

1. Introduction

October 15, 2021

Mr. Marcus Jones, PE
Henderson County Government
1 Historic Courthouse Square
Hendersonville, NC 28792

Subject: Letter of Interest - Ecusta Rail-Trail, TIP BL=0007

Dear Mr. Jones:

AECOM Technical Services of North Carolina, Inc. (AECOM) is pleased to submit our qualifications for engineering services for the Henderson County Rails-Trails project. The western region of the State of North Carolina and the Great Smoky Mountains offer spectacular scenic destinations and boast hundreds of miles of gorgeous trails, attracting visitors, hikers, bikers and nature lovers. The proposed Ecusta Rail-Trail will expand this offering with a 19-mile trail connection between Hendersonville and Brevard, expanding mobility and providing a new economic opportunity to the region.



Cheat River Trail, Preston County, WV (pg 3)

To deliver on this iconic project, AECOM is proposing a seasoned team of designers and planners who understand the local vision for the Ecusta Trail. Our team includes experts who will leverage their local understanding and extensive experience in greenway and trail planning and engineering: GIS analysis, pedestrian and bicycle safety, accurate cost estimation, engineering and design, greenway maintenance, site design, innovative and experienced public engagement, grant management, processes and funding and a very deep knowledge of NCDOT processes and funding structures. Our subject matter experts have worked in different capacities with North Carolina counties, municipalities, and multiple divisions of the NCDOT, including Division 14, developing trails and greenways in similar environments.

AECOM Offers Exceptional Project Management and Broad Technical Expertise

AECOM transportation professionals will deliver strong project management and wide-ranging technical expertise. Our proposed Project Manager, **Mickey Geiser, PE**, has broad experience managing complex projects, delivering signature projects to regional municipalities, including multimodal projects for the City of Charlotte, the Towns of Morganton and Cornelius and many others. His success is based on a commitment to timely and within-budget project delivery, expecting high levels of accountability from technical experts and maintaining an open line of communication between all parties during the life of the project. Mr. Geiser will be supported by **Mariate Echeverry** as Deputy Project Manager and **Mickey O'Brien, PLA, LEED^{BD+C}**, as Technical Advisor. Ms. Echeverry is a seasoned Project Manager who resides and works in Asheville, NC. She brings intimate knowledge of the region and of the Ecusta Trail particularities. Mr. O'Brien, an experienced Landscape Architect, has led and supported numerous greenway and trail projects and is highly versed in corridor planning, streetscape and open space design.

Specialized Partnering Firms

To complement our services, AECOM is pleased to partner with the following firms who each bring a unique set of skills and familiarity with Henderson County and the Ecusta Trail. **Site Design Studio (SDS)**, a highly creative and experienced landscape architecture and planning firm, will provide site design and support our public outreach and stakeholder coordination efforts. **Studio Main LLC**, one of South Carolina's leading landscape architecture firms specialized in greenways, parks and trails, will also support our public outreach and stakeholder coordination efforts. **Wildlands Engineering, Inc. (Wildlands)**, a leader in ecosystem restoration in the southeast, will provide stream restoration expertise. **Stewart Engineering, Inc. (Stewart)**, an engineering firm with a variety of offerings, will provide survey and SUE services. Finally, **Terracon Consultants Inc. (Terracon)**, an employee-owned engineering firm, will support the project's geotechnical needs.

SPSF Participation - AECOM is committed to an effective supplier diversity program that is consistent with Henderson County's objectives and contractual expectations. In view of this commitment, three of our subconsultant partners are registered Small Businesses: **SDS is an NCDOT-certified DBE/WBE/HUB, Stewart is a State of North Carolina HUB and Wildlands an NCDOT-certified SPSF.**

Firm Registration - **Conflict of Interest** - **Contractual Terms** - AECOM is fully and properly registered with the North Carolina Board of Examiners to offer engineering services. Our most recent *NCDOT Engineering Firm Qualifications Package* and *Private Engineering Firm Questionnaire* were submitted in July 2021. AECOM and our subconsultants are collectively prequalified to perform all work codes required under this LOI. Upon review of the requirements under this contract and to the best of our knowledge, we find no personal or financial conflict of interest on the part of any officer or employee of our firm. AECOM reserves the opportunity to negotiate in good faith the terms and conditions of any contract resulting from the submission of this Letter of Interest.

On behalf of the AECOM team, we thank you for the opportunity to submit this qualifications package and look forward to your positive response. If you require further information, you can contact the Project Manager and primary contact person, Mickey Geiser, at mickey.geiser@aecom.com or by phone at 704.962.2527.

Respectfully yours,

AECOM Technical Services of North Carolina, Inc.

Dominic J. "Mickey" Geiser, PE | Project Manager
704.962.2527 | mickey.geiser@aecom.com

Jeff Mann | Vice President | Project Director
919.414.2215 | jeff.mann@aecom.com

2. Team Qualifications



For over a half century, AECOM has been a leader in the fields of design and planning to preserve, enhance, and develop the unique character of the communities we live in and serve.

For this effort, our planning process will be structured to help the community effectively articulate its particular vision and needs, developing a meaningful connection between two key destinations that will be part of a regional greenway system. Below are examples of our expertise in action.

AECOM FAST FACTS

OVER
400 
NORTH CAROLINA STAFF

AND OVER
2700
STAFF IN NEARBY OFFICES

- TENNESSEE
- SOUTH CAROLINA
- VIRGINIA
- GEORGIA

Our Project Experience

MONONGAHELA RIVER TRAILS LTD MASTER SERVICE AGREEMENT (MSA) Monongalia County, West Virginia



Client / Reference

Monongahela River Trails Conservancy, Ltd.
Ella Belling, Executive Director
304.692.6782 / ella@montrails.org

Completion

Master Services Agreement valid till 2022



They (AECOM) have been cooperative in offering solutions to past issues, including changes in WVDOT grant requirements, permitting requirements, and construction contractor problems. Outstanding attention to detail!

Ella Belling, Executive Director, MRTC

The Monongahela River Trails Conservancy (MRTC) develops, manages and maintains a 48-mile linear park consisting of the Mon River and Deckers Creek Rail-Trails that transects three counties in North Central West Virginia. The trail system accommodates walking, running, cycling and cross-country skiing and includes connections to other recreational assets including parks and the Monongahela River Water Trail.

AECOM has been supporting MRTC since 2006 when we evaluated and performed design and construction phase services for a 3-1/2 mile section of trail development that included bridge restoration, drainage improvements and grading and paving with limestone sand. AECOM engineers also developed utility relocation plans and agency coordination with the WV Department of Environmental Protection and the West Virginia Department of Highways. More recently, AECOM has served MRTC under a MSA for a variety of project types. Task orders have included:

- **Reedsville Connector** – trail drainage evaluation and repairs, culvert design, and development of a short connector trail to a town park.
- **Deckers Creek Trail Resurfacing** – trail evaluation, design, and construction phase services for 12 miles of aggregate resurfacing, including culvert replacements and trail and ditch reconditioning where needed.
- **Collins Ferry Connector** – site evaluation, design, preparation of contract documents and construction phase services for the reconditioning and drainage improvements to a quarter-mile hillside trail connector from the Mon River Trail to local neighborhoods.
- **Arboretum Drainage repairs** – trail evaluation, design and preparation of contract documents for the replacement of four culverts and reconditioning of ditches to improve drainage and mitigate reoccurring trail damage after storms.
- **Wharf District Lighting** – design of pedestrian lighting along the Mon River Trail near the Morgantown City Center and Riverside Park.
- On-call damage assessment after storms and slope slides and slips.

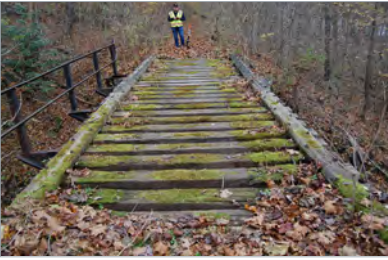
Of the recent tasks, the Reedsville Connector was completed in 2019 and the Deckers Creek Resurfacing project in 2020. The Collins Ferry Connector design phase is complete and is currently advancing to the construction phase. In 2020, based on the continued success of the partnership, MRTC awarded AECOM a two-year extension of the MSA.

The MRTC provided an overall ranking of Outstanding - "We've found the AECOM staff very professional and focused on the needs of the rail-trail projects with attention to detail, budget and time schedule... I have no hesitancy or reservations in recommending them for the engineering and architectural services for the storm damage repair projects in the Monongahela National Forest."

Ella Belling, Executive Director, MRTC

CHEAT RIVER RAIL-TRAIL - MANHEIM TO CADDELL

Preston County, West Virginia



Client / Reference

Friends of the Cheat
Owen Mulkeen, Associate Director
304.329.2621 / owen@cheat.org

Completion

March 2022 (design)

AECOM is responsible for the development of plans, specifications, and cost estimates for a 8.7-mile section of the Cheat River Trail from Manheim to Caddell in Preston County, WV. AECOM engineers are currently developing environmental studies, trail design, structure design, trailhead conceptual design, drainage systems and providing agency coordination. The project includes the rehabilitation of eight existing steel girder and timber bridge structures for re-use as part of the trail. The largest structure crosses the Cheat River adjacent to the planned Preston site trailhead. The Cheat River Bridge is envisioned as a centerpiece to the trail and will have observation decks for viewing the scenic Cheat River.

To fulfill CSX Transportation requirements to evaluate and, as necessary, remediate contaminated soils onsite, AECOM has performed a Site Assessment Report, Human Health and Ecologic Risk Assessments and development of a Remedial Action Plan as part of the West Virginia Voluntary Remediation Program.

MUD CREEK GREENWAY FEASIBILITY STUDY

Henderson County, North Carolina



Client / Reference

Henderson County
Janna Bianculli, Planning Department
828.694.655
jbianculli@hendersoncountync.gov

Completion

February 2021

AECOM was hired by Henderson County to study the feasibility of building a greenway along Mud Creek. The project is part of the county's Greenway Master Plan and will connect neighborhoods south of Hendersonville with the Ecusta Trail. Public engagement was conducted entirely through a virtual environment. Property owner's workshops, a virtual public meeting, surveys and the guidance of the Steering Committee provided input that helped determine the best route. The main recommendation of this study was the potential for a greenway that traverses the creek's wetlands and provide educational and recreational opportunities in addition to transportation connections to the main greenway network.

Plan elements included: existing conditions, opportunities and constraints, public participation, recommendations, cost estimation and phasing and implementation.

CLARK'S CREEK GREENWAY HAMPTON CONNECTOR

Charlotte, North Carolina



Client / Reference

Mecklenburg County
Alicia Rocco
980.314.2501
alicia.rocco@mecklenburgcountync.gov

Completion

2016



In a cooperative effort and at the request of the local citizens, Mecklenburg County joined with the Hampton Place Homeowner Association to construct a jointly funded greenway connection. This connection provided the newly constructed neighborhood access over a stream to the existing Clark's Creek Greenway. AECOM was selected by Mecklenburg County Asset and Facilities Management to design a pedestrian bridge and trail modification/extension.

AECOM developed a greenway alignment and performed the hydraulic analysis, CLOMR studies, wetland and permitting process, and coordinated the survey and geotechnical subconsultants for this 600-foot connector. Our services included obtaining the Individual Floodplain Development Permit and temporary erosion control permit. While no utility relocation was ultimately necessary, AECOM designed around Duke and Charlotte Water facilities in the area.

WALNUT CREEK GREENWAY AT TRAILWOOD DRIVE

Raleigh, North Carolina



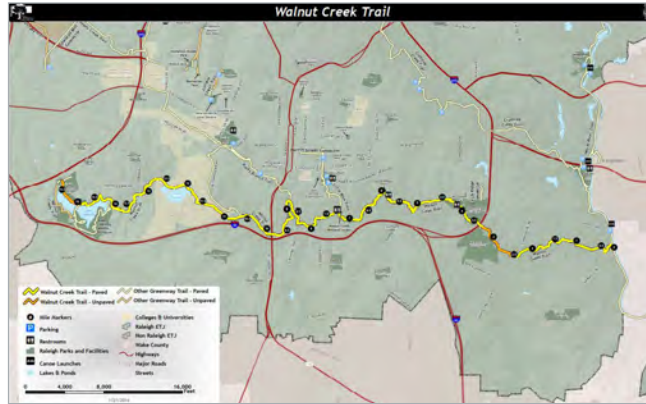
Client / Reference

City of Raleigh
 Kris Morley-Nikfar, AICP, Project Manager
 Parks, Recreation and Cultural Resources
 919.996.4789

kris.nikfar@raleighnc.gov

Completion

Expected in 2022



The Walnut Creek Trail follows Walnut Creek across southern Raleigh, extending over 15 miles from Lake Johnson to the Neuse River Trail and includes connections with the Centennial Bikeway Connector, Rocky Branch Trail, Little Rock Trail and the Neuse River Trail. It also includes a range of landscapes and environments to experience, from natural to urban to residential. The eastern section of the Trail is designated as part of the East Coast Greenway Trail

which is a long distance nationwide trail that winds its way between Canada and Key West, linking all of the major cities of the eastern seaboard.

AECOM is developing final design plans for the Walnut Creek Trail that completes a current end users system gap. This is a heavily traveled area with many Centennial Campus users in addition to patrons of Lake Johnson Park. Initial design development included a feasibility study to determine the best alternative alignment to improving the connectivity. Two options were considered including a multi-use path adjacent to existing roadways and a greenway with pedestrian bridge following an existing sewer easement. Design progressed utilizing the greenway alignment and includes an asphalt paved trail with a pedestrian bridge spanning Brushy Branch Creek. AECOM's multidisciplinary services included an environmental evaluation, a Categorical Exclusion submittal, permitting, Hydraulic Flood Studies (with CLOMR and LOMR), civil design, structural engineering, bid document preparation, cost estimates and bid phase assistance. The proposed trail section connects the Centennial Campus Greenway Trail with the existing multi-use path located on Trailwood Drive to further improve the Capital Area Greenway System. Construction began in the spring of 2020.

FAYETTEVILLE MULTI-USE TRAIL + BRIDGE

Fayetteville, Georgia



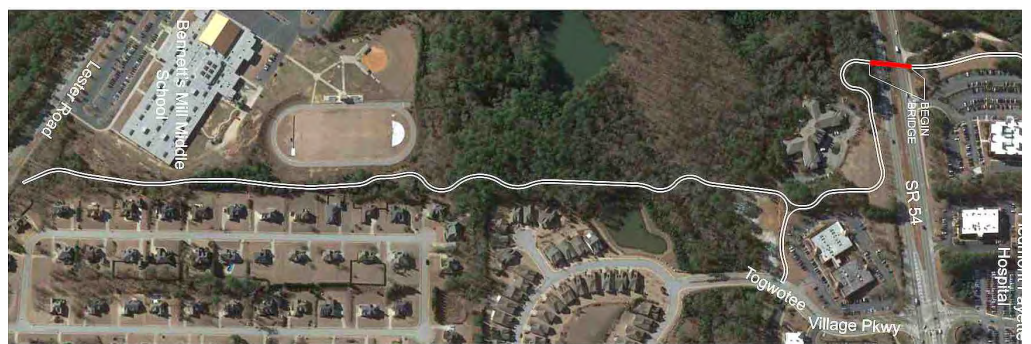
Client / Reference

City of Fayetteville
 Brian Wismer, Director
 Community Development
 770.719.4175

bwismer@fayetteville-ga.gov

Completion

Expected in 2022



AECOM assisted the City of Fayetteville with the design of an approximately ¾ multi-use trail and a grade separated multi-use bridge which will span over State Route 54, located just ¼ of a mile west of the intersection of Togwotee Village Parkway and State Route 54. The primary purpose of the project is to provide a multi-modal connectivity between Piedmont Fayette Hospital, new residential developments and Pinewood Film Studio to the north of SR 54 with existing residential and two schools to the south of SR 54: Cleveland Elementary and Bennett's Mill Middle School. This project will provide connectivity with existing paths in Fayetteville and within the unincorporated County.

AECOM has been retained by the City of Fayetteville to provide construction administration throughout the construction phase of the project scheduled for completion in 2022.

SDS RECENT PROJECT TRAIL + GREENWAY-RELATED PROJECTS

Western North Carolina



Enka Heritage Trail, Buncombe County

As part of the recreational development of Bob Lewis Ball Park, SDS provided greenway alignment concepts and coordinated with the private developer and Buncombe County Parks and Recreation Director to identify an alternative to be evaluated in the feasibility study ultimately awarded to AECOM. Currently, SDS is a member of the design team providing community engagement, steering committee and public involvement, alignment alternative and construction document services for the preferred greenway route, associated amenities and landscape improvements.

Client / Reference

Buncombe County Recreation Services / Peyton O’Conner, Director
828.250.4260 / peyton.oconner@buncombecounty.org

Completion Ongoing



River Arts District Transportation Improvement, City of Asheville

SDS was a member of the design team selected by the City of Asheville to provide construction documents for the 2.2 mile River Arts District Transportation Improvement Project from Hill Street to Amboy Road. SDS’ initial role on the design team involved conceptual park and recreation alternatives to identify the final greenway alignment and streetscape concepts as well as on and off-street parking, designated bicycle lanes, a two-way cycle track and multi-use path south of the Lyman Street intersection to Amboy Road. SDS also assisted in the evaluation of river access for recreation and coordinated the greenway and future boat launch plans with the North Carolina Wildlife Resources Commission for implementation in 2017. Additionally, SDS assisted the Riverfront Redevelopment Office and City’s Greenway Coordinator regarding exhibits for Park and Recreation Trust Fund Grants, a Comprehensive River Arts District Map, which was installed at the Craven Street Intersection Trailhead, as well as the design of a City Standard Greenway Safety Rail.

Client / Reference

City of Asheville / Dustin Clemens, Program Manager
828.232.4580 / dclemens@ashevillenc.gov

Completion July 2021



Additional Project Experience

- Mud Creek Greenway, Henderson County, subconsultant under AECOM
- Wilma Dykeman Greenway, City of Asheville
- Reems Creek Greenway, Buncombe County
- NCDOT I-2513A Design, Asheville, subconsultant under AECOM
- NCDOT I-26 Connector, Northwest Asheville
- Greenway Master Plan Maintenance and Operations Cost Estimates, Buncombe County



HENDERSONVILLE MULTI-AREA STREAMBANK RESTORATION

Hendersonville, North Carolina



The Multi-Area Streambank Restoration project is a City of Hendersonville initiative to restore approximately 11,000 LF of streambanks at 13 local sites. The goal is to protect sanitary sewer and other City infrastructure and improve water quality in Mud Creek, an impaired stream on the state’s 303(d) list, using a green infrastructure-focused approach. Wildlands completed grant funding activities and documentation to meet Division of Water Infrastructure requirements consisting of easement acquisition, bid package preparation, and engineering cost estimates.

Client / Reference

City of Hendersonville / Brent Detwiler, City Engineer
828.697.3060 / bdetwiler@hvlnc.gov

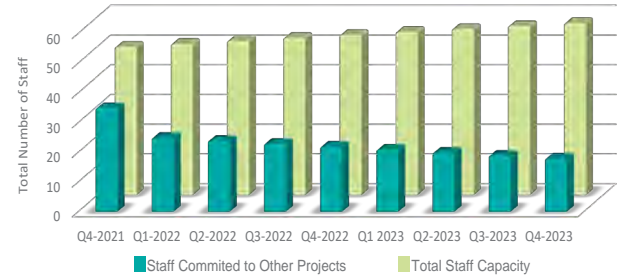
Completion 2021

3. Team Experience

The design and technical elements associated with the Ecusta Rail-Trail project call for diverse backgrounds and specialized greenway and trail designers.

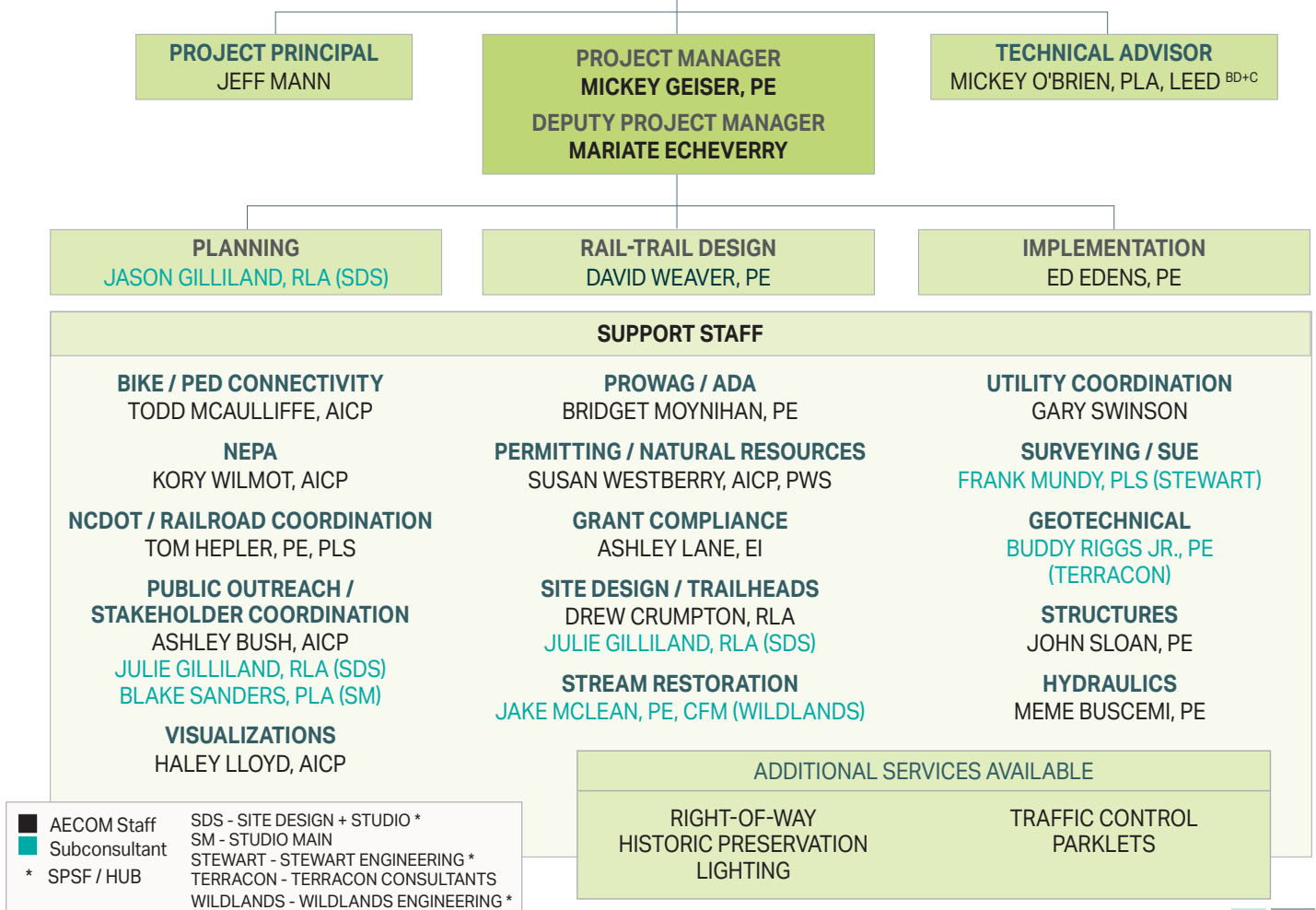
AECOM has assembled a team of experienced staff with the skillsets needed to deliver the Ecusta Trail. We have the availability to begin work in earnest this fall, immediately kicking off public engagement, design and environmental effortst. Mr. Geiser and Ms. Echeverry have much experience in implementing grant-funded projects and will organize efforts to maximize project progress within grant constraints and in line with the critical path of the schedule. AECOM will engage not just our staff, but our excellent and talented teammates as we drive this work forward. Our diverse team of engineers, landscape architects, and environmental scientists will be quickly engaged through clear communication, team flexibility and effective management to efficiently provide services to the County.

AECOM Team Availability Chart
Q4-2021 - Q3-2023



Staff	Availability
Mickey Geiser, PE	65%
Mariate Echeverry	50%
Mickey O'Brien, PLA	30%
Jason Gilliland, RLA	60%
Ed Edens, PE	30%
David Weaver, PE	65%

Organization Chart



■ AECOM Staff
 ■ Subconsultant
 * SPSF / HUB
 SDS - SITE DESIGN + STUDIO *
 SM - STUDIO MAIN
 STEWART - STEWART ENGINEERING *
 TERRACON - TERRACON CONSULTANTS
 WILDLANDS - WILDLANDS ENGINEERING *

Our Partnering Firms...

AECOM brings together highly qualified professionals with a broad set of skills specifically tailored to the needs of the Ecusta Rail-Trail project.



Success lies in effective public communication, working with stakeholders, providing an attractive, effective and cost efficient design, and successful acquisition and execution of grant funding. To provide the best-in-class service to Henderson County, we have selected the following teaming partners introduced below. Our team stands ready to deliver.



SITE DESIGN STUDIO

Established in 2009 and located in Weaverville, NC, Site Design Studio (SDS) is a highly creative and experienced landscape architecture and planning firm, with the expertise and capabilities to deliver project management, public involvement and coordination, planning, construction documentation, cost estimating and permitting services. SDS staff have over 40 years of combined design and project management experience, of which 30 years have been served in Asheville, Western NC and the southeast. SDS was founded upon the experience of Landscape Architects with a range of expertise in both public and private sectors focusing on community planning, parks and recreation as well as greenway and multi-use trail design. SDS ideas are thought-provoking and results-focused so each and every client brief is delivered professionally and to the highest standard. **SDS is an NCDOT-certified DBE/WBE/HUB.**

Contact: Julie Nicole Gilliland, RLA, President
10-D South Main Street, Weaverville, NC 28787
828.484.822 | Julie@SDS-LA.com



WILDLANDS
ENGINEERING

Wildlands Engineering, Inc. (Wildlands) is a vertically integrated engineering company specializing in water resources and ecosystem restoration services. Wildland's team of dedicated, motivated, and highly trained engineers, hydrologists, ecologists, biologist, real estate brokers and GIS analysts possesses extensive experience in all aspects of stream and wetland restoration. As a leader in ecosystem restoration in the southeastern United States, Wildland's 72-person team is focused solely on environmentally-oriented restoration projects, which means their designers can focus on developing the most innovative and cost-effective techniques that yield the greatest ecological outcomes. Wildlands is dedicated to creating ecological solutions through innovative engineering. **Wildlands is an NCDOT-certified SPSF.**

Contact: Jake McLean, PE, CFM
1430 S. Mint Street, Suite 104, Charlotte, NC 28203
704.332.7754 | jmclean@wildlandseng.com

STUDIOMAIN

Studio Main LLC is a landscape architecture planning and design firm that has become one of South Carolina's leading small-business firms specializing in planning, design and implementation of strategic master plans, corridors, greenways, parks and trail systems. Founded in 2016 by Blake Sander, PLA, after leading thousands of miles of multi-modal planning implementation for national design firms, Studio Main engages in a focused design approach that leads with a commitment to transforming communities through community-oriented design. Studio Main is at the forefront of the sustainable transportation movement and is active in the Ten at the Top Mobility Alliance, Complete Streets Coalition. Blake has given national and regional presentations on pedestrian and bicycle corridor and network design and implementation and provide greenway and trail safety and sustainability services.

Contact: Blake Sanders, PLA, ASLA, President
1 Hindman Street, Pelzer, SC 29669

Terracon

Terracon is a 100% employee-owned consulting engineering firm that has provided quality engineering services to clients since 1965. From major highway projects to bridge inspections, Terracon proves itself to be a leader in the transportation sector, providing geotechnical engineering, environmental consulting, construction materials and pavement related services, with broad range of technical and management experience delivered to both public and private sector clients. Terracon's geotechnical expertise includes subsurface investigations for roads and bridges, preparation of inventory, foundation recommendations and pavement reports, subgrade stabilization mix design and testing and PDA and CSL testing. Terracon maintains NCDOT prequalification to provide various geotechnical and environmental work scopes and currently holds an on-call geotechnical contract with NCDOT. Terracon's Raleigh laboratory is fully certified by AASHTO and NCDOT to perform various Levels I and II soils and aggregate tests.

Contact: Abner Riggs, PE, Geotechnical Project Manager
2401 Brentwood Road, Suite 107, Raleigh, NC 27604
919.873-2211 | Abner.RiggsJr@terracon.com



STEWART

With an office in Charlotte, NC, Stewart Engineering offers a unique interdisciplinary collaborative approach that results in stronger and more creative design solutions. Stewart serves domestic and international clientele, offering a full range of services including Civil Engineering, Geomatics, Geotechnical and Construction Services, Landscape Architecture Municipal Planning, Structural Engineering and Transportation. Founded in 1994 by Willy E. Stewart, PE, the firm has more than 200 employees and is owned by a select group of professionals who are personally involved in our clients' success. From their headquarters in Raleigh, Stewart has proudly provided professional services on hundreds of projects throughout the state of North Carolina during their 27-year history, including municipal projects, parks, infrastructure improvements, residential and higher education. The company was recognized by Charlotte Business Journal as among the 2020 Best Places to Work and Healthiest Employers. Stewart was also nationally ranked as a 2020 Top 500 Design Firm by Engineering News-Record. **Stewart is a certified State of North Carolina HUB.**

Contact: Frank Mundy II, PLS, Practice Leader, Geomatics
223 S. West Street, Suite 1100 Raleigh, NC 27603
803.203.6162 | FMundy@stewartinc.com

Our Leadership Team...



Mickey Geiser, PE Project Manager

Mickey serves as Transportation Department Manager in the Charlotte, NC office. For over 22 years, Mickey has worked for clients such as the City of Charlotte, NCDOT, South Carolina

Department of Transportation (SCDOT) and several municipalities. His work has focused on roadway, transit, greenway, stormwater design, utility coordination and construction services. Mickey has developed the understanding necessary to implement holistic solutions for difficult urban and rural corridors. Mickey led the CityLYNX Gold Line – Phase 2 Streetcar Project, a multi-million dollar transit project that replaced water and sewer, stormwater, utility, roadway pavement, and sidewalk facilities for a 2.5-mile corridor in Charlotte in addition to 2.5-miles of FTA-grant funded streetcar infrastructure. This challenging design provided a new transit service and enhanced utility infrastructure while improving ADA accommodations and the multimodal functionality.

Education

BS, Civil Engineering, North Carolina State University, 1998

Registration

Professional Engineer, NC, SC

Select Experience

CityLYNX Gold Line Phase 2, City of Charlotte Engineering and Property Management, NC. Project Manager for a 2.5-mile extension to the CityLYNX Gold Line streetcar system. Utilizing 30% conceptual design developed by AECOM in 2009, the AECOM team progressed design to a 65% level to support the Charlotte Area Transit System pursuit of a Section 5309 FTA Small Starts Grant. With successful award of that grant, the contract was amended to include final design and construction phase services in 2015. Streetcar operations have now begun, and project punch-list construction is nearing completion. Mr. Geiser is managing a team of ten consultants to provide survey, geotechnical, track, civil, utility, train systems, community involvement, safety and security, construction phase services, and other various tasks.

Mud Creek Greenway Feasibility Study, Henderson County, NC.

AECOM was selected to review the feasibility of a greenway connection between the communities south of Hendersonville, and the Ecusta Trail. The study included public engagement (through virtual environments), alternatives analyses, and environmental considerations. Provided engineering guidance during the study, and performed quality control for final deliverables to the client.

Highway 115 Feasibility Study, Phase II – Washam Potts Road to Highway 73, Town of Cornelius, NC. Project Manager for a study of NC 115 between the towns of Cornelius and Huntersville, investigating the ability to provide bicycle and pedestrian facilities, analyzing current and future traffic operations, and improving the safety of rail crossings along the 2.5-mile corridor of NC-115 adjacent to an existing Norfolk Southern Rail line. The project included stakeholder, NCDOT, and railroad coordination, as well as public engagement, traffic analysis, and conceptual designs and estimates.



Jeff Mann Project Director

Located in Raleigh, Jeff serves as AECOM's North Carolina Transportation Business Unit Leader and Vice President. A seasoned transportation executive with over 25 years of professional experience that has included program management, NEPA, operational assessments, contract negotiation, budget development, demand forecasting, performance measurement and governmental relations, Jeff served as NCDOT's Deputy Secretary of Transit, providing oversight to the non-highway modes. He also served as President/CEO of GoTriangle, leading agency planning, capital development and operations. Jeff will provide leadership and resources for the Ecusta Rail-Trail project.

Education

MBA, Wake Forest University, 1995

BS, Business Management, University of North Carolina at Wilmington, 1992

West Trade/Rozzelles Ferry Comprehensive Neighborhood Improvements Project – I-77 Underpass Enhancement, City of Charlotte, NC. As Senior Design Engineer, assisted in the design and review for the planning and design phases of approximately 2,000 LF of new sidewalks, planting strips, curb ramps, and plaza area with the Trade Street/I-77 interchange immediately west of uptown Charlotte. Intended to improve the access of western neighborhoods to uptown, and as part of the CNIP program, the project compliments the CityLYNX Gold Line streetcar corridor by improving mobility options through connections to transit, the greenway system, and a more comfortable experience through an interchange that is otherwise hostile to bicycle and pedestrian traffic. Project to bid in 2019.

Clark's Creek Greenway Hampton Connector, Mecklenburg County, NC. In order to connect a newly constructed neighborhood to the existing Clark's Creek Greenway, AECOM has been contracted by Mecklenburg County Asset and Facilities Management to design a pedestrian bridge and trail extension. Provided senior oversight and direction for project design, final construction documents, and project implementation. The project was completed in 2016.

Little Sugar Creek Parkwood Underpass/Cordelia Park Greenway Extension, Mecklenburg County, NC. In order to provide a direct off street connection from the existing Little Sugar Creek Greenway to the Cross Charlotte Trail extension through Cordelia Park, AECOM was contracted to provide hydraulic studies, a CLOMR application demonstrating no impact to existing homes and structures, new trail alignment and park modifications. Provided senior oversight and direction for the project. Construction was completed in 2017.

Little Sugar Creek Greenway Phase 1A, Mecklenburg County Real Estate Services, Charlotte, NC. Project Manager. Responsible for the preliminary and final design, permitting, and construction observation of Phase 1A. This portion of the Little Sugar Creek Greenway west of Belmont Avenue included installation of a prefabricated pedestrian bridge and a covered pedestrian underpass under an existing CSX railroad bridge over Little Sugar Creek. Specific project tasks included coordination with and acquisition of a CSX Railroad agreement, schematic design and project engineering (drainage, roadway impacts, and greenway design), construction documentation, and construction administration. *Work performed under previous employer.*

Little Sugar Creek Greenway through Freedom Park, Mecklenburg County Real Estate Services, Charlotte, NC. Project Manager. Final design, permitting, and construction observation for the Little Sugar Creek Greenway through Freedom Park in Charlotte. Worked closely with the County to design, permit, bid, and construct this segment of the greenway, incorporating the design into Freedom Park and recent stream restoration improvements. Work also included the installation of a BMP in the parking lot of the Charlotte Nature Museum. Construction was completed in 2008. *Work performed under previous employer.*



Mariate Echeverry

Deputy Project Manager

Located in Asheville, NC, Mariate is a Senior Transportation Planner with 23 years developing and implementing innovative transportation strategies focused on the integration of land use and multi-modal transportation systems, complete streets and livable communities. She was responsible for developing the mobility vision and comprehensive multimodal plans for the City of Miami Beach and the City of Asheville and for developing and implementing the transit master plans, pedestrian, and bicycle and greenways master plans for these municipalities. Mariate is multilingual and supports our LEP outreach services. She recently supported the outreach efforts for the Cabarrus County Long Range Transportation Plan in Cabarrus County, NC.

Education

MSc, Urban Transportation, Universidad de Brasilia, Brazil
BS, Architecture, Universidad Simon Bolivar, Venezuela

Select Experience

- Mud Creek Greenway Feasibility Study, Henderson County, NC
- SouthPark Comprehensive Neighborhood Improvements Program, City of Charlotte, NC
- Riverside Drive Greenway Feasibility Study, Buncombe County Recreation Services, Asheville, NC
- Independence Boulevard Corridor Pedestrian/Bicycle Routes, City of Charlotte, NC
- Highway 115 Feasibility Study Phase II, Town of Cornelius, NC
- Five Points Plaza Intersection Improvements, City of Charlotte, NC
- Bike and Ped Cost Estimation Tool, NCDOT, NC



Ed Edens, PE

Implementation Lead

AECOM's North Carolina Roadway Department Manager, Ed is located in the Raleigh, NC office. During his 33-year career, Ed has worked extensively with public sector clients in North Carolina in delivering transportation projects involving in all phases of project development from planning, final design and construction phases services. This broad-based experience involves leading multi-disciplined full-service project delivery teams to provide turn-key support for our public sector clients including NCDOT, numerous municipalities, airports and other transportation clients. Ed will lead our implementation services, overseeing field work and key engineering efforts. He will also be our primary interface with NCDOT during the course of this project.

Education

BS, Civil Engineering, North Carolina State University, 1988

Registration

Professional Engineer, NC, SC, TN

Select Experience

- Falls of Neuse Road Realignment and Widening from Raven Ridge Road to New Falls of Neuse Road (U-4901), City of Raleigh, NC
- Asbury Chapel Road Relocation and Intersection Realignment, Mecklenburg County, NC
- Battleground Rail/Trail Grade Separation, Greensboro, NC
- Independence Boulevard (US 74) - Albemarle Road to Idlewild Road, Mecklenburg County, NC
- Atlantic Avenue Road Widening, City of Raleigh, NC
- Trinity Road Pedestrian Tunnel, NCDOT, Raleigh, NC



Mickey O'Brien, PLA,

LEED^{BD+C} Technical Advisor

Located in Atlanta, GA, Mickey is a seasoned Landscape Architect focused on optimizing the potential of infrastructure projects in the public realm from function to form. Over the course of his 25-year career, he has supported land use and corridor planning as well as streetscape and open space design. Mickey brings a multi-disciplinary approach on projects and understands the true value of design collaboration. His master planning efforts as well as landscape architecture services have focused on promoting walkability and multi-modal transportation options with attention to detail celebrating the unique character within the design for each town or community. In addition, Mickey has extensive experience working with DOTs related to roadway/corridor beautification treatments.

Education

BLA, School of Environmental Design, University of Georgia, 1994

Registration

Licensed Landscape Architect, GA, TN | LEED Accredited Professional BD+C

Select Experience

- Mud Creek Greenway Feasibility Study, Henderson County, NC
- Multi-Use Trails and Bridge Design, City of Fayetteville, GA
- North Charleston Park Master Plan, City of North Charleston, SC
- Fayetteville Streetscape Improvements, City of Summerville, SC
- Urban Orchard of Piedmont Park, Piedmont Park Conservancy, GA
- Marbry Park, Cobb County Parks and Recreation Department, GA
- SR 54 Multi-use Trail Alternative Transportation Facility, City of Fayetteville, GA



Jason Gilliland, RLA (SDS)

Greenway Design Lead

Located in Weaverville, NC and co-owner/Vice President of SDS, Jason gained his experience in New York, Colorado and North Carolina. With over 21 years of experience, his expertise includes park and open space planning, community and neighborhood park design, streetscapes, greenway, bicycle and pedestrian facilities, public engagement and facilitation. As a NCI-certified Charrette Planner, he approaches projects with a participatory public involvement process. Jason has worked with several municipalities improving and enhancing the quality of trails, streetscapes, intersections and points of interests. He has extensive experience in site investigation/analysis, conceptual design, construction documentation and detailing, technical specifications, project management, cost estimating, permitting, bidding and construction observation.

Education

BLA, Ball State University, College of Architecture and Planning

BS, Landscape Horticulture/Nursery Production/Management, Colorado State University

Registration

Registered Landscape Architect, NC, TN | Stormwater BMP Inspection & Maintenance Certification | NCDOT Complete Streets Certification | National Charrette Institute (NCI) Certified Charrette Planner

Select Experience

- Enka Heritage Trail Greenway Feasibility Study, Buncombe County, NC
- Mud Creek Greenway (Sub under AECOM), Henderson County, NC
- Wilma Dykeman Greenway, City of Asheville, NC
- Reems Creek Greenway, Buncombe County, NC
- I-2513 Final Design for I-26/I-240, NCDOT, Asheville, NC
- Greenway Master Plan Maintenance and Operations Cost Estimates, Buncombe County, NC

Our Specialized Support Staff...



David Weaver, PE Rail-Trail Design Lead

David is an experienced Project Manager who oversees and develops planning studies, engineering design, and construction management for a variety of project types and disciplines. As Branch Manager of AECOM's Morgantown office, David supervises the operations in that office and coordinates with other AECOM offices around the country. David also has an extensive background in structural rehabilitation and forensic investigations.

Education

MS, Structural Engineering, University of Washington, 1988
 BS, Civil Engineering, Clemson University, 1986

Registration

Professional Engineer, WV

Select Experience

- Cheat River Trail, Preston County, WV
- Monongahela River Rail-Trail, (MRTC, WV)
- Deckers Creek Trail Resurfacing, MRTC, WV
- Reedsville Connector, MRTC, WV
- Arboretum Drainage Repairs, Trail Evaluation and Design, MRTC, WV
- Elkins Bypass Preliminary and Final Design, WVDOT, Pittsburgh, WV



Todd McAulliffe, AICP Bike + Ped Connectivity

Located in Charlotte, Todd is a Planner and GIS Analyst with over 18 years of experience delivering multimodal transportation planning projects for NCDOT and municipalities throughout North Carolina and the Southeast. He uses the analytical power of GIS to help identify barriers to mobility and accessibility as well as opportunities to provide improvements for all modes of travel. With a Masters in Geography and a concentration in planning, he focuses on applying his GIS expertise to planning and transportation projects.

Education

BS, Sport Management, Western Carolina University, 2006
 MA, Geography, UNC Charlotte, 1993

Registration

Certified Planner, American Institute of Certified Planners

Select Experience

- Mud Creek Greenway Feasibility Study, Henderson County, NC
- Town of Elkin Bike/Ped Plan, Elkin NC
- Town of Rutherfordton Bike/Ped Plan, NC
- Highway 115 Feasibility Study Phase II, Town of Cornelius, NC
- Independence Boulevard North Ped/Bike Project, City of Charlotte, NC



Kory Wilmot, AICP NEPA

Located in Raleigh, Kory is a Senior Urban Planner with experience in multi-modal planning and complete streets projects. With over 16 years of experience in urban planning, he has completed projects for local governments and state and federal agencies. His experience includes bicycle and pedestrian plans, multi-modal projects, transit, and complete street projects. As an urban planner, Kory brings not only experience in infrastructure planning, but also programmatic and policy considerations including vision zero, encouragement, and education.

Education

MA Certificate, Community Preparedness and Disaster Recovery, UNC Chapel Hill, 2006
 MPA, UNC Chapel Hill, 2004

BA, Urban and Regional Planning, University of Illinois at Urbana-Champaign, 2001

Registration

Certified Planner, American Institute of Certified Planners

Select Experience

- NC 251/Riverside Drive Greenway Feasibility Study, Buncombe County Recreation Services, NC
- Black River Road Corridor Study, Kershaw County, SC
- Kinston Bypass Environmental Impact Statement (EIS), NCDOT, Kinston, NC
- City of Raleigh Bike and Ped Planning On-Call, NC



Tom Hepler, PE, PLS NCDOT + Railroad Coordination

As a Senior Program and Project Manager with over 40 years of experience, Tom began working as a consultant for NCDOT's Rail Division developing facilities to support the inaugural operation of the Piedmont Train between Raleigh and Charlotte. Tom's work has included all types of surface transportation design with a unique mix of highway, light rail, freight and transit coupled with environmental planning. Tom brings a working understanding of design disciplines of stormwater management, utility design/coordination, traffic maintenance, pavement marking and signage, permitting, NEPA studies and construction document preparation. Tom is located in Raleigh.

Education

MCE, Transportation, North Carolina State University, 1978
 BS, Civil Engineering, North Carolina State University, 1976

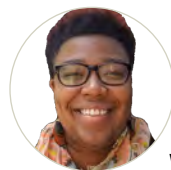
Registration

Professional Engineer, NC

Professional Land Surveyor, NC

Select Experience

- Old Fayetteville Road Multi-Use Path, Town of Leland, NC
- Highway 115 Feasibility Study Phase II, Town of Cornelius, NC
- I-26 Connector EIS, NCDOT, Asheville, NC
- NCDOT Rail Crossing Safety LSC, Statewide, NC



Ashley Ervin, AICP Public Outreach

Located in Raleigh, Ashley has spent much of her career working on public outreach initiatives consisting of planning and public charrettes, pop-up public outreach events, public open houses and public hearings. Ashley routinely uses a variety of tools and engagement platforms, to engage the public in interactive, meaningful ways. Ashley presented the MetroQuest Survey for Kinston Bypass at the 2019 International Association for Public Participation Conference in Charlotte, NC and for their 2020 Summer webinar series with a viewership of 300+ participants worldwide. Ashley recently supported the public/stakeholder outreach efforts for the Kinston Bypass project and the NCDOT I-26 Connector Design project in Asheville, NC.

Education

Master in City + Regional, Planning, UNC Chapel Hill, 2016
 BS, Building Construction, Georgia Institute of Technology, 2012

Registration

Certified Planner, American Institute of Certified Planners

Select Experience

- NCDOT I-26 Connector Design Public Hearing, Asheville, NC
- French Broad River MPO Regional Transit Plan Public Outreach, Asheville, NC
- Kinston Bypass Public Participation, Kinston, NC
- Commuter Krewe of Louisiana TDM Community Outreach, Baton Rouge, LA



Julie Gilliland, RLA Stakeholder Coordination + Site Design

Julie is President of Site Design Studio and is located in Weaverville, NC. Prior to establishing SDS, Julie gained her experience in California, Colorado and North Carolina. With over 19 years of experience, she has project management and design expertise in community planning, park and open space master planning, streetscapes, greenway and bicycle and pedestrian facilities as well as landscape architecture. She brings a unique perspective to design solutions through her extensive experience in conceptual design, site planning, grading, drainage and native planting design.

Education

BLA, Ball State University
 BS, Landscape Horticulture / Nursery Production and Management, Colorado State University

Registration

Landscape Architect, NC, TN

NCDOT Complete Streets Certification

Select Experience

- Enka Heritage Trail Greenway Feasibility Study, Buncombe County, NC
- Mud Creek Greenway, Henderson County, NC
- Wilma Dykeman Greenway, City of Asheville, NC
- Reems Creek Greenway, Buncombe County
- I-2513A, NCDOT, Asheville, NC
- I-26 Connector EIS, NCDOT, Asheville, NC



Blake Sanders, PLA
(Studio Main)
Public Outreach / Stakeholder Coordination

Located in Pelzer, SC, Blake has 15 years of practical, professional experience as a Project Manager/Landscape Architect for regional and international design firms. Blake has taken streetscapes, trails and parks from concept to construction and is known for his innovative design and construction strategies. His experience includes community-oriented planning and design through charrettes, streetscape improvement planning, corridor studies, bicycle and greenway planning, as well as municipal, campus, park, and recreation design. Blake routinely provides project management and walks communities through the charrette and design process, engaging them in a series of stakeholder meetings and open studio sessions that culminate with community driven design solution.

Education

BA, Landscape Architecture, Clemson University, 2006

Registration

Landscape Architect, SC

Select Experience

- Ecusta Trail Master Planning, Public Workshop and Master Plan, Hendersonville, NC
- Enka Heritage Trail Greenway Feasibility Study, Buncombe County, NC
- Sawmill Branch Rail-Trail Master Planning and Feasibility, Summerville, NC



Bridget Moynihan, PE
PROWAG / ADA

Bridget is a Project Manager and Senior Engineer in AECOM's Charlotte office with over 13 years of transportation experience. Focused on urban street and transit projects, Bridget has extensive experience in roadway and rail corridor design, with specific recent focus on ADA requirements, PROWAG considerations, and bike/ped designs. Bridget brings a breadth of perspective to the project, having expertise ranging from conceptual to final design and construction phase services to verify designs are implemented correctly.

Education

BS, Civil Engineering, Virginia Polytechnic Institute and State University, 2007

Registration

Professional Engineer, NC

Select Experience

- North Pedestrian/Bike Independence Boulevard Final Design, City of Charlotte, NC
- I-77 Underpass Enhancement, City of Charlotte, NC
- Independence Boulevard North Ped/Bike Project, City of Charlotte, NC
- Highway 115 Feasibility Study Phase II, Town of Cornelius, NC
- Shamrock Gardens Neighborhood Improvements, City of Charlotte, NC
- CityLYNX Gold Line Phase 2, City of Charlotte, NC



Haley Llyod, AICP
Visualizations

Haley is a Transportation Planner in AECOM's Raleigh office. Her experience includes transit projects, bicycle and pedestrian projects, NEPA documentation, and working with diverse communities and stakeholders to achieve community goals. Haley offers a diverse skill set that includes Geographic Information Systems, data analysis, digital visualization, cartography, and public engagement. Her passion for sustainable transportation is an asset to the communities and clients we serve.

Education

Master in Urban/Environmental Planning, University of Virginia, 2018

BS, Environmental Science, Bridgewater College, 2016

Wildlife Ecology, Smithsonian- Mason School

Registration

Landscape Architect, NC, TN

Certified Planner, American Institute of Certified Planners

Select Experience

- Mud Creek Greenway Feasibility Study, Henderson County, NC
- Town of Aberdeen Bike Ped Plan, Aberdeen, NC
- Smithfield Comprehensive Pedestrian Plan, NCDOT
- Kinston Bypass Final EIS, NCDOT, Kinston, NC
- Martin County Bicycle Plan, NCDOT, Martin County
- Eden Pedestrian Plan, Town of Eden, NC



Susan Westberry, AICP, PWS
Permitting + Natural Resources

Located in Wilmington, NC, Susan is a Planner and Environmental Scientist with more than 20 years of experience supporting a wide range of environmental studies and transportation planning efforts. Her expertise includes project management and planning, NEPA/SEPA documentation, community studies, public involvement, stream and wetland delineations, agency coordination, and permitting. Susan's experience ranges from small development projects, to municipal water and sewer, to large highway projects.

Education

MS, Botany, North Carolina State University, 2004

BS, Wildlife Ecology, University of New Hampshire, 1999

Registration

Certified Planner, American Institute of Certified Planners

Professional Wetland Scientist

Certified Professional in Erosion and Sediment Control

Select Experience

- Independence Boulevard Extension EIS (STIP U-4434), NCDOT, Wilmington, NC
- Cape Fear Crossing EIS, NCDOT, Brunswick and New Hanover Counties, NC
- Wicker Branch UT Restoration, Monroe, NC
- Newfound Creek Monitoring Services, NCEEP Leicester, NC



Gary Swinson
Utility Coordination

Gary is a Senior Designer in the AECOM Raleigh office with nearly 45 years of experience in utility relocation design and coordination for transportation projects involving roadways and bridges, water and sewer lines, and residential developments. Gary's expertise is in coordinating with private utility owners and coordinating the necessary relocation of their facilities that are impacted by transportation projects including developing and securing relocation agreements. He is proficient the use of MicroStation, GeoPak, and AutoCAD in the preparation of Utility By Others and Utility Construction Plans.

Select Experience

- North Wake Expressway, NCDOT, Wake County
- Charlotte Outer Loop, NCDOT, Mecklenburg County
- Independence Boulevard Extension EIS (STIP U-4434), NCDOT, Wilmington, NC
- NC 147 Utility Relocation, NCDOT, Durham County, NC
- Buddy Phillips Bridge Utility Coordination, NCDOT, Jacksonville, NC
- U-3462 Utility Relocation Study and Design, NCDOT, Shallotte, NC
- Crossroads Parks, Town of Cary, NC
- West Creek Utilities Extension, Goochland County, VA
- Outfall Relocation, City of Concord, NY



Ashley Lane, EI
Grant Compliance

Ashley has worked in the design and construction industry in a variety of market sectors that include public and private clients for both vertical and horizontal construction. Ashley served as AECOM's Deputy Project Manager on Priority Pedestrian Corridors for the Town of Wake Forest and Raleigh's Walnut Creek Greenway design. Ashley has provided pavement condition survey field quality assurance inspections and has managed high priority federal projects for USACE and NAVFAC. She brings a clear and direct approach to servicing project needs and works to efficiently address and resolve any problems that arise while maintaining open client communication and a focus on client satisfaction. Ashley is located in Raleigh.

Education

MBA, Project Management, Ashford University, 2020

BS, Civil Engineering, Purdue University, 2013

Registration

Engineering Intern

Select Experience

- Walnut Creek Greenway Trail -Trailwood Connector A, City of Raleigh, NC
- FY21 Street Improvements, Town of Cary, NC
- NCDOT Transportation Mobility and Safety Division Limited Services Contract 2016-2019
- NCDOT Field Investigations, Various Locations



Drew Crumpton, RLA
Site Design

Drew is a Landscape Architect and Park Planner who provides support for projects serving public agencies nationwide. Located in our Raleigh office, Drew specializes in parks and recreation system master plans and graphic visualizations for transportation design projects. Drew has been involved in all phases of planning and design processes including project support, demographic analysis, graphic visualizations and public involvement such as workshops, focus groups, stakeholder meetings, and public presentations. Drew understands the value of thorough analysis, inclusive participation, and collaborative team environments.

Education

Master in Landscape Architecture, North Carolina State University, 2013
BS, Parks, Recreation and Tourism Management, North Carolina State University, 2010

Registration

Professional Landscape Architect, NC

Select Experience

- NC 251 Greenway Feasibility Study, Buncombe County, NC
- River of Grass Greenway Feasibility Study and Master Plan, Miami-Dade to Collier County, FL
- Swannanoa and South Shenandoah Parks Landscape Architectural Services, City of Miami, FL
- National Park Service, National Capital Region, Regional Paved Trail Plan, Washington D.C.



Buddy Riggs, Jr., PE
(Terracon)
Geotechnical

A Senior Geotechnical Engineer in Terracon's Columbia, SC office, Buddy brings over 30 years of geotechnical engineering, construction materials testing, and project management experience. Buddy works on transportation infrastructure projects including airports, roadways and bridges as well as public work projects such as, office buildings, schools, cell towers, water treatment plants and elevated water tanks. Buddy has performed flexible and rigid pavement designs, slope stability analysis, ground improvement, groundwater control, retaining wall design, embankment settlement, embankment surcharge design, spread footing capacity, pile capacity, dynamic analysis of driven piles, drilled shaft capacity and lateral stability for piles and shafts.

Education

MS, North Carolina State University, 1982
BS, Civil Engineering, North Carolina State University, 1980

Registration

Professional Engineer, NC

Select Experience

- Proposed Bridge on Dixie Pipeline Entrance Road Over Tributary to Middle Creek, Apex, NC
- P-5705B Charlotte Gateway Station and Safety Improvements, Charlotte, NC
- I-26 / US74 Interchange Modifications, Town of Columbus, NC



Jake McLean, PE,
CFM (Wildlands)
Stream Restoration

Located in Charlotte, Jake has 20 years planning and designing of ecological restoration and stormwater management projects. His expertise includes stream and wetland restoration, dam removal, culvert and bridge, aquatic organism passage, river access, greenway and park design, floodplain management, water quality, hydrologic, hydraulic and sediment transport analyses and site design projects involving retaining walls, stormwater, sanitary sewer and utility relocation. Jake is responsible for project management and design of watershed and water resource planning and design projects and has worked extensively on grant-funded projects through state/federal agencies with projects in park/greenway settings and with projects involving complex hydraulic, hydrologic and sediment transport considerations.

Education

MS, Civil Engineering, Auburn University, 2002
BS, Civil Engineering

Registration

Professional Engineer, NC / Certified Floodplain Manager,
Select Experience

- Hendersonville Multi-Area Streambank Restoration Project, City of Hendersonville, NC
- Asheville Town (Nasty) Branch and Clingman Forest Greenways, City of Asheville, NC
- Laurel Creek Greenway Design Master Plan, City of Greenville Parks and Recreation, SC



Frank Mundy, PLS
(Stewart)
Survey / SUE

As the Practice Leader of Geomatics at Stewart, Frank is responsible for managing Geomatics services consisting of survey, subsurface utility engineering (SUE), high-definition surveys and unmanned aerial systems. Using technically advanced equipment including laser scanning, global positioning systems, robotic total stations and ground penetrating radar, Stewart's Geomatics group offers clients a wide array of methodologies to collect and analyze geospatial data to support their projects. During his career, Frank has been responsible for site design and survey services for numerous universities, K-12 schools, airports, military bases including utility infrastructure as well as departments of transportation and private land development.

Education

BS, Engineering Technology, Old Dominion University

Registration

Professional Land Surveyor, NC, SC, VA, WV

Select Experience

- Swann Street Stormwater Improvements, City of Raleigh, NC
- Six Forks Road Sidewalk Improvements, City of Raleigh, NC
- North Carolina Railroad Corridor Monumentation, Various Locations, NC



John Sloan, PE
Structural Design

John is a Senior Structural Engineer/Project Manager who currently serves as the AECOM North Carolina Bridge Program Manager. Located in Raleigh, his 17 years of experience includes conventional design, complex design, and inspection for a wide variety of transportation structural engineering projects. John's project experience for conventional structures includes grade separations, stream crossings, railroad structures, railroad overheads, and temporary shoring. John has authored several reports such as bridge type studies, feasibility studies and evaluations. He has provided complex structure design including post-tensioned structures, rehabilitations and historic arch bridge widening.

Education

MS, Structural Engineering and Mechanics, North Carolina State University, 2002
BS, Civil Engineering, Virginia Military Institute, 2005

Registration

Professional Engineer, NC / Certified NBIS Bridge Inspector

Select Experience

- Clark's Creek Greenway Bridge, Mecklenburg County, NC
- Nutrien Hwy 33 Railroad Crossing, Aurora, NC
- NCDOT Bridge Replacement Program, Statewide
- Love Grove Additional Access Bridge, City of Wilmington, NC



Meme Buscemi, PE
Hydraulics + Erosion Control

Located in Raleigh, Meme is a Hydraulic Engineer with 14 years of experience. She is well practiced in hydraulic modeling and floodplain mapping through the production of flood studies for stream restoration, roadway, bridge, and culvert projects. Meme has worked on BMP design, evaluation, assessment, and inspection. She has designed and evaluated various site and roadway drainage systems and has produced erosion and sediment control plans for various projects. Meme is knowledgeable of state stormwater rules and regulations.

Education

MS, Civil Engineering, North Carolina State University, 2007
BS, Civil Engineering, North Carolina State University, 2003
BA, Biology, University of North Carolina - Charlotte, 2000

Registration

Professional Engineer, NC

NCDOT Level III Designer of Erosion and Sedimentation Control Plans

Select Experience

- Walnut Creek Greenway, City of Raleigh, NC
- Ellerbe Creek Stream Restoration and Pedestrian Bridge, NCDENR, NC
- Old Fayetteville Road Multi-Use Path, Town of Leland, NC
- NCDOT General Rail Engineering LSC, Statewide NC
- I-26 Connector Final EIS, NCDOT, Asheville, NC

4. Technical Approach



The Ecusta Rail -Trail is an iconic project that will connect the county and the region with the potential to radically change how people move, live and play in Henderson County.

The Ecusta Trail offers Henderson County and the entire region an amazing opportunity to provide an iconic pedestrian and bicycle route. Ultimately connecting Hendersonville and Brevard, the Trail will become an amenity that dramatically expands mobility options via a safe non-vehicular transportation corridor, provides links to the Brevard Bike Path, Statue Trail as well as the Oklawaha Trail and creates a path through a truly beautiful corner of our state.

Our Project Approach

Task 1 • Project Management

Successful completion of the Ecusta Rail-Trail project will rely on effective public communication, working with stakeholders, providing an attractive, effective and cost-efficient design and successful acquisition and execution of grant funding.

The AECOM team stands ready to deliver on all of these accounts. AECOM and our teammates are experienced with greenway design, proposing a staff that has experience delivering rail trail corridors. Our trail and greenway expertise are balanced with and complimented by our community engagement experience, bicycle and pedestrian planning capabilities, and extensive permitting and NEPA skillsets. AECOM consistently delivers rural and urban designs compliant with state and federal guidelines, providing innovative and creative solutions for civil/site design, public engagement, utility coordination and design, programming, surveying, bridge and drainage structures, land acquisition and appraisal, cost estimating, as well as grant pursuit and implementation: all requirements we anticipate for the successful project delivery.

Timely execution of the project will rely on excellent communication and proper project management. AECOM will employ our standard company processes to the project, creating a Project Management Plan (PMP). Accompanied by the Quality Plan, Schedule and Safety Plan, the PMP will define roles and responsibilities for all project members, identify key milestones, and establish management team coordination processes. Mickey Geiser, Project Manager, will be responsible for the implementation of the project, and will serve as the primary point of contact. Supported by Mariate Echeverry as Deputy Project Manager, he will oversee work performed by the consultant team, issue monthly project reports and invoices, monitor the project schedule and direct the project task leads. Both Mariate and Mickey are Certified Project Managers with AECOM.

Scope and Budget - Scope and budget development will occur collaboratively between AECOM and Henderson County. We will strive to clearly define roles, responsibilities, and deliverables required, and clearly understanding the schedule requirements of the County and the funding grant. Engaging our subconsultant team members throughout this process, the AECOM team will work collectively to build scopes, define schedules, and then develop fees for the effort, based on hourly estimations of the anticipated tasks.

Assignments and responsibilities will be provided to the specific task leads at this time. Beginning at the project kick-off meeting, which will include all team members and the County, we can all start the project as a comprehensive team and a clear understanding of project goals.

Schedule - AECOM will approach project schedule development with a consistent theme – to deliver a high-quality project quickly, and in accordance with grant requirements. We will work with the County to understand the myriad constraints and commitments the Ecusta Trail needs to accomplish. Using the detailed Work Breakdown Structure (WBS) developed in the scoping process and working backwards from delivery milestones, AECOM will develop a detailed schedule using either Microsoft Project or Primavera software that defines every work process needed to deliver the project. We will identify and define the critical path and track progress during our scheduled bi-weekly meetings and in each monthly progress report.

Cost Control - AECOM's approach to cost controls will be two-fold. With respect to consultant costs, AECOM will strive to efficiently deliver the project through effective project administration. First, we will keep the project team small and streamlined, keeping task leads informed and in tune with all activities while strategically engaging technical staff. Staff will be provided clear direction and expectation of deliverables. The second cost control process concerns implementation costs. Our experienced team will strive to provide cost effective solutions to reduce and mitigate construction costs. Opportunities on the corridor likely include accommodation or avoidance of potential utility conflicts, storm drainage rehabilitation and strategic design to avoid impacts to driveways, roadways, and structures.

Grant Preparation and Management – Our team is adept at efficiently pursuing federally funded projects. In the last five years, NCDOT, MPOs and local municipalities have asked AECOM to complete numerous INFRA, TIGER, BUILD, RAISE and CRISI grant applications, resulting in award wins of over \$200M within the state. In addition, AECOM is assisting NCDOT in managing the various federal BUILD grant reporting requirements for the Growing Rural Economy and Agriculture through Transportation & Technology Enhancement or Replacement in North Carolina (GREATTER) Project.

AECOM has completed numerous projects where funds are funneled through NCDOT. Our processes and procedures maintain compliant labor and expense records, while our progress reports will be tailored to align with the funding source requirements. Recently, AECOM successfully provided grant pursuit materials and later design and construction phase services for the CityLYNX Gold Line – Phase 2 Streetcar Project in Charlotte, implemented under an FTA Small Starts grant. For the Ecusta Trail, we will set up all the necessary controls and templates at project inception for approval by the Project Management Team (PMT).

Quality Control - AECOM will utilize our proven Quality Management System (QMS) certified to the internationally renowned ISO 9001:2008 standard. Quality management is central to our project management approach and, under our system, each of our project teams includes individuals assigned to specific quality roles. Through technical and independent reviews, and detailed documentation, AECOM will focus on delivering high quality work.

Oversight Committee - The Oversight Committee will guide the development of the project and will help identifying goals, project vision, and vet the actions of the AECOM team. The members of the Oversight Committee will be identified with Henderson County PMT's assistance. Approximately five meetings with the Oversight

Committee are currently anticipated. Our project leads are committed to attending the meetings in person, if social restrictions allow and will arrange appropriate team member's participation either in person or via teleconference.

Public Outreach

The Ecusta Rail-Trail is a complex project that requires clear public outreach and stakeholder coordination at key design development stages to reflect the community's needs and desires. A detailed, thorough and transparent public participation process should guide the project throughout its entirety, building and maintaining public trust and engagement. Our team will develop a Public Participation Plan in conjunction with Henderson County's PMT, that will identify the activities, timeframes, materials and responsible parties that will be important for the execution of this task. Our public involvement team, led by Ashley Bush, has extensive experience in NCDOT Public Engagement efforts. She is accompanied by Julie Gilliland and Blake Sanders who both have worked on projects in the area and are familiar with county and region stakeholders.

AECOM is at the forefront of innovative public outreach, with methods and techniques that facilitate public input, including traditional meeting environments, pop-up events, virtual rooms and other. Our team successfully completed the Mud Creek Feasibility Study entirely in virtual environments to respond to pandemic restrictions with high participation and engagement.

DELIVERABLES

- Project Management Plan
- Regularly scheduled coordination meetings with the PMT
- Public Participation Plan and Public Involvement Activities
- Five Oversight Committee meetings
- Monthly Progress Reports and Invoices

Task 2 • Existing Conditions Evaluation + Assessment

The AECOM project team will perform a corridor evaluation of the proposed route to identify challenges and opportunities defining and enhancing linkages with adjacent and nearby community destinations, neighborhoods, parks and greenways such as Jackson Park and the Oklawaha Greenway, and other community features, as well as future regional destinations, such as The Hellbender Regional Trail. As part of this effort, AECOM will gather data on the existing bicycle and pedestrian networks that may serve as feeders and extension linkages to the main corridor of the Ecusta Rail-Trail. This supporting information will allow our team to better define and evaluate the corridor and network as a whole.

Our approach will embrace a combination of desktop GIS analysis tools, along with boots on the ground efforts, to increase the efficiency of assessing the trail corridor conditions, potential branch connection opportunities, and identifying engineering and permitting challenges and constraints to be factored in for the development of a successful project plan. These can include hydraulic/scour issues, geotechnical/stability considerations, and interfaces and crossings of existing transportation systems.

In conjunction with the in-field efforts, our team will employ ESRI's ArcGIS Online Enterprise Software System to enhance data collection through the use of handheld tablets enabled with real-time mapping/data collection capabilities. This will allow our staff to accurately identify, locate, and capture imagery of specific project features along the corridor that will require more detailed study. Utilizing this process should eliminate duplicate processes, save time and money and will maximize the accuracy of field-based data collection. Mapping resources such as Open Street Maps can be used to inventory trail access points, and other relevant features.



Our assessment of existing conditions will be focused on making the trail design universally accessible to accommodate all people and provide access to community and transportation lifelines along the corridor. Connections and trail improvements should be designed to accommodate wheel loads of emergency vehicles and include systems to aid navigation and communications. In addition, we propose an evaluation of hazards on the trail (flood, rockfall, slides, wildfires) as well as assessing connections to community and transportation lifelines for resilience.

The data assembled during this assessment is vitally important since it will be used to inform the project team and stakeholders of the current conditions along the corridor which will guide the design for the project. AECOM will work closely with the staff to format our data and document the processes used to conduct our analysis for the benefit and use by the staff and partners. Once complete, the assessment of existing conditions will include:

- Existing bicycle and sidewalk facilities
- Key destinations, lifeline routes and facilities
- Consideration of trail in local and regional emergency response
- Existing signage/wayfinding
- Population density
- Community partners that will help support and promote the viability and usage of the trail

As part of Task 2, AECOM proposes to develop a comprehensive memorandum on the existing conditions and assessment of the corridor. This memorandum will capture existing local policies and planning documents. AECOM will work with the stakeholders to gather available local multimodal plans, transportation plans and policies related to bicycle and pedestrian planning. This will include, but not be limited to, adopted plans and ordinances from the local governing bodies and schools, as well as any MPO policies or Transportation Demand Management policies or programs. These will be compared to NCDOT's Bike-Ped Safety Action Plan.

DELIVERABLES

- Existing Conditions Evaluation and Assessment Memorandum
- GIS Analysis and Data
- Fieldwork Data and Analysis
- Policy and Plan Summary

Task 3 • Rail Trail Design

The Ecusta Rail-Trail design presents features that resemble challenges we've seen on other AECOM Rail-Trail projects, successfully planned, designed and constructed. These features include a rail-banked corridor with existing ballast subgrade, multiple bridge structures, stormwater drainage features, at-grade road intersections, and adjacent properties with a variety of land uses.

Survey and base mapping will be important components of corridor design and emphasis on quality foundations for the design are a primary focus. AECOM will utilize existing GIS data such as aerial photography, LiDAR, assessor's office tax maps, and state agency datasets to develop a desktop survey of the rail corridor for use in base mapping and analysis. This base mapping will be supplemented with field survey data. Attention to utility crossings, access control needs, drainage features, and existing ballast subgrade conditions are important for the detailed design of the trail corridor.

Best practices from the Rails-to-Trails Conservancy, AASHTO design guidelines, NCDOT and other resources will be referenced to develop functional designs for the Trail. On similar rail trail projects, AECOM has found it important to focus on trail surface and subgrade design, bridges, at-grade intersections, access control and drainage.

While the geometrics of railroad alignments are favorable to mixed use trails with gradual grade changes and large sweeping horizontal curves, there can be challenges in the conversion of the existing railroad embankment to a low maintenance trail. As with most railbanked corridors, the condition of the ballast and embankment subgrade varies throughout the corridor. Careful evaluation of subgrade and trail surface options can have the greatest impact on the initial cost and long-term maintenance of a trail.

The existing bridge structures on Phases A, B, and C of the Ecusta Rail-Trail corridor are relatively small, typical railroad structures. AECOM has significant rail trail experience with the evaluation of existing structures, conversion to trail bridges, and long-term maintenance of the structures and amenities. We completed similar work for the Monongahela River Trails, where our team performed bridge restoration, drainage improvements and grading and paving designs. We will inspect all the existing structures and provide an opinion of condition, life span and potential repairs.

Rail Trail intersections with urban streets and rural highways are important elements from a safety standpoint. Implementation of signage and pavement marking will be required for both the rail trail and the vehicular intersection crossed. Additionally, access control at intersections is important to prevent motorized vehicles, including four wheelers, from entering the trail corridor. AECOM has also found that driveways for adjacent properties can require fencing, landscaping, or other barriers to control access to the trail and maintain safety for trail users.

Trail drainage will utilize existing drainage structures as well as modification and potential addition of drainage features. Existing drainage culverts and structures will be visually inspected as part of the drainage evaluation and design process. Drainage reports will be developed and a drainage summary compiled for cost estimating and final construction plans. Evaluation and mitigation of erosion, as well as potential scour from Shaw Creek and the French Broad River will be included here.

The design process will also include maintenance considerations. Vegetation, trail surface, and drainage are major elements that will require maintenance throughout the life of the rail-trail. AECOM's



Walnut Creek Railroad Underpass at Lake Wheeler, Raleigh, NC

experience with other rail-trail systems, including our 15 years of experience supporting the Monongahela River Trails Conservancy, have provided meaningful experience through evaluations, inspections and long-term maintenance requirements.

DELIVERABLES

- 30%, 60%, 90% Design Development

Task 4 • Preparation of Construction Ready Design + Permitting Documents

The AECOM project team has extensive familiarity developing plans and specifications that are consistent with NCDOT requirements, policies and procedures. Our team will leverage our past experience on LAPP and other NCDOT-funded projects to streamline our plan development process, required submittals and reviews to enable efficient and timely utilization of available funding sources.

Upon award of the project, the team will coordinate with the PMT, NCDOT and the French Broad River MPO to define the project schedule, expected deliverables, submittals and reviews and coordination touchpoints. Our team will work collaboratively to develop a comprehensive and cohesive set of bid documents necessary to advertise, bid, award and construct the project. This effort will run parallel with the required regulatory permitting, a process with which our team has much experience.

During the design phase, we will utilize as many NCDOT standard items as practical to lessen the need for project special provisions and extensive special details. This enables our team to capitalize on a large amount of cost and bid data available to assemble the opinion of probable costs more accurately, comparing the budgetary needs of the project with respect to the available funding.

Once the design development is complete and approved, our team will pull together the contract documents, general conditions, specifications, project special provisions and the Engineer's Estimate necessary to advertise the project for bid.

During the advertisement and bid phase, we will support the County by conducting a Pre-Bid meeting with interested contractors. During this meeting, the team will present the project and answer design-related questions. Following the Pre-Bid meeting, we will issue minutes, clarifications, and any addendums.

Once bids are received, AECOM will work collaboratively with the owner to review the bids for compliance with the contract documents and instructions to bidders. The team will evaluate the bids and assist the owner in making a recommendation of award. This evaluation and recommendation will be coordinated with NCDOT to obtain approval and authorization to construct the project.

DELIVERABLES

- Final Plans, Specifications and Estimates
- Project Special Provisions (NCDOT format)
- Contract Bidding Documents (Front End Documents, Instructions to Bidders, Bid Forms)

Communities and public groups have worked for years to make the Ecusta Rail-Trail a reality. With the recent grant award to Henderson County, the corridor in the process of being railbanked and easement being finalized, we recognize a sense of urgency for a clean, efficient project execution and a great need to seamlessly combine public coordination with successful project delivery. We will work hand in hand with the County, with NCDOT and will stakeholders to deliver a project that will positively transform the community.

FOR USE ON CONTRACT SOLICITATIONS ONLY
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PRIME CONSULTANT

TO BE USED WITH PROFESSIONAL SERVICES CONTRACT ONLY

RACE AND GENDER NEUTRAL

HENDERSON COUNTY - ENGINEERING SERVICES FOR HENDERSON COUNTY RAILS TO TRAILS

TIP No. and/or Type of Work (Limited Services)
AECOM TECHNICAL SERVICES OF NORTH CAROLINA INC (Federal Tax ID No. 36-3771338)

(Consultant/Firm Name and Federal Tax Id)

<i>SERVICE / ITEM DESCRIPTION</i>		
Discipline Code**	Description**	Anticipated Utilization (%)
00032	Categorical Exclusion	0.50%
00063	Environmental Assessment / Finding of No Significant Impacts	0.50%
00070	Erosion Control	2.00%
00106	Historic Architectural Surveys of Standing Structures	0.50%
00132	Landscape and Streetscape Design	0.50%
00143	NBIS Bridge Inspection	0.50%
00155	Pavement Marking Plans	2.00%
00171	Public Involvement	5.00%
00207	Signal Design	1.00%
00243	Threatened & Endangered Species Survey	0.50%
00247	Traffic Control Plans	1.50%
00269	Urban Roadway Design	0.50%
00270	Utility Coordination	1.50%
00280	Wetlands and Stream Delineation	1.00%
00294	Roadway Foundation Investigation & Design	0.50%
00295	Structure Foundation Investigation & Design	1.00%
00296	Retaining Wall Investigation & Design	0.50%
00297	Pavement Design Investigation	0.50%
00316	Multi-Use Trail Design, Survey & Layout	10.00%
00332	Building Design	2.00%
00338	Building Site Design	3.00%
00433	Basic Hydrologic and Hydraulic Design	8.00%
00434	Tier II Complete Hydrologic and Hydraulic Design	2.00%
TOTAL UTILIZATION:		45.00%

**One (1) per line -- please use additional Prime RS-2 Forms if necessary.

"PRIME CONSULTANT" (FORM RS-2) RACE AND GENDER NEUTRAL

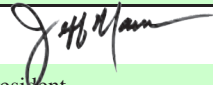
Instructions for completing the Form RS-2:

1. Complete a Prime Consultant Form RS-2 for the prime consultant firm.
2. Insert TIP Number and /or Type of Work (Limited Services)
3. Complete the Consultant/Firm name and Federal Tax ID Number for the primary firm information.
4. Enter Service/Item Description – describe work to be performed by the Prime Firm
5. Enter Anticipated Utilization – Insert dollar value or percent of work to the Prime Firm
6. *Signature of the Prime Consultant is required on each RS-2 Form to be submitted with the Letter of Interest (LOI) to be considered for selection
7. Complete "SPSF Status" section - Check the appropriate box regarding SPSF Status, check Yes if SPSF or No if not SPSF

RECOMMENDED BY:

CONSULTANT:

AECOM Technical Services of North Carolina, Inc.

*BY: 

Jeff Mann, Vice President

TITLE:

SPSF Status: YES NO

SUBCONSULTANT

TO BE USED WITH PROFESSIONAL SERVICES CONTRACT ONLY
 RACE AND GENDER NEUTRAL

HENDERSON COUNTY - ENGINEERING SERVICES FOR HENDERSON COUNTY RAILS TO TRAILS

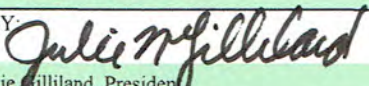
TIP No. and/or Type of Work (Limited Services)
 AECOM TECHNICAL SERVICES OF NORTH CAROLINA, INC. | Federal Tax ID No. 36-3771338

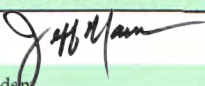
(Consultant/Firm Name and Federal Tax Id)
 SITE DESIGN STUDIO PLLC. | Federal Tax ID No. 27-1077079

(Subconsultant/Firm Name and Federal Tax Id)

SERVICE / ITEM DESCRIPTION		
Discipline Code**	Description**	Anticipated Utilization (%)
132	Landscape and Streetscape Design	3.00%
316	Multi-Use Trail Design, Survey and Layout	7.00%
338	Building Site Design	3.00%
171	Public Involvement	5.00%
TOTAL UTILIZATION:		18.00%

**One (1) per line -- please use additional Subconsultant RS-2 Forms if necessary.

SUBMITTED BY:
 SUBCONSULTANT:
 Site Design Studios PLLC
***BY:** 
 Julie Milliland, Presiden
TITLE: President

RECOMMENDED BY:
 CONSULTANT:
 AECOM Technical Services of North Carolina, Inc.
***BY:** 
 Jeff Mann, Vice Presiden
TITLE:

SPSF Status: YES NO

"SUBCONSULTANT" (FORM RS-2) RACE AND GENDER NEUTRAL

Instructions for completing the Form RS-2:

1. Complete a Subconsultant Form RS-2 for each Subconsultant firm to be utilized by your firm.
2. Insert TIP Number and /or Type of Work (Limited Services)
3. Complete the Consultant/Firm name and Federal Tax ID Number for the primary firm information.
4. Complete the Subconsultant/Sub Firm name and Federal Tax ID Number for the sub firm information.
5. Enter Service/Item Description – describe work to be performed by the Sub Firm
6. Enter Anticipated Utilization – Insert dollar value or percent of work to the Subconsultant/Sub Firm
7. *Signatures of both Subconsultant and Prime Consultant are required on each RS-2 Form to be submitted with the Letter of Interest (LOI) to be considered for selection
8. Complete "SPSF Status" section - Subconsultant shall check the appropriate box regarding SPSF Status, check Yes if SPSF or No if not SPSF

In the event the firm has no subconsultant, it is required that this be indicated on the Subconsultant Form RS-2 form by entering the word "None" or the number "ZERO" and signing the form.

SUBCONSULTANT

TO BE USED WITH PROFESSIONAL SERVICES CONTRACT ONLY
 RACE AND GENDER NEUTRAL

HENDERSON COUNTY - ENGINEERING SERVICES FOR HENDERSON COUNTY RAILS TO TRAILS

TIP No. and/or Type of Work (Limited Services)
 AECOM TECHNICAL SERVICES OF NORTH CAROLINA, INC. | Federal Tax ID No. 36-3771338

(Consultant/Firm Name and Federal Tax Id)
 WILDLANDS ENGINEERING, INC. | Federal Tax ID No. 56-0651376

(Subconsultant/Firm Name and Federal Tax Id)

<i>SERVICE / ITEM DESCRIPTION</i>		
Discipline Code**	Description**	Anticipated Utilization (%)
00243	THREATENED & ENDANGERED SPECIES SURVEY & STUDIES	1.00%
00280	WETLANDS AND STREAM DELINEATION	6.00%
TOTAL UTILIZATION:		7.00%

**One (1) per line -- please use additional Subconsultant RS-2 Forms if necessary.

SUBMITTED BY:
 SUBCONSULTANT:

Wildlands Engineering, Inc.

*BY:

Shawn Wilkerson, President

TITLE:

RECOMMENDED BY:
 CONSULTANT:

AECOM Technical Services of North Carolina, Inc.

*BY:

Jeff Mann, Vice President

TITLE:

SPSF Status: YES NO

“SUBCONSULTANT” (FORM RS-2) RACE AND GENDER NEUTRAL

Instructions for completing the Form RS-2:

- Complete a Subconsultant Form RS-2 for each Subconsultant firm to be utilized by your firm.
- Insert TIP Number and /or Type of Work (Limited Services)
- Complete the Consultant/Firm name and Federal Tax ID Number for the primary firm information.
- Complete the Subconsultant/Sub Firm name and Federal Tax ID Number for the sub firm information.
- Enter Service/Item Description – describe work to be performed by the Sub Firm
- Enter Anticipated Utilization – Insert dollar value or percent of work to the Subconsultant/Sub Firm
- *Signatures of both Subconsultant and Prime Consultant **are required** on each RS-2 Form to be submitted with the Letter of Interest (LOI) to be considered for selection
- Complete “SPSF Status” section - Subconsultant shall check the appropriate box regarding SPSF Status, check Yes if SPSF or No if not SPSF

In the event the firm has **no** subconsultant, it is required that this be indicated on the Subconsultant Form RS-2 form by entering the word “None” or the number “ZERO” and signing the form.

SUBCONSULTANT

TO BE USED WITH PROFESSIONAL SERVICES CONTRACT ONLY
 RACE AND GENDER NEUTRAL

HENDERSON COUNTY - ENGINEERING SERVICES FOR HENDERSON COUNTY RAILS TO TRAILS

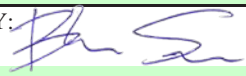
TIP No. and/or Type of Work (Limited Services)
 AECOM TECHNICAL SERVICES OF NORTH CAROLINA, INC. | Federal Tax ID No. 36-3771338

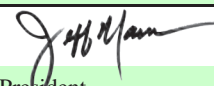
(Consultant/Firm Name and Federal Tax Id)
 STUDIO MAIN LLC. | Federal Tax ID No. 81-5170368

(Subconsultant/Firm Name and Federal Tax Id)

<i>SERVICE / ITEM DESCRIPTION</i>		
Discipline Code**	Description**	Anticipated Utilization (%)
316	Multi-Use Trail Design, Survey and Layout	2.50%
171	Public Involvement	2.50%
TOTAL UTILIZATION:		5.00%

**One (1) per line -- please use additional Subconsultant RS-2 Forms if necessary.

SUBMITTED BY: SUBCONSULTANT: Studio Main LLC <hr/> *BY:  Blake Sanders, President <hr/> TITLE:

RECOMMENDED BY: CONSULTANT: AECOM Technical Services of North Carolina, Inc. <hr/> *BY:  Jeff Mann, Vice President <hr/> TITLE:
--

SPSF Status: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
--

“SUBCONCONSULTANT” (FORM RS-2) RACE AND GENDER NEUTRAL

Instructions for completing the Form RS-2:

1. Complete a Subconsultant Form RS-2 for each Subconsultant firm to be utilized by your firm.
2. Insert TIP Number and /or Type of Work (Limited Services)
3. Complete the Consultant/Firm name and Federal Tax ID Number for the primary firm information.
4. Complete the Subconsultant/Sub Firm name and Federal Tax ID Number for the sub firm information.
5. Enter Service/Item Description – describe work to be performed by the Sub Firm
6. Enter Anticipated Utilization – Insert dollar value or percent of work to the Subconsultant/Sub Firm
7. *Signatures of both Subconsultant and Prime Consultant **are required** on each RS-2 Form to be submitted with the Letter of Interest (LOI) to be considered for selection
8. Complete “SPSF Status” section - Subconsultant shall check the appropriate box regarding SPSF Status, check Yes if SPSF or No if not SPSF

In the event the firm has **no** subconsultant, it is required that this be indicated on the Subconsultant Form RS-2 form by entering the word “None” or the number “ZERO” and signing the form.

SUBCONSULTANT

TO BE USED WITH PROFESSIONAL SERVICES CONTRACT ONLY
RACE AND GENDER NEUTRAL

HENDERSON COUNTY - ENGINEERING SERVICES FOR HENDERSON COUNTY RAILS TO TRAILS

TIP No. and/or Type of Work (Limited Services)
AECOM TECHNICAL SERVICES OF NORTH CAROLINA, INC. | Federal Tax ID No. 36-3771338

(Consultant/Firm Name and Federal Tax Id)
STEWART ENGINEERING INC | Federal Tax ID No. 56-1854766

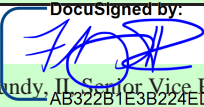
(Subconsultant/Firm Name and Federal Tax Id)

SERVICE / ITEM DESCRIPTION		
Discipline Code**	Description**	Anticipated Utilization (%)
00199	ROUTE LOCATION SURVEYS	15.00%
TOTAL UTILIZATION:		15.00%

**One (1) per line -- please use additional Subconsultant RS-2 Forms if necessary.

SUBMITTED BY:
SUBCONSULTANT:

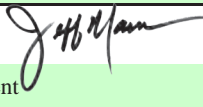
Stewart Engineering Inc.

*BY:  DocuSigned by:
Frank Mundy, II, Senior Vice President
AB322B1E3B224ED...

TITLE:

RECOMMENDED BY:
CONSULTANT:

AECOM Technical Services of North Carolina, Inc.

*BY: 

Jeff Mann, Vice President

TITLE:

SPSF Status: YES NO

"SUBCONCONSULTANT" (FORM RS-2) RACE AND GENDER NEUTRAL

Instructions for completing the Form RS-2:

1. Complete a Subconsultant Form RS-2 for each Subconsultant firm to be utilized by your firm.
2. Insert TIP Number and /or Type of Work (Limited Services)
3. Complete the Consultant/Firm name and Federal Tax ID Number for the primary firm information.
4. Complete the Subconsultant/Sub Firm name and Federal Tax ID Number for the sub firm information.
5. Enter Service/Item Description – describe work to be performed by the Sub Firm
6. Enter Anticipated Utilization – Insert dollar value or percent of work to the Subconsultant/Sub Firm
7. *Signatures of both Subconsultant and Prime Consultant **are required** on each RS-2 Form to be submitted with the Letter of Interest (LOI) to be considered for selection
8. Complete "SPSF Status" section - Subconsultant shall check the appropriate box regarding SPSF Status, check Yes if SPSF or No if not SPSF

In the event the firm has **no** subconsultant, it is required that this be indicated on the Subconsultant Form RS-2 form by entering the word "None" or the number "ZERO" and signing the form.

SUBCONSULTANT

TO BE USED WITH PROFESSIONAL SERVICES CONTRACT ONLY

RACE AND GENDER NEUTRAL

HENDERSON COUNTY - ENGINEERING SERVICES FOR HENDERSON COUNTY RAILS TO TRAILS

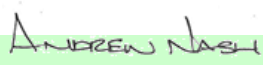
TIP No. and/or Type of Work (Limited Services)
AECOM TECHNICAL SERVICES OF NORTH CAROLINA, INC. | Federal Tax ID No. 36-3771338

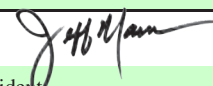
(Consultant/Firm Name and Federal Tax Id)
TERRACON CONSULTANTS INC. | Federal Tax ID No. 42-1249917

(Subconsultant/Firm Name and Federal Tax Id)

<i>SERVICE / ITEM DESCRIPTION</i>		
Discipline Code**	Description**	Anticipated Utilization (%)
00294	Roadway Foundation Investigation & Design	7.00%
00295	Structures Foundation Investigation & Design	3.00%
TOTAL UTILIZATION:		10.00%

**One (1) per line -- please use additional Subconsultant RS-2 Forms if necessary.

SUBMITTED BY: SUBCONSULTANT:	
Terracon Consultants Inc.	
*BY:	
	
TITLE:	

RECOMMENDED BY: CONSULTANT:	
AECOM Technical Services of North Carolina, Inc.	
*BY:	
	
Jeff Mann, Vice President	
TITLE:	

SPSF Status: YES NO

“SUBCONCONSULTANT” (FORM RS-2) RACE AND GENDER NEUTRAL

Instructions for completing the Form RS-2:

- Complete a Subconsultant Form RS-2 for each Subconsultant firm to be utilized by your firm.
- Insert TIP Number and /or Type of Work (Limited Services)
- Complete the Consultant/Firm name and Federal Tax ID Number for the primary firm information.
- Complete the Subconsultant/Sub Firm name and Federal Tax ID Number for the sub firm information.
- Enter Service/Item Description – describe work to be performed by the Sub Firm
- Enter Anticipated Utilization – Insert dollar value or percent of work to the Subconsultant/Sub Firm
- *Signatures of both Subconsultant and Prime Consultant **are required** on each RS-2 Form to be submitted with the Letter of Interest (LOI) to be considered for selection
- Complete “SPSF Status” section - Subconsultant shall check the appropriate box regarding SPSF Status, check Yes if SPSF or No if not SPSF

In the event the firm has **no** subconsultant, it is required that this be indicated on the Subconsultant Form RS-2 form by entering the word “None” or the number “ZERO” and signing the form.