

MATTHEW J. BROKAW, P.E.

Education

BS – Construction Engineering and Management,
North Carolina State University, 2013
Minor in Parks and Recreation



Matt Brokaw

Professional Licenses

Professional Engineer – North Carolina

Professional Affiliations

American Society of Civil Engineers
National Society of Professional Engineers
Solid Waste Association of North America

Professional Experience

As a Senior Project Professional, Mr. Brokaw is responsible for engineering and design of a variety of projects, with a primary focus in solid waste management, stormwater management, and other environmental and civil related fields. Mr. Brokaw works closely with SCS's municipal clients of North Carolina and is currently expanding his services to regional and national clients. Mr. Brokaw had previously worked for another environmental design and consulting firm for 7 years prior to joining SCS in early 2020.

Since then, he has provided technical and consulting support for various MSW and C&D landfill sites throughout North Carolina. Mr. Brokaw has provided design, recommendation, and submittals for landfill expansions, construction stormwater management and pollution prevention, erosion and sediment control, and permanent stormwater BMP's. Mr. Brokaw is also highly experienced in Site-Civil design, which provides services in utility design, grading and stabilization, pavement design, facility layout, site design, and general construction services and Construction Quality Assurance (CQA). Other projects have included feasibility studies, environmental permitting, site assessments, lake/dam/and stream rehabilitation, environmental remediation, and preparation of various other Construction/Bid documents. Mr. Brokaw has over a decade of experience executing projects using AutoCAD Civil 3D and is knowledgeable in the wide-range of solutions it can provide for our client's needs.

The projects described below highlight some of Mr. Brokaw's notable involvements with SCS and prior to joining the company.

Landfill Engineering

Arconic, New York, Coal Ash Landfill Operations and Closures. Project Engineer for the environmental remediation, landfilling, lining, and capping of coal ash from aluminum manufacturing. Project team was tasked with dredging several hundred thousand cubic yards of contaminated sediment from a river bed and simultaneously incorporate the contaminated material into the coal ash landfill. This project presented significant challenges for controlling contact water, executing effective temporary and permanent cover, and coordinating operations plans which moved

very quickly. Mr. Brokaw, along with the project team, successfully overcame these challenges to support the client.

Wake County, North Carolina, South Wake Partial Landfill Closure. Project engineer for the 20-acre Phase I Partial Landfill Closure project for the South Wake Landfill. Mr. Brokaw provided design and CAD drafting support as well as CQA inspection throughout the project. It was a unique opportunity to be a vital component of the project from design through construction. Challenges included working with a Subtitle D Landfill which produced high amounts of LFG and was continuously settling throughout construction, coordinating simultaneous well drilling projects, installing innovative stone trench “rain-gutters” to convey runoff, and working through issues with the contractor.

Various Counties, North Carolina, On-Call Solid Waste Services. Mr. Brokaw provides a wide-range of engineering services, on-call support, and is the primary CADD drafter and designer for various North Carolina Solid Waste Clients. Project sites include Cumberland County landfills, Wake County landfills, Dare County C&D landfill, Cabarrus County C&D landfill, and Brevard County. Mr. Brokaw assists with stormwater management, erosion control, airspace analysis, filling operations, and construction support for these clients.

Civil-Site & Facility Design

City of Raleigh, North Carolina, East Neuse Pump Station and Forcemain Project. Project engineer for design of 3,200 LF of oversized gravity sewers, a 30,000 SF pump station site, and 2,500 SF of dual 48” forcemains to the Neuse River Waste Water Treatment Plant. The project included 30’ deep manholes, a custom oversized concrete junction box, a directional-bore river crossing, and site design for the pump station site. Mr. Brokaw was responsible for setting up CAD drawings, performing calcs for pipe layout, grading and drainage, as well as erosion control, stormwater, and environmental permitting.

Wake County, North Carolina, South Wake Northeast District Improvements Project. Project engineer for the improvements project to the waste disposal facilities at SWLF. The project includes the replacement of existing convenience center, renovations to the multi-materials and household hazardous waste (HHW) facilities, improvements to traffic flow, relocation of offices, an additional entrance office building, and removal over buried waste under the site. Responsibilities included coordinating with design sub-consultants and the County, civil-site design, utilities, grading and drainage, as well as providing erosion control, stormwater, and environmental permitting support.

US Air Force/Royal Saudi Air Force, Saudi Arabia, King Faisal Air Base. Mr. Brokaw was one of the lead civil design engineers for the airfield areas of the Air Base Modernization Program of KFAB, which includes renovations, additions, and various improvements to the base and its facilities. Mr. Brokaw worked with the team to design site layout, grading and drainage, and pavement for taxiways, hangars, and test facilities for assigned areas of the base.

Environmental Remediation

NCDEQ, North Carolina, Fairview Landfill Remedial Action Plan. Project engineer for the remediation plan to excavate, remove off-site waste, and close a pre-regulatory landfill site. NCDEQ requested various design alternatives and options to excavate and grade the site and deem it closed/stable. Mr. Brokaw lead the design plan for excavation and removal of waste on existing slopes up to 1.5H:1V, and drafted the plans in CAD using extensive surface modeling and volume analysis. Responsibilities also included the engineering report and erosion control permit. Mr. Brokaw has worked on several other NCDEQ remediation projects throughout North Carolina similar in nature. In addition to steep slopes and challenging terrain, other NCDEQ remediation projects included waste

along streambanks, riparian buffers, and/or wetlands and how to mitigate these impacts, as well as 401/404 permitting, which Mr. Brokaw was also responsible for.

USACE, New Jersey, Woodbrook Rd. Dump Remediation Plan. Staff engineer and primary CAD technician for the remediation plan to excavate and remove off-site a large amount of PCB contaminants. The USACE has requested analysis and presentation of the test pit data, development and review of a detailed excavation plan, off-site removal plan, and final construction drawings. Mr. Brokaw worked closely with lead project engineers who reported to Army Corps and NJDEP.

Construction Experience

Wake County, North Carolina, South Wake Landfill – Multiple Construction Projects. Mr. Brokaw has provided construction oversight and has served as the full-time construction representative for the Owner (Wake County) and Engineer during two ongoing projects at the South Wake Landfill facility in Apex, NC. The projects consisted of a 20-acre landfill closure and a 15-acre complete site renovation to the convenience center, multi-materials recycling facility, hazardous waste operations, and offices, including a new 5,000-sf field office building for meetings and tours. Mr. Brokaw inspected 1,600 LF of water line replacement and upgrades; 1,000 LF of new sanitary sewer; drilling and blasting of 15,000 CY of rock; concrete and asphalt paving; grading; and other site work for the improvements project. Mr. Brokaw also inspected the installation of 15 acres of geomembrane liner and geocomposite drainage net, landfill gas pipe network, and an innovative “rain gutter” stormwater system for the closure project.