#### EDUCATION

University of Rhode Island, Kingston, RI B.S., Civil and Environmental Engineering, 2013

#### PROFESSIONAL EXPERIENCE

RT Group, Inc. Senior Project Engineer, 2016 - Present Project Engineer, 2013 - 2015 Office/Field Engineer, 2012 - 2013

Aetna Bridge Company Office Engineer, 2011 - 2012



As a Senior Project Engineer, Mr. Coren is responsible for preparing project reports, managing project documentation, creating and editing Computer-Aided-Design drawings, performing project calculations, data analysis and review, and interacting with clients. He has also been intimately involved with updating and helping to execute RTG's marketing plan, and co-wrote and implemented its Employee Health and Safety Program.

Mr. Coren has also provided a number of services involving onsite project work. He has assisted in dam safety and performance inspections, performed observation well monitoring and outfall sampling, surveyed multiple projects, monitored geotechnical subsurface investigations, and performed both part-time and full-time construction observation. Representative project experience includes:

#### Marine / Waterfront Engineering

- Town of Narragansett, Waste Water Treatment Plant Flood-Proofing Project: Project Engineer for preparing plans and specifications for bidding and construction of a floodproofing barrier at the Scarborough Wastewater Treatment Facility located along the Narragansett Bay. The work included the design of an earthen berm with a sheet pile wall core; designing the barrier to account for existing utilities; incorporating a new stormwater run-off treatment system; preparing budget-level construction cost estimates; preparing the RICRMC Permit Application; preparing the FEMA Conditional Letter of Map Revision Application; and preparing plans and specifications for bidding and construction; Narragansett, RI.
- Town of Narragansett, Waste Water Treatment Plant Flood-Proofing Alternatives Evaluation Report: Project Engineer for the preparation of an Alternatives Evaluation Report for the flood-proofing of Scarborough Wastewater Treatment Facility located along Narragansett Bay. The work included performing a topographic and bathymetric survey; overseeing a geotechnical investigation; and preparing the flood-proofing Alternatives Evaluation Report. Narragansett, RI.
- Americas Styrenics, LLC, 5-Year Pier Improvements Plan Project: Project Engineer for the preparation of the 5-Year Pier Improvements Plan for a 710-foot-long timber pier located on the Thames River. The work included performing a topside visual and underwater



dive inspection off all timber components; developing an Alternatives Evaluation Report, including budget-level cost estimates; preparing the CTDEEP COP Permit Application; preparing plans and specification for bidding and construction; and providing construction phase services. Gales Ferry, CT.

- Town of Jamestown, Elevated Timber Walkway Project: Project Engineer for the design of an elevated timber walkway to provide access to the coast of Narragansett Bay. The work included performing a topographic survey of the site; overseeing a geotechnical investigation; and preparing plans and specifications for permitting. Jamestown, RI.
- Town of Jamestown, Boat Ramp Repairs Project: Project Engineer for the design of a concrete boat ramp replacement located along the coast of Narragansett Bay. The work included performing a topographic and bathymetric survey of the site and preparing plans and specifications for permitting. Jamestown, RI.
- Town of Jamestown, East Ferry Sea Wall Project: Field Engineer for surveying construction limits and existing structures for the development of bidding and construction plans and specifications for the replacement of 260 linear feet of existing concrete seawall. Jamestown, RI.
- Quonset Development Corporation, Zarbo Avenue Bulkhead Project: Project Engineer for completing the design of approximately 1,300 LF of new anchored sheetpile bulkhead. The work included preparing a Condition Assessment Report; performing a geotechnical investigation; completing design and permitting for the new bulkhead; and preparing plans and specifications for bidding and construction. North Kingstown, RI.
- Quonset Development Corporation, Terminals 4 and 5 Bulkhead Improvements. Project Engineer for the preparation of plans and specifications for bidding and construction of a new concrete cap along an existing steel sheet pile bulkhead, including new bollards and cleats and concrete pavement. Responsibilities included designing the concrete cap to resist loading from vessels; performing the site survey; and assisting in the preparation of plans and specifications for construction. Quonset Point, RI.
- Southern New England Ship Building Company, Laydown Area Expansion and Air Bag Launch Way Project: Field Engineer for construction of a dry dock launch way. Observed daily construction activities to confirm general adherence to project plans and specifications. Responsibilities included confirming proper subgrade preparation; observing concrete pouring and associated testing; observing the placement of Pre-Cast Articulated Concrete Block mats; and managing project documentation. North Kingstown, RI.
- Americas Styrenics, Maintenance Dredging Project: Project Engineer for obtaining vibrocore sediment samples and for performing chemical and biological testing for a 100,000 CY Maintenance Dredging project in the Thames River. Responsibilities included executing the Sediment Sampling Plan and obtaining grab sediment samples at two disposal sites in the Long Island Sound. Gales Ferry, CT.
- Town of Jamestown, Fort Getty Pier Inspection: Project Engineer for the inspection of a WWI era timber pier. Responsibilities included conducting a visual inspection of the pier both topside and waterside, and reducing data from the inspection for the preparation of the inspection report. Jamestown, RI.



• Styron LLC., Shoreline Protection Project: Project Engineer for the design of a new riprap revetment to protect an eroding shoreline adjacent to an active rail line. Responsibilities included conducting a topographic survey of the wetlands and surrounding area; completing the CTDEEP Structures, Dredging, and Fill Permit Application; and developing the revetment design to prevent continued erosion of the slope. Gales Ferry, CT.

# General Civil Engineering

- Town of Jamestown, Fort Getty Roadway Repairs Project: Project Engineer for the design of repairs to a roadway damaged by storm surge. The project included performing a topographic survey of the existing conditions, designing the repairs, and preparing plans and specifications for construction. Jamestown, RI.
- Capital Terminal Company, Salt Pile Property Development: Field Engineer for surveying property lines and existing structures for possible development of a fuel delivery rail depot. East Providence, RI.

### Geotechnical Engineering

- Groundwater and Environmental Services, Inc., Geotechnical Interpretive Reports: Project Engineer for the preparation of several Geotechnical Reports for proposed Cumberland Farms, Inc. convenience stores and gas stations. The work included analyzing geotechnical investigation data; evaluating seismic conditions; performing the preliminary foundation design; and developing construction considerations and recommendations. Throughout New England and New York.
- Sprint/United Management Corporation, Seekonk River Horizontal Directional Drilling Project: Project Engineer for the design of a Horizontal Directionally Drilled fiber optic cable conduit under the Seekonk River. The work included performing a topographic survey of the site; overseeing a geotechnical investigation; overseeing a bathymetric and geophysical survey of the river; preparing the RIDEM and RICRMC Permit Applications; facilitating obtaining easements on RIDOT property; preparing plans and specifications for bidding and construction; and providing construction phase services. Providence, RI.
- Hugo Key and Son, Inc., Barney Pond Dam Pedestrian Bridge: Project Engineer for the design of concrete footings for a pedestrian bridge over the Barney Pond Dam Spillway. The work included performing a stability analysis of the existing spillway training walls and designing the reinforced concrete footings for the 50-foot pedestrian bridge. Lincoln, RI.
- Southern New England Ship Building Company, Laydown Area Expansion and Air Bag Launch Way Project: Field Engineer for monitoring pile driving operations by verifying pile locations and adherence to particular refusal criteria; performing site surveys for preconstruction layout and structure placement; and monitoring geotechnical subsurface investigations. North Kingstown, RI.

## Dam Engineering

• City of Providence, Canada Pond Dam Low-level Outlet Improvements Project: Project Engineer for the design of repairs to the existing low-level outlet of a concrete and earth



embankment dam. The work included performing a topographic survey of the site; observing an underwater dive inspection; preparing the RIDEM Dam Safety Permit Application; and preparing plans and specifications for bidding and construction. Providence, RI.

• YMCA of Pawtucket, Quidnick Reservoir Dam Improvements Project: Project Engineer for the design of improvements to a 650-foot-long earth embankment dam. Responsibilities

include for preparing a Visual Inspection Report; performing a topographic survey; completing the design of the improvements; preparing the RIDEM Dam Safety Permit Application; and preparing plans and specifications for bidding and construction. Coventry, RI.

- Quidnick Reservoir Company, Flat River Reservoir Dam Timber Sluice Gate and Trash Rack Repairs Project: Project Engineer for the design of repairs to the three (3) existing timber sluice gates and the timber trash rack. This project included observing an underwater dive inspection; preparing plans and specifications for bidding and construction; and providing construction phase services. Coventry, RI.
- NATCO, Arctic Dam Hydroelectric Facility Low-Level Outlet Repairs Project: Project Engineer for the design of repairs to the existing low-level outlet at the Arctic Dam. The work included performing a topographic survey of the site; designing a slip-lining repair and gate replacement; preparing plans and specifications for construction; and providing construction phase services. West Warwick, RI.
- Hugo Key & Sons, Inc., Featherbed Dam Dewatering, Flow Diversion, and SOE Plan: Project Engineer for preparing contractor submittals for improvements made to this earth and masonry dam. The dewatering, flow diversion, and support of excavation plans that were prepared allowed the contractor to replace the existing stone masonry culvert with pre-cast box culverts and to reconstruct the municipal roadway travelling across the crest of the dam. North Kingstown, RI.
- Town of Chaplin, Darling Pond Dam Improvements Project: Project Engineer for the design of improvements to this 250-foot-long earth embankment dam. Responsible for preparing the Visual Inspection Report; performing a topographic survey; completing design and permitting; and preparing plans and specifications for bidding and construction. This project included retro-fitting the existing pre-cast drop-inlet type structure for use as a low-level outlet structure; installing a new primary box culvert spillway; flattening the upstream and downstream slope of the dam; and armoring the upstream slope. Chaplin, CT.
- City of Providence, Canada Pond Dam Alternatives Evaluation Report: Project Engineer for preparing an Alternatives Evaluation Report of this 340-foot-long concrete retaining wall and earth embankment dam. The work included performing a topside visual inspection; observing an underwater dive inspection; concrete coring; soil test holes; and preparing the Alternatives Evaluation Report. Providence, RI.
- Quidnick Reservoir Company, Flat River Reservoir Dam Biennial Inspection: Field Engineer for assisting in performing the inspection and evaluation of a 1,400-foot-long by 20-foot-high High-Hazard earth and masonry dam, as well as preparing the Inspection / Evaluation Report. Coventry, RI.



### Environmental Engineering

- Millennium Tower, Dewatering and Water Treatment Plan: Project Engineer for the preparation of the Dewatering and Water Treatment Plan for the temporary earth support system installed for the construction of the Millennium Tower in Boston, Massachusetts. The Tower is being built adjacent to the historic Burnham Building and will be 55 stories, or approximately 606 feet tall upon completion. The plan included estimating the expected seepage/leakage rate into the excavation; specifying the dewatering wells/pumps; and designing the treatment system for the removal of site contaminants in conjunction with Lockwood Remediation Technologies. Boston, MA.
- Capital Terminal Company, Environmental Monitoring: Field Engineer for performing monthly observation well monitoring by measuring and reporting ground water and LNAPL product levels within a diesel fuel tank farm. Conducted the semi-annual oil-water separator outfall sampling and coordinated the required analytical testing. East Providence, RI.

### Structural Engineering

- Hugo Key and Son, Inc., University of Rhode Island GSO Pier Demo Plan: Project Engineer for the development of a demolition plan for the superstructure of an existing timber/concrete pier at the University of Rhode Island's Graduate School of Oceanography. The work included overseeing a dive inspection of the pile supports; performing a loading analysis of the pier to check the use of machinery to be utilized for the demolition; and developing a demolition plan to remove the concrete deck and timber structural components. Narragansett, RI.
- Daniel O'Connell's Sons, Prefabricated Metal Building: Project Engineer for the analysis of the column baseplates and concrete anchoring system to be used as part of the erection of a prefabricated metal building. The work included performing the load development for each column base plate in accordance with LRFD; and designing the baseplates and concrete anchors to support the applied loads from each column. West Warwick, RI.
- EDM Construction, Inc., Erection Procedures: Project Engineer for the preparation of the Erection Procedure Plans for three utility bridges being constructed as part of the MBTA Greenline Extension Project. The work included analyzing the crane pick loads; determining the outrigger bearing pressure; and developing the erection procedures. Somerville, MA.
- J.H. Lynch and Sons, Inc., Providence Station Demolition Plan: Project Engineer for the development of a demolition plan for a public plaza located above an existing underground parking garage at the Providence Station. The work included performing a comparative loading analysis of the existing parking garage to support demolition equipment; and developing a phased demolition plan to demolish portions of the plaza safely. Providence, RI.



# PROFESSIONAL MEMBERSHIPS/ACHEIVEMENTS

American Society of Civil Engineers

Chi Epsilon Civil Engineering Honor Society

Tau Beta Pi Engineering Honor Society

American Institute for Steel Construction

Recipient of the 2013 Rhode Island Consulting Engineers Scholarship

