



Credere Associates LLC

**Theresa Patten, PE**  
President  
Principal Engineer

#### PROFESSIONAL LICENSES

- ▲ Professional Engineer  
ME #8694 12/31/24  
NH #13309 09/30/22  
MA #52129 06/30/22  
VT #133197 07/31/22  
RI #13192 6/30/23  
NY #101738-01 7/31/22

#### TRAINING

- ▲ 40-Hour OSHA 29 CFR 1910.120 HAZWOPER Course
- ▲ 8-Hour OSHA 29 CFR 1910.120 Hazardous Waste Health and Safety Refresher Course
- ▲ 24-hour ASTM Phase I and II ESA Class and 4-hour ASTM Continuing Obligations Class
- ▲ Portable Nuclear Density/Moisture Gauge Use and Safety Training and Radiation Safety
- ▲ USACE/NAVFAC CQCM Training

#### EDUCATION

- ▲ M.S., Civil Engineering (Environmental Geotechnologies), Tufts University, Medford, MA (1993)
- ▲ B.S., Cum Laude, Civil Engineering, Rensselaer Polytechnic Institute, Troy, NY (1991)

#### PROFESSIONAL ACTIVITIES

- ▲ Executive Board Member, Maine Chapter of American Council of Engineers Companies
- ▲ Member, Society of American Military Engineers
- ▲ Member, American Society of Civil Engineers

#### HIGHLIGHTS OF EXPERIENCE

Ms. Patten is a geotechnical and environmental engineer with over 23 years of engineering experience. In September of 2007, Ms. Patten founded the women-owned business of Credere Associates, LLC. She oversees the daily operation of the office and is principally in charge of the financial and business operations of the company. Ms. Patten serves as the senior reviewer/QC manager and Principal in charge for various on-going projects for Credere.

Ms. Patten's past engineering experience involved a variety of geotechnical and environmental projects including landfill design and construction, geotechnical engineering evaluations and construction, and hydrologic design and evaluations.

#### PROJECT EXPERIENCE INCLUDES

##### SENIOR REVIEWER/QC MANAGER

Ms. Patten Serves as the QC manager for federal, brownfield and private projects. These projects include long-term groundwater monitoring, remedial investigation/risk assessment, feasibility study, remediation implementation, hazardous building materials sampling, and demolition on repair projects. Ms. Patten takes an active role in the preparation and review of Quality Assurance Project Plans (QAPPs), Accident Prevention Plans (APPs), and related attachments. Ms. Patten is also responsible for the final work product of Brownfield and private Phase I and Phase II ESAs. She provides the final review of the majority of reports produced at Credere to ensure a consistent work product all cross the board. Federal project Ms. Patten has been involved in include:

- Various Demolition/Repair and/or Hazardous Building Material Projects at Portsmouth Naval Shipyard (PNSY), Kittery, ME
- Caswell Air Force Station, Caswell, ME
- Glenburn former Ground to Air Transmitter Site, Glenburn, ME
- Bucks Harbor former US Air Force Radar and Transmitter Site, Machiasport, ME
- Gould Island former US Navy Base, Jamestown, RI
- Naval Support Activity Cutler, Cutler, ME
- Dow Air Force Base Salvage Yard, Bangor, ME
- Naval Education and Training Center, Melville, Portsmouth, RI
- Former Loring Air Force Base FUDS, ME
- St. Albans Former Air Force Station, St. Albans, VT



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## **GEOTECHNICAL ENGINEERING**

### **Project Manager/Engineer for Airport Projects**

Ms. Patten has coordinated, and overseen field work associated with soil investigations at multiple airports. The scopes of work included advancing soil borings using standard hollow-stem auger techniques (ASTM D-1452) and Standard Penetration tests (ASTM D-1586); collecting soil and pavement samples for material testing; interpretation of laboratory results; and preparation of final soil boring logs.

### **Project Manager/Engineer for various Projects**

Ms. Patten has coordinated and conducted field work associated with geotechnical evaluations at numerous sites encompassing a wide range of subsurface conditions from deep deposits of sensitive soft clay to bony till. Field work has included completion of test boring and test pit programs including logging subsurface conditions, classifying soils, conducting in-situ field vanes, collecting undisturbed Shelby tubes and/or bedrock core samples, installing piezometers, inclinations, and settlement plates associated with settlement monitoring programs. Ms. Patten has evaluated subsurface conditions, estimated anticipated settlement based on consolidation tests, evaluated clay strength and stability of embankments, calculated the allowable bearing capacity of the soil, and developed recommendations for both shallow and deep foundations, retaining walls, pavement sections, reuse of on-site soil materials, and earthwork construction. Ms. Patten provided construction quality control, coordination of soils laboratory testing; performed field moisture-density testing of compacted fill, prepared daily field reports summarizing the contractor's activities, results of field density test, and any additional field recommendations.

### **Callahan Mine Superfund Site, Brooksville, Maine**

A key project which highlights Ms. Patten's experience/abilities is the Geotechnical Investigation of the Tailing Impoundment at Callahan Mine Superfund Site in Brooksville, Maine. The scope of work included a 2-month long field effort, an extensive geotechnical laboratory testing program, and static and seismic stability analyses. The objectives of the geotechnical project were to characterize the subsurface soil properties throughout the tailings impoundment, specifically the thickness and strength parameters of the glaciomarine silt-clay deposit and the tailings; determine the hydrological conditions throughout the impoundment; define the geometric configuration and geotechnical properties of the perimeter berm material; and establish the existing static and seismic stability of the tailings impoundment and evaluate the feasibility of relocating residential and/or ore pad material to the impoundment. Ms. Patten served at the Project Manager and lead geotechnical engineer on this project.