. Mr. Bergeron will be assisting in the structural design aspect for this project.</p>	<input checked="" type="checkbox"/> Check if project performed with current firm					
<p>(1) TITLE AND LOCATION (City and State)</p> <p>170 Byram Lake Road Culvert Replacement, New Castle, NY</p>	<p>(2) YEAR COMPLETED</p> <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION (if applicable)</td> </tr> <tr> <td>Ongoing</td> <td></td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)	Ongoing	
PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)					
Ongoing						
<p>g. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE</p> <p>This project involve the replacement of an existing culvert at 170 Byram Lake Road in New Castle, NY. Tectonic is providing full consultant engineering services to the Town for the replacement, including: topographic survey, , structural design, hydraulic analysis, permit preparation, geotechnical investigation, traffic control, and water handling. Mr. Bergeron is assisting in the structural design aspect for this project.</p>	<input checked="" type="checkbox"/> Check if project performed with current firm					
<p>(1) TITLE AND LOCATION (City and State)</p> <p>Route 120 Quaker Road Bridge Superstructure Replacement and Rehabilitation , New Castle, NY</p>	<p>(2) YEAR COMPLETED</p> <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION (if applicable)</td> </tr> <tr> <td>Ongoing</td> <td></td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)	Ongoing	
PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)					
Ongoing						
<p>h. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE</p> <p>This project involves the superstructure replacement and rehabilitation of the 240ft long bridge along Route 120 Quaker Rd in New Castle, NY. Tectonic provided bridge inspection services and is providing consultant engineering services to the Town for the superstructure replacement and rehabilitation, including: topographic survey, structural design, wetland delineation, environmental studies, hydraulic analysis, permit preparation, geotechnical investigation, and slope stabilization. Mr. Bergeron is assisting in the structural design aspect for this project.</p>	<input checked="" type="checkbox"/> Check if project performed with current firm					
<p>(1) TITLE AND LOCATION (City and State)</p> <p>Replacement of South Maple Street over Scantic River, Enfield, CT,</p>	<p>(2) YEAR COMPLETED</p> <table border="1"> <tr> <td>PROFESSIONAL SERVICES</td> <td>CONSTRUCTION (if applicable)</td> </tr> <tr> <td>2011</td> <td>2012</td> </tr> </table>		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)	2011	2012
PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)					
2011	2012					
<p>i. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE</p> <p>This project involved the replacement of the South Maple Street Bridge over the Scantic River and roadway approach improvements in the Town of Enfield. The existing bridge was removed and replaced with a new fully precast structure. Construction cost was \$2.2 million dollars. Mr. Bergeron assisted in the structural design aspect for this project and performed periodic construction inspection.</p>	<input checked="" type="checkbox"/> Check if project performed with current firm					

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Kevin Fuller	13. ROLE IN THIS CONTRACT Senior CAD Designer	14. YEARS EXPERIENCE a. TOTAL 28	b. WITH CURRENT FIRM 22
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15. FIRM NAME AND LOCATION (City and State)

Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C., Inc., Glastonbury, CT 06033



16. EDUCATION (DEGREE AND SPECIALIZATION)

A.S. Mechanical Engineering, 1989, Hartford State Technical College

17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE)

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Certificate in Machine Drafting Program (1983) Vinal Regional Vocational Technical School, Middletown, CT

Certificate of Apprenticeship Machine Drafting Program (1988), State of Connecticut

ACI –Concrete Field-Testing Technician

NETTCP – Hot Mix Asphalt

QCIS - Stormwater Compliance Inspector

19. RELEVANT PROJECTS

<p>(1) TITLE AND LOCATION (City and State) Rehabilitation of Tuckahoe Road Bridge over Bronx River, Yonkers & Tuckahoe, NY</p>	<p>(2) YEAR COMPLETED PROFESSIONAL SERVICES 2018-ongoing</p>	<p>CONSTRUCTION (if applicable)</p>
<p>a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE This project involves the rehabilitation of the bridge (BIN 3364940), at the town line of Tuckahoe and Yonkers, New York. The existing bridge carrying Tuckahoe Road over the Bronx River is a single span concrete arch bridge built in 1916. The bridge has an asphalt wearing surface over a concrete slab on fill and wide concrete sidewalks on either side. The overall size is approximately 44 feet long by 66 feet wide. The work involves removal and replacement of pavement, curbs and sidewalks; excavation and removal of materials to expose the top of the arch; cleaning, repairing and waterproofing the rigid frame; major repointing of the spandrels and wingwalls; replacement of the stone parapets with reinforced concrete with stone facades. Scour countermeasure are required to ensure long-term durability of the structure. The construction cost is estimated at \$2,000,000. Tectonic is preparing detailed design plans specifications and cost estimates for the rehabilitation work. Also included in the scope of services is the preparation of all surveying, condition inspection and load rating, and permitting. Mr. Fuller is providing all CAD drawings for this project.</p>	<p><input checked="" type="checkbox"/> Check if project performed with current firm</p>	
<p>b. (1) TITLE AND LOCATION (City and State) 170 Byram Lake Road Culvert Replacement, New Castle, NY</p>	<p>(2) YEAR COMPLETED PROFESSIONAL SERVICES 2022</p>	<p>CONSTRUCTION (if applicable)</p>
<p>(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE This project involves the replacement of an existing culvert at 170 Byram Lake Road in New Castle, NY. Tectonic is providing full consultant engineering services to the Town for the replacement, including: topographic survey, structural design, hydraulic analysis, permit preparation, geotechnical investigation, traffic control, and water handling. Mr. Fuller is preparing all CAD drawings for this project.</p>	<p><input checked="" type="checkbox"/> Check if project performed with current firm</p>	
<p>c. (1) TITLE AND LOCATION (City and State) Route 120 Quaker Road Bridge Superstructure Replacement and Rehabilitation, New Castle, NY</p>	<p>(2) YEAR COMPLETED PROFESSIONAL SERVICES 2022-ongoing</p>	<p>CONSTRUCTION (if applicable)</p>
<p>(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE This project involves the superstructure replacement and rehabilitation of the 240 ft long bridge along Route 120 Quaker Rd in New Castle, NY. Tectonic provided bridge inspection services and is providing consultant engineering services to the Town for the superstructure replacement and rehabilitation, including: topographic survey, structural design, wetland delineation, environmental studies, hydraulic analysis, permit preparation, geotechnical investigation, and slope stabilization. Mr. Fuller has prepared temporary repair details and all CAD drawings for this project.</p>	<p><input checked="" type="checkbox"/> Check if project performed with current firm</p>	
<p>d. (1) TITLE AND LOCATION (City and State) North Main Street over West Branch of Trout Brook, West Hartford, CT</p>	<p>(2) YEAR COMPLETED PROFESSIONAL SERVICES 2017</p>	<p>CONSTRUCTION (if applicable) 2022</p>
<p>(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Mr. Fuller provided construction plans, repair details, MPT plans, and all contract drawings for the rehabilitation of the bridge. This triple arch structures rehabilitation included uncovering the arches to provide repairs and waterproofing, removal of the end sections to rebuild the headwalls and parapets, partial and full depth patching on the insides of the arches and installation of scour countermeasures. Safety upgrades, utility coordination and property acquisition were also provided.</p>	<p><input checked="" type="checkbox"/> Check if project performed with current firm</p>	
<p>e. (1) TITLE AND LOCATION (City and State) Braeburn Road over Trout Brook, Culvert Rehabilitation, West Hartford CT</p>	<p>(2) YEAR COMPLETED PROFESSIONAL SERVICES 2018</p>	<p>CONSTRUCTION (if applicable) On-going</p>
<p>(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE Mr. Fuller prepared the drawings for the full rehabilitation of twin 6'-3 x 9'-6" CM Pipes. This project included hydrologic and hydraulic analysis of existing and proposed conditions to assess the impact to the flood elevation due to the changes. Prepared traffic control plan and developed specifications to the specialized work.</p>	<p><input checked="" type="checkbox"/> Check if project performed with current firm</p>	
<p>f. (1) TITLE AND LOCATION (City and State)</p>	<p>(2) YEAR COMPLETED</p>	

Project L128-0002 Hop Meadow Street Connectivity, Simsbury.	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable) 2024
<div style="display: flex; justify-content: space-between;"> <div> <p>(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE</p> <p>Project Manager: LOTCIP Project L128-0002. This project involves furnishing all labor, materials, equipment necessary for the construction of a sidewalk corridor along the west side of Hopmeadow Street beginning at the southern end at Hoskins Road and continuing north to the CTDOT Storage Facility/Park n' Ride. The design will include a 5ft wide concrete sidewalk along Hopmeadow Street that is approximately 4,400 LF with a varying snow shelf for a majority of the project area. Construction Coordinator during construction phase.</p> </div> <div> <input checked="" type="checkbox"/> Check if project performed with current firm </div> </div>		
<p>(1) TITLE AND LOCATION (City and State)</p> Project L093-0001 Maple Avenue and Robbins Avenue Complete Streets Improvements, Newington, Connecticut.	<p>(2) YEAR COMPLETED</p> PROFESSIONAL SERVICES	CONSTRUCTION (if applicable) 2023
<div style="display: flex; justify-content: space-between;"> <div> <p>(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE</p> <p>Project Manager: LOTCIP Project L093-0001. This project involves resurfacing of approximately 8,400 linear feet of Maple Hill Avenue and Robbins Avenue beginning at New Britain Avenue (CT Route 174) and ending at Main Street (CT Route 176). Work includes, but is not limited to, milling of the existing pavement, crack sealing, repaving with hot mix asphalt, minor roadway widening, installing new catch basins and pipes, replacing catch basin tops, sidewalk and accessible curb ramp improvements, traffic signal improvements, pavement markings, replacing and resetting signs, landscaping and other necessary appurtenances such as maintenance and protection of traffic. Construction Coordinator during construction phase.</p> </div> <div> <input checked="" type="checkbox"/> Check if project performed with current firm </div> </div>		
<p>(1) TITLE AND LOCATION (City and State)</p> Project L164-0007: International Drive Improvements- Construction Inspection Services, Windsor CT.	<p>(2) YEAR COMPLETED</p> PROFESSIONAL SERVICES	CONSTRUCTION (if applicable) 2023
<div style="display: flex; justify-content: space-between;"> <div> <p>(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE</p> <p>Project Manager: LOTCIP Project. This project involves resurfacing of approximately 4,800 linear feet of roadway work along the northbound lanes of the roadway. Work includes, but is not limited to, full depth reconstruction, milling and paving, installing new catch basin tops and curbing. Construction Coordinator during construction phase.</p> </div> <div> <input checked="" type="checkbox"/> Check if project performed with current firm </div> </div>		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME Theodore Haines, P.L.S.	13. ROLE IN THIS CONTRACT Lead Survey Manager	14. YEARS EXPERIENCE a. TOTAL 22 b. WITH CURRENT FIRM 14	
15. FIRM NAME AND LOCATION (City and State) Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C., Inc., Glastonbury, CT 06033			
16. EDUCATION (DEGREE AND SPECIALIZATION) B.S. Surveying/Engineering State University of New York Alfred State College A.A.S. Forest Technology, State University of New York School of Environmental Science and Forestry New York State Ranger School at Wanaken		17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Professional Land Surveyor: New York # 50440 New Jersey # 24GS04326500 Connecticut # 70300	
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) New York State Association of Professional Land Surveyors; Delaware-Hudson Land Surveyors Association			



19. RELEVANT PROJECTS

a.	(1) TITLE AND LOCATION (City and State) Town of New Castle, Millwood Sidewalk Improvement; Millwood, NY	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2021	CONSTRUCTION (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm As Survey Manager, responsible for project oversight and QA/QC. Tectonic performed a boundary/topographic of approximately 3 miles of the Croton Turnpike. Topography was performed using a combination of two- and three-man field crew to increase efficiency. Topography was shot at a maximum spacing of 50 feet along the centerline and edges of pavement and at all site features. Utilities were mapped based on records and utility mark outperformed by providers servicing the area. Inverts of drainage and sanitary sewers were measured by Tectonic field staff. As part of this project, Tectonic produced several Acquisition Maps to create permanent easements and fee taking per NYS DOT Standards.		
b.	(1) TITLE AND LOCATION (City and State) Town of Hempstead, Northern Hamlet Survey; Hempstead, NY	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2020	CONSTRUCTION (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm As Survey Manager, responsible for project oversight and QA/QC. Tectonic performed topographic mapping for 17,600 lineal feet of streets to be used for road and sidewalk improvements including drainage, grading, and ADA ramps. The survey was performed using a combination of survey techniques including traditional total station and mobile LiDAR. Topography was mapped for the full width of the road including up to 4 feet behind the existing sidewalk. Spot elevations were shown at 25 ft. spacing perpendicular to a baseline established in the center of the road. The spot elevations were shown at centerline of road, top and bottom of curb, front and back of sidewalk and 4 ft. behind the sidewalk.		
c.	(1) TITLE AND LOCATION (City and State) New York City Department of Design and Construction, Laurelton Avenue Survey; Queens, NY	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2016	CONSTRUCTION (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm As Survey Manager, responsible for project oversight and QA/QC. Tectonic performed a topographic survey of approximately 14,000 linear feet of streets located in Queens as part of improvements to the street infrastructure. The survey was a NYCDOT type survey which includes a detailed topography of the entire route including location of all utilities. This project involved the establishment, location and mapping of all right-of-way lines, property lines, surface features and subsurface features including utilities with spot elevations and capacities. The mapping requirements required the preparation of profiles of the street centerline, storm and sewer lines, top and bottom of curb and back of walk.		
d.	(1) TITLE AND LOCATION (City and State) Surveying Services, Cemetery of the Highlands, Highland Mills, NY	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2015	CONSTRUCTION (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Tectonic provided construction layout surveying services for the expansion of a cemetery located in Highland Mills, NY. Scope of work included construction layout of drainage structures, new road system and cemetery plots. At the completion of construction, Tectonic will prepare an as-built of the new improvements		
e.	(1) TITLE AND LOCATION (City and State) SPEC Consulting, LLC, Midland Terminal Surveying Services, Midland, PA	(2) YEAR COMPLETED PROFESSIONAL SERVICES 2015	CONSTRUCTION (if applicable)
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Tectonic performed a Boundary/Topographic survey of multiple parcels, approximately 125-acres, to study the feasibility of using the property for a new oil terminal. Tectonic also performed a laser scan of the existing tank area, picking up the location of storage tanks, piping, and other site features.		

**F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S
QUALIFICATIONS FOR THIS CONTRACT**
(Present as many projects as requested by the agency, or 10 projects, if not specified.
Complete one Section F for each project)

20. EXAMPLE PROJECT KEY NUMBER

01

21. TITLE AND LOCATION (City and State)

**CRCOG - CTDOT LOTCIP Engineering Construction:
On-Call List 2**

22. YEAR COMPLETED

PROFESSIONAL SERVICES

CONSTRUCTION (if applicable)

On-going

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

CRCOG

b. POINT OF CONTACT NAME

see below

c. POINT OF CONTACT TELEPHONE NUMBER

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

Tectonic Engineering and Surveying Consultants P.C. (Tectonic) is providing construction engineering and inspection, under the general supervision of the Municipality assigned Project Engineer in conformance with the current version of the "LOTICIP Manual" and the "Information Pamphlet for Contracting Engineers Performing Construction Inspection," dated July 1996 for the following projects.

Newington - Maple Hill Avenue and Robbins Avenue Complete Streets Project 2023

This project involves resurfacing of approximately 8,400 linear feet of Maple Hill Avenue and Robbins Avenue beginning at New Britain Avenue (CT Route 174) and ending at Main Street (CT Route 176). Work includes, but is not limited to, milling of the existing pavement, crack sealing, repaving with hot mix asphalt, minor roadway widening, installing new catch basins and pipes, replacing catch basin tops, sidewalk and accessible curb ramp improvements, traffic signal improvements, pavement markings, replacing and resetting signs, landscaping and other necessary appurtenances such as maintenance and protection of traffic.

Reference: Chris Zibbideo, Town Engineer 860.665.8572

Windsor - International Drive Roadway Improvements, Phase 1 2023

This project involves resurfacing of approximately 4,800 linear feet of roadway work along the northbound lanes of the roadway. Work includes, but is not limited to, full depth reconstruction, milling and paving, installing new catch basin tops and curbing.

Reference: Jenna Zinky, Assistant Town Engineer 860.285.1874

Windsor - Baker Hollow Road Reconstruction Project 2023-ongoing

This project involves the construction of Baker Hollow Road from Old Poquonock Road to Marshall Phelps Road. The project will include a 30 foot wide paved road with an adequate drainage system, curbing, water and sewer systems, and sidewalks throughout.

Reference: Jenna Zinky, Assistant Town Engineer 860.285.1874

Simsbury - Hopmeadow Street Connectivity Project 2023- on going

This project involves furnishing all labor, materials, equipment necessary for the construction of a sidewalk corridor along the west side of Hopmeadow Street beginning at the southern end at Hoskins Road and continuing north to the CTDOT Storage Facility/Park n' Ride. The design will include a 5ft wide concrete sidewalk along Hopmeadow Street that is approximately 4,400 LF with a varying snow shelf for a majority of the project area.

Reference: Adam Kessler, Town Engineer 860.876.9909

Simsbury - Bloomfield-Tariffville Multi-Use Trail Connector Project 2023

The project is approximately 0.87 miles of paved 10 foot wide recreational trail, intersection improvements and related work. The project begins approximately 600 linear feet west of State Route 189 and connects to an existing multi-use trail in Bloomfield. The trail then continues north along State Route 189 for approximately 0.75 miles to the intersection with Main Street in Tariffville. Included in the project are drainage improvements, a landscaping buffer along the trail route, intersection improvements and traffic signal modifications at the intersection of State Route 189/ 315 (Elm Street), sidewalk improvements, and the installation of bike racks and construction of retaining wall at the northern terminus of the multi-use trail. website development, and daily communication was required to maintain close coordination with the affected property owners and users due to the tight corridor and extensive Rights of Way "Rights" to perform work on private property. During construction, access to all properties, including the over 100 businesses within the project limits, and pedestrian access was also carefully coordinated. Tectonic received "exceptional" ratings on this project.

Reference: Adam Kessler, Town Engineer 860.876.9909

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
a.	Tectonic Engineering Consultants, Geologists & Land Surveyors D.P.C., Inc.	Glastonbury, CT	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT
(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)

20. EXAMPLE PROJECT KEY NUMBER

02

21. TITLE AND LOCATION *(City and State)*

North Main Street Over West Branch of Trout Brook, West Hartford, CT

22. YEAR COMPLETED

PROFESSIONAL SERVICES

2017

CONSTRUCTION *(if applicable)*

2022

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

Town of West Hartford

b. POINT OF CONTACT NAME

Mr. Duane Martin, Town Engineer

c. POINT OF CONTACT TELEPHONE NUMBER

860.561.7539

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

Subsequent to the inspection of this 1901 three-barrel arch structure, by Tectonic, it was determined that this bridge is in poor condition and requires immediate repairs due to the extent of concrete deterioration, including severe spalling.

The rehabilitation is necessary in order to slow down the deterioration, improve the bridge load carrying capacity and extend its service life, for the safety of the pedestrians and the traveling public.

The proposed work entails the removal of the fill material from the existing arch structure to expose the top of the slab for concrete patching repairs and the placement of a membrane waterproofing. Concrete repairs will also be made to the underside of the arch and the downstream face of the structure. Both parapets will be removed and replaced, including portion of the upstream spandrel wall.

Also, a channel revetment at the bridge will be placed as a scour countermeasure. This countermeasure is intended to stabilize the channel and protect the crossing from further development of bridge scour that can lead to the closing of the bridge.

Approach roadway excavation will be required to support the excavation at the bridge. Guardrail will be erected at the approaches. The existing utilities will be temporarily supported and the watermain replaced.

Also, Tectonic is responsible for the Stream Channel Encroachment and the local Inland, Wetland and Watercourse permits and the development of a Hydraulic and Scour reports. Tectonic will provide construction support services. The construction cost is \$1,200,000.00.

Performed the construction inspection for the project.

Project Relevance

✓	DOT Policies and Procedures
✓	Hydrology & Hydraulics Engineering
✓	Geotechnical Engineering
✓	Bridge Rehab/Replacement
✓	Construction Inspection Services



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
a. Tectonic Engineering Consultants, Geologists & Land Surveyors D.P.C., Inc.	Rocky Hill, CT	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>	20. EXAMPLE PROJECT KEY NUMBER <div style="font-size: 24pt; color: orange; text-align: center;">03</div>
--	--

21. TITLE AND LOCATION (City and State) Rehabilitation of Crosby Street Bridge over Padanaram Brook, Danbury, CT	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2015	CONSTRUCTION (if applicable) 2016

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER City of Danbury	b. POINT OF CONTACT NAME Mr. Farid Khouri, PE	c. POINT OF CONTACT TELEPHONE NUMBER 203-797-4641

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

As part of Tectonic's On-Call Bridge Engineering Services for Danbury, Tectonic provided full rehabilitation design for the Crosby Street Bridge over Padanaram Brook near the center of the city. **The existing two span stone masonry arch bridge was built in 1899 and is listed by the Connecticut Department of Transportation as an historic bridge.** The existing bridge has a roadway width of 31.8' which is adequate for two lanes of one-way traffic.

The existing bridge was rehabilitated by removing the existing roadway surface and fill to expose the top of the stone arch, repairing cracks with mortar or epoxy injection and placing membrane waterproofing along the top of the arch. Additional repairs included re-pointing of the stone masonry spandrel walls, installation of new bridge rail with an historic look, rebuilding of the downstream wingwalls, dredging of the silt in the river channel and providing scour counter measures.

Environmental services included collecting sediment samples from the proposed dredging area, analyzing the samples for waste disposal characteristics, and comparing the results to Connecticut soil standards. Services include preparing project specifications for the appropriate handling and disposal of the contaminated dredged sediments in accordance with DEP Remediation Standard Regulations (RSRs) and NPDES requirements.

Tectonic prepared permits for Local Wetlands, Flood Management Certification and ACOE Category 2 permits.

Surveying services included establishing the right-of-way and property lines within the area of the project, and providing a detailed topographic survey of the area immediately surrounding the bridge, both approach roads on either side of the bridge for a distance of 300-ft, and the brook for a distance of 500-ft upstream and 300-ft downstream from the bridge. Cross sections of the stream were field measured at 40' intervals and extended to the 100-year flood line for a stream hydrology study. All survey data was tied to Connecticut State Plane coordinate system, and mapping was produced in digital format conforming to the Connecticut Department of Transportation standards. Tectonic performed the construction inspection.

Project Relevance	
✓	DOT Policies and Procedures
✓	Hydrology & Hydraulics Engineering
✓	Geotechnical Engineering
✓	Bridge Rehab/Replacement
✓	Construction Inspection Services



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
a. (1) FIRM NAME Tectonic Engineering Consultants, Geologists & Land Surveyors D.P.C., Inc.	(2) FIRM LOCATION (City and State) Rocky Hill, CT	(3) ROLE Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>	20. EXAMPLE PROJECT KEY NUMBER <div>04</div>
--	--

21. TITLE AND LOCATION (City and State) ConnDOT (SPN 0042-0317) – Resurfacing, Bridge and Safety Improvements on Route 2, East Hartford, CT	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION <i>(if applicable)</i> Ongoing

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER ConnDOT	b. POINT OF CONTACT NAME Mr. Mark St. Germain, PE	c. POINT OF CONTACT TELEPHONE NUMBER 860 258-4646

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT <i>(Include scope, size, and cost)</i>
--

Tectonic is currently providing construction inspection services for this project that consists of resurfacing, bridge, and safety improvements along the Route 2 corridor from the Exit 3 (Pitkin Street) to Exit 5C (Maple Street), (approx. 2.8 miles). The project also includes Incident Management Systems (IMS) upgrades and extension of coverage on Route 2 and Route 3. This Project will include the following improvements within the project area: roadway rehabilitation; mill and overlay; concrete pavement base repair; ramps; median reconstruction and improvements including the removal of the existing sub-standard metal beam rail and installation of concrete barrier; wider shoulders; acceleration/deceleration lane extensions; drainage modifications including the reconstruction of two outfalls into the Connecticut river; all new signage including overhead structures; landscaping and new highway lighting will be installed throughout the length of the project.

Project Relevance	
✓	DOT Policies and Procedures
✓	Hydrology & Hydraulics Engineering
✓	Geotechnical Engineering
✓	Bridge Rehab/Replacement
✓	Construction Inspection Services



crosswalks, and ADA ramps.

Improvements to nine (9) bridges will also be performed. This includes two full (2) bridge deck replacements, bridge deck repairs, and concrete parapet and guide rail upgrades.

Exit 5B ramps, Cambridge Drive (westbound on-ramp), and Sutton Avenue (eastbound off-ramp) will be permanently closed to improve traffic safety, access, and mobility; due to closures, traffic will be diverted to Exits 5A and 5C. Increased volumes at ramps 5A/5C are addressed by intersection improvements including traffic signal replacements, ramp realignments, shoulder and lane width adjustments, dedicated turn lanes, and ADA improvements. Streetscape improvements at the Main/Broad/Maple intersection include new concrete sidewalks upgraded pedestrian signals,

Tectonic is also providing community outreach services which includes public presentations, dedicated website communication and door-to-door contact with stakeholders to address inquiries and mitigate community concerns.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
a.	(1) FIRM NAME Tectonic Engineering Consultants, Geologists & Land Surveyors D.P.C., Inc.	(2) FIRM LOCATION <i>(City and State)</i> Glastonbury, CT	(3) ROLE Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT
(Present as many projects as requested by the agency, or 10 projects, if not specified.
Complete one Section F for each project)

20. EXAMPLE PROJECT KEY NUMBER

05

21. TITLE AND LOCATION (City and State)

**ConnDOT (SPN 063-0633) – Route 44 (Albany Avenue)
Reconstruction; Hartford, CT**

22. YEAR COMPLETED

PROFESSIONAL SERVICES

CONSTRUCTION (if applicable)

2020

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

ConnDOT

b. POINT OF CONTACT NAME

Mr. Mark St. Germain, PE

c. POINT OF CONTACT TELEPHONE NUMBER

860 258-4646

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

Tectonic was retained by the Connecticut Department of Transportation to perform construction inspection services for the Route 44 (Albany Avenue) Safety Improvements Project. Improvements to Albany Avenue were constructed to improve safety for vehicles, pedestrians and bicyclists. Extensive streetscape addressed accessibility, connectivity, vehicle access, and operations. Minor drainage modifications were also included. The project included extensive street trees and other plantings.

One method used to improve pedestrian safety was the construction of bulb outs at many of the intersections. The bulb outs provide pedestrians a shorter crossing distance and a slightly elevated position to stand prior to crossing the roadway. This treatment allows a better line of sight around parked vehicles as well as making the pedestrian more visible to the motorist. Some of the design elements to improve vehicle safety were realigning several intersections, eliminating one of the eastbound travel lanes and replacing it with an alternating left turn lane, and modifying several of the one-way traffic flow patterns. The modifications to some of the one-way traffic flow circulations now provide signalized access to Albany Avenue when entering from many of the side streets while providing one-way circulation away from Albany Avenue at non-signalized intersections.

Traffic signal improvements included modified signal timing, the replacement of seven (7) existing signals, the installation of four (4) new signals, and the removal of one (1) signal. Additionally, the improvements include the replacement of seven (7) existing traffic control signal cabinets and controllers in order to maintain the communication and integrity of the ConnDOT-owned closed loop system along this section of Route 44. This project also included milling and overlaying all of the project roadways within the limits of work, including approximately 6,000 feet of Albany Avenue, installation of new granite curbing, concrete sidewalks, paver bandings, crosswalks at all intersections, installation of ornamental lighting, bus shelters and other site amenities, street trees, and modifications to the existing drainage system in support of the installed bulb outs. The project also created bicycle access on the mainline and Homestead Avenue, which is a major arterial road.

A significant community outreach plan, website development, and daily communication was required to maintain close coordination with the affected property owners and users due to the tight corridor and extensive Rights of Way "Rights" to perform work on private property. During construction, access to all properties, including the over 100 businesses within the project limits, and pedestrian access was also carefully coordinated. Tectonic received "exceptional" ratings on this project.

Project Relevance

✓	DOT Policies and Procedures
✓	Hydrology & Hydraulics Engineering
	Geotechnical Engineering
	Bridge Rehab/Replacement
✓	Construction Inspection Services



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

a.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
	Tectonic Engineering Consultants, Geologists & Land Surveyors D.P.C., Inc.	Glastonbury, CT	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT
(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)

20. EXAMPLE PROJECT KEY NUMBER

06

21. TITLE AND LOCATION *(City and State)*

**ConnDOT (SPN 0032-0130) – Route 31 Reconstruction;
Coventry, CT**

22. YEAR COMPLETED

PROFESSIONAL SERVICES

CONSTRUCTION *(if applicable)*

2018

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

ConnDOT

b. POINT OF CONTACT NAME

Mr. Mark St. Germain, PE

c. POINT OF CONTACT TELEPHONE NUMBER

860 258-4646

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

The Route 31 Roadway reconstruction project in Coventry involved the reconstruction of a section of Route 31 from just north of Stone House Road and extends 2,050 feet south past School Street, which encompasses the entire "downtown" of Coventry.

This project included roadway reconstruction, culvert replacement, rock cutting, storm drainage and sewer reconstruction, as well as architectural finish work including granite curb and sidewalk. The roadway was widened and greatly improved with smoother pavement, better drainage, wider shoulders, improved sightlines and roadway protection. The project also included the creation and/or rehabilitation of all the sidewalks within the project area for better pedestrian access.

Tectonic provided construction engineering and inspection, contract administration, technical inspection of construction, and processed all payment estimates to the contractor. Tectonic also provided and maintained a dedicated project website with real-time information and weekly email updates to nearby residents and stakeholders. Tectonic received "exceptional" ratings on this project.

Project Cost: \$6.3 Million

Project Relevance



DOT Policies and Procedures



Hydrology & Hydraulics Engineering

Geotechnical Engineering

Bridge Rehab/Replacement



Construction Inspection Services



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

(1) FIRM NAME

**Tectonic Engineering
Consultants, Geologists & Land
Surveyors D.P.C., Inc.**

(2) FIRM LOCATION *(City and State)*

Glastonbury, CT

(3) ROLE

Prime Consultant

a.

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)

20. EXAMPLE PROJECT KEY NUMBER

07

21. TITLE AND LOCATION (City and State)

Upper Collinsville Dam, Canton, CT

22. YEAR COMPLETED

PROFESSIONAL SERVICES

Engineering and
Construction Inspection

CONSTRUCTION (if applicable)

Concrete Constructors
Company and Hemlock
Construction

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

WWS and Canton Hydro LLC

b. POINT OF CONTACT NAME

Patrick Aiglstorfer, PM

c. POINT OF CONTACT TELEPHONE NUMBER

Austria +43 (0) 7282 / 5922 – 28

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

The Upper Collinsville Dam is located along the Farmington River in the Town of Canton, CT. The dam was constructed in 1867 by the Collins Company to power their facilities. The re-development of the dam was started in 2015 for the town with Canton Hydro LLC as the project's developer and WWS Wasserkraft as the turn-key solution provider, the project is currently in construction phase. Tectonic was hired as the design build engineering & inspection consultant in 2018. Once completed, it will be a 1 megawatt (MW) hydroelectric facility and is projected to generate an average 4.3 million kWh of renewable energy annually into the grid.

Tectonic provided the designs of the structural components throughout the dam including five sections of fish ladder walls, new intake gate & trash rack concrete structures including dam modifications & additions, dam stability analysis, new rock anchors at the dam, concrete dam modification at the overtop gate, steel gate support frame at the spill way, power house modification structural design, turbine draft tube concrete design, concrete transformer pad & retaining wall structure, and eel passage structure at the upstream. All the design was performed following the Federal Energy Regulatory Commission (FERC) Engineering Guidelines, AASHTO LRFD, ACI-318, ACI-350 (for under water concrete), ASIC Steel Manual, and FHWA-IF-99. The geometry of the dam modifications & additions is defined and provided by WWS, Tectonic provided changes to the geometry to ensure structural integrity of the structures when necessary.

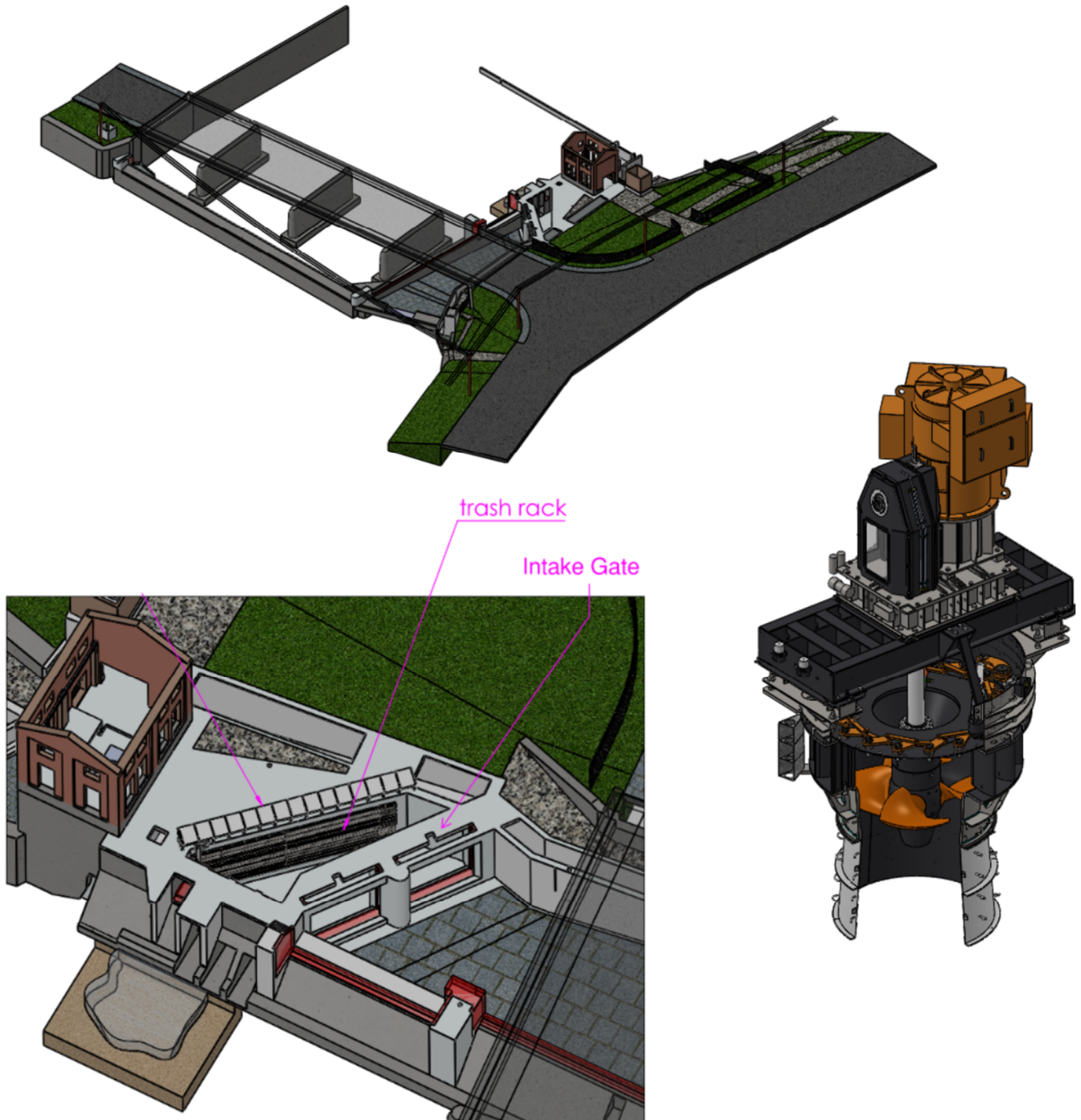
Tectonic prepared design submittals (calculations & drawings) to FERC as part of the project requirement from FERC. Tectonic coordinated with FERC along the entire design process including multiple meetings with FERC to make sure the designs & dam modifications follow FERC guidelines and obtained approvals from FERC for construction in time.

Tectonic provided construction inspection services for the project including day to day construction inspections, reinforcement inspection, concrete testing, rebar rock dowel pull tests, grouted rock anchor inspection, grouted rock anchor pull test and as-build drawings.

The major challenges Tectonic faced and resolved in this project are, but not limited to:

- Design of concrete structures with very irregular geometry.
- As a design build project, Tectonic finished different portions of the design in a timely manner and obtained approvals for construction to accommodate the on-going construction schedule.
- FERC guidelines and requirements – provided reasonable & economical design while making sure design is in conformance with FERC guidelines and FERC officials' comments and obtained approvals from FERC.
- Coordination between all parties involved – Coordination efforts made between FERC, the developer Canton Hydro LLC, the turn-key solution provider WWS, and the Contractor.
- Incorporate the unusual design forces & geometry of the special steel mechanical components designed by WWS, including the hydraulic piston-controlled crest gates at the existing dam, the turbine & generator at the powerhouse slab, and the draft tube under the turbine.
- Provided full engineering review of WWS calculations and engineering drawings for structural steel, hydraulic gates, and other civil works.

- Providing Certified Building Official Inspections for the power connections in coordination with Eversource and the Town Building Department.
- Incorporate field changes due to site geometry & contractor 's means & methods into the design.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
a.	Tectonic Engineering Consultants, Geologists & Land Surveyors D.P.C., Inc.	Glastonbury, CT	Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT
(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)

21. TITLE AND LOCATION *(City and State)*
Project Pictures

22. YEAR COMPLETED

PROFESSIONAL SERVICES

CONSTRUCTION *(if applicable)*

23. PROJECT OWNER'S INFORMATION

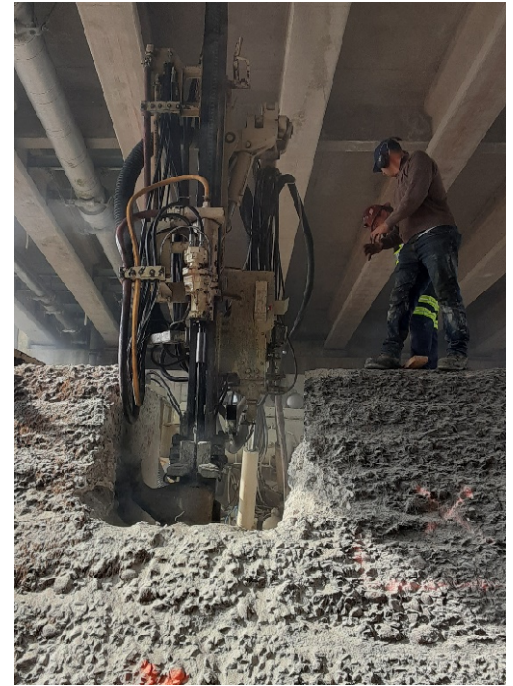
a. PROJECT OWNER

b. POINT OF CONTACT NAME

c. POINT OF CONTACT TELEPHONE NUMBER

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*





25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
a.	Tectonic Engineering Consultants, Geologists & Land Surveyors D.P.C., Inc.	Glastonbury, CT	Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT (Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)			20. EXAMPLE PROJECT KEY NUMBER 08												
21. TITLE AND LOCATION (City and State) Replacement of the Bigelow Hollow Access Road Culvert over Bigelow Brook, Union, CT		22. YEAR COMPLETED PROFESSIONAL SERVICES: 2011 CONSTRUCTION (if applicable): 2013													
23. PROJECT OWNER'S INFORMATION															
a. PROJECT OWNER Connecticut DEEP	b. POINT OF CONTACT NAME Ms. Deb Corcoran	c. POINT OF CONTACT TELEPHONE NUMBER 860.966.9682													
24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)															
<p>The Connecticut Department of Energy & Environmental Protection selected Tectonic to provide on-call engineering services for bridge design. The first assignment is the replacement of the Bigelow Hollow Access Road Culvert that was damaged during heavy rain in October of 2005 and is in poor condition.</p> <p>We performed all of the design and engineering including the hydraulic analysis using HEC- HMS and HEC-RAS and structural engineering and construction contract documents. Also, Tectonic developed the required materials for the D.E.E.P. permit application.</p> <p>The replacement will be a precast concrete box culvert with cast-in-place concrete wingwalls. Water handling plans and stormwater management issues were prepared for the project.</p> <p>Performed periodic inspections during construction.</p>		<table border="1"> <thead> <tr> <th colspan="2">Project Relevance</th> </tr> </thead> <tbody> <tr> <td>✓</td> <td>ConnDOT Policies and Procedures</td> </tr> <tr> <td>✓</td> <td>Hydrology & Hydraulics Engineering</td> </tr> <tr> <td></td> <td>Geotechnical Engineering</td> </tr> <tr> <td>✓</td> <td>Bridge Rehab/Replacement</td> </tr> <tr> <td></td> <td>Construction Inspection Services</td> </tr> </tbody> </table>		Project Relevance		✓	ConnDOT Policies and Procedures	✓	Hydrology & Hydraulics Engineering		Geotechnical Engineering	✓	Bridge Rehab/Replacement		Construction Inspection Services
Project Relevance															
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✓	Hydrology & Hydraulics Engineering														
	Geotechnical Engineering														
✓	Bridge Rehab/Replacement														
	Construction Inspection Services														
															
25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT															
a.	(1) FIRM NAME Tectonic Engineering & Surveying Consultants PC.	(2) FIRM LOCATION (City and State) Rocky Hill, CT	(3) ROLE Prime Consultant												

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>		20. EXAMPLE PROJECT KEY NUMBER <div>09</div>
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21. TITLE AND LOCATION (City and State) Replacement of South Maple St. Bridge, and Roadway Reconstruction of South Maple St. and Powder Hill Road, Enfield, CT	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2011	CONSTRUCTION (if applicable) 2012

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER Town of Enfield	b. POINT OF CONTACT NAME Mr. Matt Cropley, PE.	c. POINT OF CONTACT TELEPHONE NUMBER 860.763.7599

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)
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Bridge Design using ABC and Precast Box Beams. This Locally Administered Federal-Local Bridge project involves the replacement of the substandard South Maple Street Bridge over the Scantic River and the reconstruction of the South Maple Street and Powder Hill Road roadway approaches to provide adequate travel lanes and shoulders between the new bridge and the existing road. The replacement bridge accommodates vehicular, bicycle and pedestrian traffic, while maintaining and enhancing the rural nature of this roadway corridor. The project included removal of the existing bridge and all of its abutments, construction of a new 45-foot-wide bridge with a single 82-foot long span consisting of adjacent box beams on concrete abutments.

Project Relevance	
✓	DOT Policies and Procedures
✓	Hydrology & Hydraulics Engineering
✓	Geotechnical Engineering
✓	Bridge Rehab/Replacement
✓	Construction Inspection Services

The bridge was designed and built using 100 percent precast elements for the substructure and superstructure. *This is the first fully precast bridge designed and built in Connecticut and the first ABC bridge in the state.* This approach cut the construction duration from 2 seasons to only 4 months and saved nearly \$1 million. Approximately 500LF of roadway was also reconstructed on South Maple St. and Powder Hill Road. Tectonic performed bridge condition inspection of the existing structure, prepared a type study report, and prepared preliminary and final PS&E bid documents. Construction support included bid phase services, working drawings and shop drawing review and periodic construction inspection including weekly construction meeting.

Tectonic performed periodic A checks during the construction phase.

The final construction cost was \$3.2 million. *This project was the recipient of the 2012 ACEC Engineering Excellence Award.*



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT		
a. (1) FIRM NAME Tectonic Engineering Consultants, Geologists & Land Surveyors D.P.C., Inc.	(2) FIRM LOCATION (City and State) Rocky Hill, CT	(3) ROLE Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT
(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)

20. EXAMPLE PROJECT KEY NUMBER

10

21. TITLE AND LOCATION *(City and State)*

**Braeburn Road Culvert Rehabilitation - Bridge No. 06076;
West Hartford, CT**

22. YEAR COMPLETED

PROFESSIONAL SERVICES

2018

CONSTRUCTION *(if applicable)*

On-going

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER

Town of West Hartford

b. POINT OF CONTACT NAME

Mr. Duane Martin, Town Engineer

c. POINT OF CONTACT TELEPHONE NUMBER

860.561.7539

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT *(Include scope, size, and cost)*

This project involved the full rehabilitation of a twin corrugated metal culverts and installation of scour countermeasures at the outlet. A twin ACCMP 6' x 9½' culvert located in West Hartford, CT, was rated structurally "poor" in the 2014 CTDOT biennial inspection. This rating was predominately controlled by the channel scour and deterioration of the inverts and end walls, all of which required rehabilitation. Several locations below the spring line contained areas of missing or corroded steel panels and bolts. Localized voids had formed below the invert, compromising the stability of the culvert and roadway above. The end walls were comprised of mostly stone rubble which did not adequately channel the water into the culvert openings.

As part of the culvert rehabilitation, Tectonic performed an inspection of the culvert to identify the critical issues. A survey was performed of the project site, with the rights-of-way and wetlands delineated. Tectonic also performed a hydrologic and hydraulic analysis, including a scour analysis for the existing and proposed repair conditions. As part of the structural rehabilitation, three alternatives were developed. The final design included paved inverts with reinforced concrete and shear studs welded to the existing ACCMP. Permanent sheet piling was added to the streambed to mitigate the channel scour and end wall deterioration, in addition to enclosing the concrete added to the invert. Additional services include completing and submitting environmental permits, traffic and staging plans, design specifications and special provisions, and a construction cost estimate.

Tectonic performed construction inspection for the project.

Project Cost: \$330,000



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

a.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
	Tectonic Engineering Consultants, Geologists & Land Surveyors D.P.C., Inc.	Glastonbury, CT	Prime Consultant

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

[illegible]

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	CRCOG - CTDOT LOTCIP Engineering Construction: On-Call List 2	6	ConnDOT (SPN 0032-0130) Route 31 Reconstruction; Coventry, CT
2	North Main Street Over Trout Brook; West Hartford, CT	7	Upper Collinsville Dam, Canton, CT
3	Crosby Street Bridge Rehabilitation; Danbury, CT	8	Replacement of the Bigelow Hollow Access Road Culvert over Bigelow Brook, Union, CT
4	ConnDOT (SPN 0042-0317) – Resurfacing, Bridge and Safety Improvements on Route 2, East Hartford, CT	9	Replacement of South Maple St. Bridge, and Roadway Reconstruction of South Maple St. and Powder Hill Road, Enfield, CT
5	ConnDOT (SPN 0063-0633) Route 44 (Albany Avenue) Reconstruction; Hartford, CT	10	Braeburn Road Culvert Rehabilitation; West Hartford, CT

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

Project Approach

Tectonic is familiar with Municipal Systems Projects funded through various State Programs including LOTCIP. This project encompasses the replacement of simple span bridges over a waterway. The improvements generally include detouring traffic, removal of the existing bridge and installation of new ones. Time constraints and permits are an integral part of the contract performance.

Tectonic will protect Andover's assets and capital expenditures by enforcing the contract plans and specifications. We will work with the Town and Contractor to ensure the materials and workmanship are correct.

Services required will include survey work, construction administration, field inspection, documentation and material testing associated with construction operations and layout staking.

Construction engineering and inspection services will involve several different areas of expertise. At a minimum, the selected inspection team must be fully conversant and highly experienced in the following short list of the most important areas of expertise:

- MSAT Documentation and Procedures (DWR's, Pay Estimates, Quantity Tracking, Material Testing, Certified payrolls, etcetera)
- Concrete and HMA Placement and Field Testing
- Maintenance and Protection of Traffic following MUTCD and ATSSA
- Construction Operations and Scheduling
- Job Site Safety
- Public Communication
- Utility Relocations and Protection
- Material Sampling and Testing



Key Project Issues

Construction engineering and inspection for this project will pose several challenges. The following key challenges, along with our strategy for addressing each challenge are presented below:

- Administrative Oversight and Bookkeeping
- Maintenance and Protection of Traffic, including access to private driveways.
- Job Site Safety and Safety Compliance
- Inspection and Materials
- Public Awareness and Coordination
- Problem Resolution
- Coordination

Administrative Oversight and Bookkeeping

The administrative aspects of the work are as important as the field inspection activities. Tectonic will prepare various correspondences, collect material certifications, prepare daily reports and progress reports, coordinate with property owners, utility representatives and others as necessary, receive shop drawings, assist with change order preparations, prepare payment estimates, and document the activities on the project. This includes preparation of Non-Compliance Notices (NCNs). Our bookkeeping will conform to the requirements.

Our inspectors will maintain daily work reports in accordance with ConnDOT MSAT bookkeeping practice for processing payment estimates, labor wage checks, contractor payrolls and payments will be agreed upon and reviewed for accuracy, and the Town of Andover will be advised of any discrepancies. Tectonic will prepare necessary reports and paperwork for submission to funding agencies including ConnDOT and FHWA if required. We will also review all contractor's requests for extra work payment, prepare change orders, and analyze requests for extensions of contract time as may be required and requested.

At the end of the contract, we will verify completion of the contract work and perform semi-final and final inspections, prepare punch lists and produce reports verifying correction of punch list items. Final change orders and final payments to the contractor will also be produced along with any final submissions required by the funding agencies. All records will be then turned over to the Town.

Defective work and materials will be tracked, without any payment, until corrected. Items that required testing or material certifications will not be processed for payment unless passing tests and material certifications are recorded.

Our inspectors will follow all project inspection requirements including:

- Preparing general correspondence
- Maintaining detailed daily project records
- Reviewing the schedule
- Materials sampling oversight and monitoring
- Measuring pay item quantities and preparing pay estimates. Due to waste, payment for materials placed is not usually equal to the material delivery tickets.
- Oversight of maintenance and protection of traffic (MPT)
- Oversight of work associated with permit requirements, and oversight of conformance of maintenance of environmental controls.
- Reviewing payment requests from the Contractor
- Reviewing and evaluating all the Contractor's claims for extra work and/or time extensions
- Preparing interim and final change order documentation

The Contractor is required to maintain and submit significant quantities of paperwork. This includes material certifications, shop drawings, working drawings, baseline and periodic schedules, labor wage reports, CLA-12 (sub-contractor approvals), affirmative action, and other paperwork. We know the MSAT / LOTCIP requirements and will work closely with the Town and Contractor to collect and process all required documents.

Meeting the DBE/SBE goals (if required) is one area where many contractors have difficulties. Since the project has State funding, we expect that this will be necessary. Tectonic is committed to pushing the Contractor to meet this obligation. Tectonic is also committed to meeting any goal for our work if required. Tectonic has a strong relationship with several Certified DBE firms: VN Engineers has provided us with inspectors on similar projects, and Garg Consulting Services can provide inspectors and survey services.

Survey

Survey can be provided on an as-needed basis to verify or check construction operations, confirm layout staking and permit impact limits, obtain information requested by the Municipal Project Engineer and aid with intermediate and final quantities. Tectonic currently has 10 full time survey crews capable of performing any type of survey. Our capabilities include, A-2 and T-2, Boundary, Mobil Lidar, laser scanning, monitoring, control set up, GPS, property mapping and construction support. We have selected Garg Consulting Services to support this work as a certified DBE.

Maintenance and Protection of Traffic

Perhaps the most important issue on this project is maintaining the efficient flow of traffic while protecting motorists, pedestrians, cyclists, residents, and the workers within the construction work zone. This includes periods when the Contractor is not actively working.

Tectonic will ensure that the Contractor follows the Contract Specifications and Special Provisions for Maintenance and Protection of Traffic, including implementation of the Contract's traffic control plans. Unless otherwise indicated, the MUTCD guidelines are followed to the greatest extent possible. Many of our staff are ATTSA Traffic Control Supervisor Certified.

Tectonic will review the Contractor's Self Certification and FHWA Letter of Acceptance submittals certifying that all Category 1, 2, and 3 traffic control devices utilized by the Contractor conform to NCHRP Report 350. Professional Engineers or ATSSA trained personnel will lead the Tectonic team in coordinating all maintenance and protection of traffic activities with the Contractor on this project. We will ensure that all signs and devices are installed and removed in strict accordance with the Project Plans and Specifications, and that dedicated traffic control personnel are positioned at the right locations. We will direct the Contractor to remove damaged or unserviceable signs and devices from the project.

An agenda shall be established for work zone safety meetings, which will be held periodically with the Contractor. These meetings will be utilized to discuss safety and review protection required. "Public Awareness" is achieved by keeping the public informed of construction work schedules through advance public notifications. On similar projects we have found that periodic emails and updates to the Municipal web site are very effective.

Coordination with Town Officials and all Public Safety Agencies / Police will be required in advance of the implementation of the construction traffic patterns required by the Contract. Our field personnel will actively monitor the situation throughout the workday to ensure work zone conformity and minimal impacts to the traveling public.

Job Site Safety and Safety Compliance

Tectonic's inspection team members are 10-hour OSHA certified and are familiar with OSHA construction safety regulations. Although the contractor is responsible for overall project safety, Tectonic places a strong emphasis on safety and performs visual surveillance of construction activities to ensure that safe construction practices are being followed. Personal Protective Safety Equipment compliance is required by our staff at all times throughout the duration of the Project. Documentation of Project conditions, including regulatory compliance or deficiency will be performed regularly throughout the duration of the Project. Our staff will direct the Contractor to correct issues as necessary.

Inspection and Materials Testing

The primary focus of the field staff is to oversee the Contractor's work. Our Chief Inspector and part time Inspector will be on site during their activities to monitor and record the Contractor's work, collect samples for lab testing and perform on site testing as required. Our Field Team will step in to make corrections actively with the Contractor. As required, our efforts will be recorded in Daily Work Reports. The reports will record all the information required by MSAT to fully document the work, issues, and resolutions. Formal Non-Compliance Notices (NCNs) will be used if the Contractor will not or does not respond to field orders.

In additions, Tectonic field staff take extensive numbers of photos throughout each day. Prior to any construction activities, we will take existing condition photos of the area as part of our records.

The inspection of concrete work involves both quality control and quality assurance. Samples are taken and tested for quality assurance and final payment; however, once the concrete has cured there is little that can be done to correct problems—short of removal and reinstallation. Our coordination and field activities are designed to focus on quality control before and during material placement, and also as it finishes and cures.

Strategies to address concrete placement include:

- The Contractor will be required to submit a concrete placement plan. The Plan's procedures will be reviewed and approved prior to the commencement of this work in accordance with the Contract Specifications.
- Reinforced steel / mesh will be monitored. We will ensure the rebar is properly placed.
- Delivery tickets will be checked to confirm receipt of the approved mix from the approved plant.
- Existing base and delivered concrete temperatures will be verified to ensure conformity to the specifications for placement. We expect there will be a significant number of cold nights and morning of work extends into mid-October. Proper placing and curing are needed to ensure long term durability.
- Proper cross slopes, profiles, and grades will be evaluated and maintained during operations. Air content and slump will be measured.
- Concrete material will be checked for segregation during placement. Segregated areas will be removed and replaced with acceptable material.
- The Contractor will be monitored to ensure that the vibratory consolidation effort and patterns recommended by ACI are being followed and that placement is continuous to avoid cold joints.
- Inspection staff will enforce the placement specifications and procedures required for each pour to ensure that the final product will conform to the specifications and perform as intended.

Public Awareness and Coordination

It has been our experience that public awareness and satisfaction is best achieved by keeping residents informed of construction schedules and progress. This can easily be achieved by regular communication with stakeholders and residents. Coordination with property owners is especially critical if driveway access will be interrupted.

Coordination of material testing services is key to keeping this project on schedule, especially with the time restrictions that will be involved with this project. Tectonic personnel utilize all available methods of communication, including e-mail, phone calls, and text messaging to provide real-time updates on schedules and to coordinate testing. Tectonic will team with a local firm, Inspection Materials Testing Laboratories, Inc., to provide immediate materials testing services as needed.

Familiarity with ConnDOT's Construction Inspection Standards & Procedures

Tectonic staff has all requisite NETTCP certifications for the key construction activities including concrete, HMA, and Quality Assurance certifications. In addition, many on our inspection staff also have certifications from other agencies

including ACI and ATSSA. Tectonic has been providing design services to ConnDOT and Connecticut Municipalities for more than 35 years and our team of technical engineers are capable to support the field staff as needed. The in-house design staff, in the Glastonbury Office, are veterans of ConnDOT and intimately familiar with the Department's construction policies and practices.

We have the staff, knowledge, skill, and construction experience to manage project documents and correspondence on a project of this size and complexity. We understand the importance of providing a project team who is intimately familiar with ConnDOT's construction inspection standards and procedures. Familiarity with these standards and procedures are essential to successfully complete any project within the State of Connecticut that involves federal and/or state funds. We will provide the Town of Andover with inspection staff who have in-depth knowledge of the ConnDOT's Construction Manual and Record Keeping procedures. This staff will be overseen by our Management Staff to ensure they are performing as required.

Familiarity with MSAT Requirements

Tectonic is very familiar with MSAT/ LOTCIP policies and procedures having staff who have worked closely with the DOT for many years performing construction inspection on municipal projects with state funding. Through this experience, we have gained an excellent working knowledge of contracting procedures and policies, design standards, and specifications. For Construction Engineering and Inspection projects, Tectonic understands our role and responsibility is as an extension of the Town. We closely monitor contractor operations, carefully prepare contractor payments and change orders, review shop drawings and other submissions, strictly monitor material testing, provide oversight and solutions to field issues, conduct all progress meetings, and manage any specifics involving administration of the contract for the Town. Tectonic will work in partnership with the Town to serve your best interests and will provide the level of quality the Town of Andover expects from Tectonic.

We recently completed Construction Inspection Services on 3 LOTCIP Project with 2 others scheduled for completion this spring.

Our Commitment to the Town of Andover

The Town of Andover needs a CEI team that is knowledgeable, skilled, works well under pressure, and above all recognizes the important responsibility they have as representatives of the Town. Our focus will ensure the Contractor conforms to the Contract Plans and Specifications and that our inspections and administration conform to CTDOT requirements. Tectonic and our team offer the following commitments to the Town of Andover:

Resources. The Tectonic team will take charge of the job and utilize our full breadth of resources available as a large regional firm to meet any and all challenges that may arise during the duration of this project. Tectonic is a full-service engineering firm and can offer roadway, bridge, civil and site engineering services to the Town, if required, at any time.

For this assignment we can make available as many resources as may be required, drawing from a pool of inspectors being assigned from our Glastonbury, CT office.

Competence. In addition to the skilled manpower to be dedicated to this assignment and our depth of additional resources (as needed), Tectonic also will provide expert management and guidance unsurpassed by our competitors. Jeff Scala, PE, as Senior Vice President / Construction Coordinator will lead the Tectonic field team throughout the duration of this project. We would like the Town to be able to take solace in the fact that ConnDOT has had confidence in the Tectonic CEI team, while performing at a high level of competency for many years on high visibility projects such as Albany Avenue Reconstruction in Hartford, the Route 31 Reconstruction in Coventry, Yankee Doodle Bridge Project and currently working on the Rte. 2 Rehabilitation project in East Hartford and Glastonbury and starting the mega Rte. 691, I-91, Rte. 15 interchange project in Meriden.

Our service ratings from CTDOT are "exceptional".

Quality. Tectonic requires thorough field documentation, measurements, and quantity computations from our inspection staff in compliance with ConnDOT's latest policies on all of our CEI projects and this assignment is no different. To assure the Town that we will not compromise in dispatching our duties, our staff will be regularly evaluated for adhering to the ConnDOT Construction Manual and MSAT requirements and sound judgment through our Quality Assurance/Quality Control Program. As is the policy of Tectonic, a project specific Quality Management Plan (QMP) may be developed and it will be the duty of our nominated QA/QC Jeffrey A. Scala, PE, to ensure that all quality and safety policies and procedures focused on quality are adhered to rigorously. He will perform periodic audits and review deliverables.

Availability. Tectonic strives to maintain a consistent and steady workload; our team is presently finishing up a majority of our projects without replacement. The timing of this project is absolutely perfect relative to the completion of other minor assignments, and we will commit the resources. Our construction inspection clients have always insisted on a sincere staff commitment and a commitment to staff continuity and availability throughout the length of the assignment. We understand why this commitment is so important to our clients—it is important to Tectonic for the same reason—staff commitment and continuity leads to a sense of teamwork, cooperation, a depth of project understanding, as well as a dedication to the project. Ultimately, this commitment produces the highest level of accountability and quality for all parties involved. Our team understands that this is potentially a multi-season assignment and that we will commit our resources to the Town of Andover for as long as it takes to reach successful completion. You have our sincere commitment that we can and will complete this project.

Depth of Staff

Currently Tectonic has a staff of nearly 500 employees and approximately 259 are dedicated to transportation projects. The depth of our staff and areas of expertise are shown in the table below.

<div><div><div>Tectonic</div><div>PRACTICAL SOLUTIONS. EXCEPTIONAL SERVICE.</div></div><div>Employee Name</div></div>		Discipline Code	Employment Status																								
Total Employees		EIT	PE	PLS	PP	PG	PMP	CIH	RPA	LSRP	Civil	Geotechnical	Environmental	Structural	CI	Transportation	Survey	CAD	Site Acq	Telecommunications	Corporate	Administrative	Accounting	Business Dev	Human Resources	Building Maintenance	IT
		26	80	5	1	7	3	1	2	2	12	25	14	18	143	116	33	24	11	19	2	21	19	12	7	1	7
																			484								

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

31. SIGNATURE



32. DATE

February 21, 2024

33. NAME AND TITLE

Jeffrey A. Scala, P.E., Senior Vice President

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (If any)
RFP AN-2024-25-01

PART II – GENERAL QUALIFICATIONS

(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME Tectonic Engineering Consultants, Geologists & Land Surveyors, D.P.C., Inc. (Branch Office Glastonbury, CT)			3. YEAR ESTABLISHED 1986	4. UNIQUE ENTITY IDENTIFIER 18-4603124
2b. STREET 148 Eastern Boulevard, Suite 201			5. OWNERSHIP	
2c. CITY Glastonbury			a. TYPE Design Professional Corporation	
2d. STATE CT			b. SMALL BUSINESS STATUS None	
2e. ZIP CODE 06033			7. NAME OF FIRM (If block 2a is a branch office) Tectonic Engineering & Surveying Consultants P.C.	
6a. POINT OF CONTACT NAME AND TITLE Jeffrey A. Scala, PE, NBIS Vice President				
TELEPHONE NUMBER (860) 563-2341			6c. E-MAIL ADDRESS jscala@tectonicengineering.com	
8a. FORMER FIRM NAME(S) (If any)			8b. YEAR ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER
Tectonic Engineering P.C.			1987	18-4603124
Tectonic Engineering & Surveying Consultants P.C.			1997	18-4603124
Tectonic Engineering Consultants, Geologists & Land Surveyors D.P.C., Inc.			2021	18-4603124

9. EMPLOYEES BY DISCIPLINE

a. Function Code	b. Discipline	c. Number of Employees	
		(1) FIRM	(2) BRANCH
02	Administrative	65	2
05	Archeologist	3	
06	Architect	2	
08	CADD Technician	26	1
12	Civil Engineer	59	
13	Communications Engineer	0	
14	Computer Programmer	8	
15	Construction Inspector	121	8
16	Construction Manager	8	
19	Ecologist	1	
21	Electrical Engineer	3	
23	Environmental Engineer	5	1
24	Environmental Scientist	8	
27	Foundation/Geotechnical Engr.	12	1
30	Geologist	16	
38	Land Surveyor	6	
39	Landscape Architect	1	
42	Mechanical Engineer	14	
47	Planner: Urban/Regional	4	
48	Project Manager	28	
51	Safety/Occupational Health Eng	1	
53	Scheduler	4	
54	Security Specialist	1	
57	Structural Engineer	15	2
58	Technician/Analyst	22	
60	Transportation Engineer	35	5
	Total	468	20

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS

a. Profile Code	b. Experience	c. Revenue Index Number (see below)
B02	Bridges	6
C10	Commercial Building	5
C15	Construction Management	7
D02	Dams – earth, rock; dikes; levees	4
E02	Educational Facilities; classrooms	7
E09	EIS, assessments or statements	6
E13	Environmental testing and analysis	4
G01	Garages; Vehicle Maint. Facilities; Parking	6
G04	GIS	5
H07	Highways; streets; parking lots; airfield paving	8
H11	Housing-residential, multi-fam; apartments	6
L02	Land Surveying	6
P06	Planning; -site, installation, project	6
R04	Recreation Facilities (parks, marinas, etc)	5
S05	Soils and Geologic Studies	6
S10	Surveying; platting, map, flood plain studies	6
T02	Testing and inspection services	8
T03	Traffic and transportation engineering	5
T04	Topographic surveying and mapping	6
T05	Towers (guyed and self-supporting)	7

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS (Insert revenue index number shown at right)

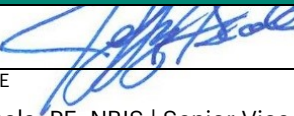
a. Federal Work	3
b. Non-Federal Work	10
c. Total Work	10

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

- Less than \$100,000
- \$100,000 to less than \$250,000
- \$250,000 to less than \$500,000
- \$500,000 to less than \$1 million
- \$1 million to less than \$2 million
- \$2 million to less than \$5 million
- \$5 million to less than \$10 million
- \$10 million to less than \$25 million
- \$25 million to less than \$50 million
- \$50 million or greater

12. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

a. SIGNATURE 	b. DATE February 22, 2024
c. NAME AND TITLE Jeffrey A. Scala, PE, NBIS Senior Vice President	