



APPENDIX 6-E

Qualified Professional Resume

EXPERIENCE SUMMARY

Alex brings more than 7 years of experience in civil/environmental engineering and project management. His technical expertise includes stormwater modeling and design, civil/site design, and wetland mitigation permitting, sampling, and design. Alex also has a background in GIS modeling and environmental markets analysis.

Mr. Caven has more than 7 years experience in civil and environmental engineering consulting. His responsibilities have been distributed over a wide variety of projects, with particular emphasis on solar on landfill/brownfield design, stormwater modeling and design, civil/site permitting and design, stream and wetland mitigation, construction oversight, environmental markets analysis, and air quality permitting and monitoring. Mr. Caven is a Past-President of the SUNY ESF chapter of Engineers Without Borders (EWB and Engineering for a Sustainable Society (ESS). During his time in this role, he helped to develop several local and international humanitarian engineering initiatives, including a tree-planting and mapping initiative in rural Haiti, as well as facilitating design efforts to improve the efficiency of a human waste composting facility in Haiti.

SELECTED RELEVANT EXPERIENCE

**Environmental Engineer and Assistant PM, Tetra Tech,
February 2022 – Present**

AC Power – Queensbury Brownfield Solar, Queensbury, NY

Assisted in providing project management and environmental engineer services for a 5 - megawatt (MW) alternating current (AC) ballast-mounted solar energy project on an inactive hazardous waste site in Queensbury, NY. Project management tasks included preparing proposal documents, cost models, change orders, meetings with the Town, communication with subcontractors, and oversight of various project tasks including site plan development, town permitting, PCMMM Modification Request development, glare study, and decommissioning plan.

Project Manager & Environmental Engineer, Tetra Tech,

March 2022 – Present

AC Power – Pine Ave Landfill Solar, Niagara, NY

Provided project management and environmental engineer services for a 10 - megawatt (MW) alternating current (AC) ballast-mounted solar energy project on a closed and capped municipal solid waste landfill in Queensbury, NY. Project management tasks included preparing proposal documents, cost models, communication with subcontractors, and oversight of various project tasks.

EDUCATION

BS, Environmental Resource Engineering, SUNY College for Environmental Science and Forestry, 2015

AREA OF EXPERTISE

Solar on Landfill/Brownfields
Erosion and Sediment Control
Stormwater modeling and design
Civil/site permitting and design
Wetland mitigation

REGISTRATIONS/ CERTIFICATIONS

Certified Professional in Erosion and Sediment Control (CPESC), March 2019

TRAINING

AutoCAD Civil3D Tools and Functions, August 2021

Tetra Tech Project Management Training, Level 1, January 2022

OFFICE

Rochester, NY

YEARS OF EXPERIENCE

7.5

YEARS WITHIN FIRM

1.5

Environmental Engineer, Tetra Tech,**May 2022 – Present****AMP – Spartan/Finch Landfill Solar, Queensbury, NY**

Provided project management and environmental engineer services for a 7 - megawatt (MW) alternating current (AC) ballast-mounted solar energy project on a closed and capped paper manufacturing waste sludge landfill in Queensbury, NY. Engineering tasks included designing the civil engineering elements of the proposed solar-on-landfill facility, including access roads, stormwater features, ballast placement review/design assistance, interconnection design, and permitting support. Additional tasks associated with this effort include reviewing proposal documents, communication with subcontractors, and oversight of various engineering and permitting project tasks.

Environmental Engineer, Tetra Tech,**March 2022 – Present****AES – Somerset Solar Project, Somerset, NY**

Provided project management and environmental engineer services for a 125 - megawatt (MW) alternating current (AC) solar energy project on a closed coal fired power plant in Somerset, NY. Engineering tasks included designing the civil engineering elements of the proposed solar-on-landfill facility, including access roads, stormwater features, ballast placement review/design assistance, and permitting support. Additional tasks associated with this effort include reviewing proposal documents and level-of-effort estimates for engineering tasks, oversight of various engineering and permitting project tasks, and client communication and management.

Design Engineer, JMT, March 2018 – November 2021**City of Charleston, Charleston, SC**

Provided H&H modeling, permitting, civil/site design, and construction oversight services for flood mitigation efforts for the Huger Street Drainage Basin (115 Acres) in Charleston, SC. Services included site visits, coordination of survey, compilation of current and historic data on existing topography and stormwater infrastructure dating back to the 1800s, development of a 2-dimensional (2D) model of existing conditions, matching known flood levels during known rainfall volumes at known tide conditions, development of several design options to mitigate flooding, construction level documents, permit applications, agency meetings, and assistance with a the client-chosen flood mitigation plan.

Design Engineer, JMT, April 2019 – December 2019**Beaufort County, SC**

Coordinated GIS mapping of all unpaved roads in Beaufort County, SC. Developed a rating system along with the client, Beaufort County, to rank all unpaved roads in order of the need for each road to be paved based on the number of homes, schools, businesses, churches, school bus routes, etc. on each road. Developed an interactive GISOnline map for county officials to use for future management of their road-paving program.

Design Engineer, JMT, November 2018–June 2020**American Timberlands, Point Farm Mitigation Bank, Wadmalaw Island, SC**

Provided H&H modeling services for approximately 100 acres of farmland to be restored to its original condition as a saltwater marsh wetland mitigation bank. Services included site visits, survey of existing stormwater and irrigation infrastructure, compilation of lidar, publicly available GIS data, and survey to create site plans and an existing conditions model for 2D H&H modeling.

Design Engineer, JMT, April 2019 – November 2021**Nexans, Goose Creek, SC**

Designed shipping channel for new, larger ships to navigate approximately 10 miles up the Cooper River to transport electrical cables from a new cable manufacturing facility to existing shipping channels. Design efforts included combining bathymetric and land-side topographic survey data, lidar, and proposed dock/wharf design. A dredge plan was created to ensure safe navigation of vessels up and down the river at the lowest possible tide conditions and the lowest possible freeboard of ships during heavy-laden navigation of the river. Services also

included the permitting and design of all associated land-side infrastructure, including a new parking area, wharf, trucking road, and associated stormwater infrastructure.

Design Engineer, JMT, March 2018 – November 2021
City of Charleston, Low Battery Seawall, Charleston, SC

Performed civil/site permitting and design services for restoration of the Low Battery Seawall along the southern tip of the Charleston, SC Peninsula, including stormwater modeling and design, sidewalk, roadway, and promenade design, and construction oversight. Services included site visits, low-level survey of existing stormwater infrastructure, and design and drafting of all elements of the project corridor including utilities, landscape elements, parking layout, intersection design, signage, and construction details.

Environmental Engineering Specialist, JMT, February 2016 – March 2018
Schluter Systems, Plattsburgh, NY

Performed a comprehensive review of existing and planned manufacturing facilities and processes to develop permitting documents for industrial processes related to the creation of shower-tray systems in Plattsburgh, NY. Services included site visits, coordination of meetings between the client and regulatory agencies (NYSDEC), analysis of pertinent local, state, and federal air quality control regulations, and development of ongoing emissions monitoring program and database.