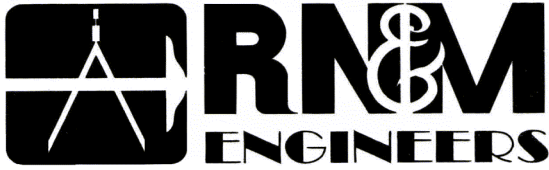




**Request for Qualifications
Professional Engineering Services
On Call Agreements
For
Various District Schools
Transylvania County Schools
Brevard, North Carolina**

November 2, 2023





Reece, Noland & McElrath, Inc.

390 Main Street / Canton, NC 28716
Phone: 828-492-0677 / Fax: 828-492-1054
MAIL@RNM-ENGINEERS.COM

November 2, 2023

Kerry Putnam
Maintenance Director
Transylvania County Schools
225 Rosenwald Ln
Brevard, NC 28712

Re: Request for Qualifications
On Call Agreement
Mechanical, Electrical, Plumbing, and Fire Protection Engineering Services
For Various District Schools
Brevard, North Carolina

Dear Mr. Putnam,

We are very pleased to present our qualifications to the Transylvania County Schools for this essential work.

This is exactly the type of work we at RNM do best, as I hope our documented experience exhibits. We have extensive experience with MEP Engineering renovations to existing occupied facilities and are uniquely qualified to work in North Carolina public schools. We have assisted several districts assessing, prioritizing, and budgeting upgrades to their mechanical systems. We have extensive experience working on public projects with a federal funding component, so we are extremely sensitive to the specific issues which may arise. Our firm is based in Western North Carolina and we understand the unique needs of mountain school districts.

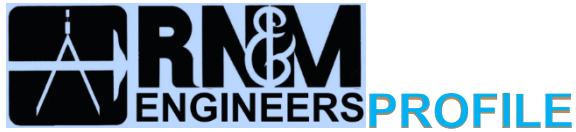
We are optimistic that you will find our team the most qualified for this project, and we are excited and ready to get started as soon as possible!

Very truly yours,

REECE, NOLAND, & McELRATH, INC.

A handwritten signature in black ink, appearing to read 'Scott Denton', written in a cursive style.

Scott Denton, P.E.
President



Reece, Noland & McElrath, Inc. is a comprehensive engineering firm, serving our clients involved in educational, medical, industrial, institutional, and commercial building construction and renovation projects.

Founded in 1960 and licensed as a professional engineering corporation in North Carolina in 1973, RN&M has successfully developed a range of engineering services encompassing feasibility studies, conditions assessments, design, and construction phase administration. In addition to traditional HVAC, plumbing and electrical designs, we possess expertise in specialized areas such as solar energy systems design, geothermal systems design, energy management and conservation, rain water reclamation, telecommunications, instrumentation, special lighting and fire protection systems. We have LEED accredited professionals on staff and are extensively involved in the LEED certification process.

While keeping abreast of ever-changing technology, we have maintained our focus on the basic business principles that have been the foundation of our success: close communication with our clients, meeting deadlines, and respecting budgets.

Our tradition has been to provide on time designs within the budget, while accomplishing the Owner's needs and desires. In addition to utilizing the services of professional cost estimating consultants, we maintain a database of budgets, probable cost of construction estimates, bid proposals received and awarded costs. We use this in conjunction with Means cost estimating data to develop budget and scope on projects.

As a 17 person office consisting of engineers, REVIT/CADD operators/technicians, and administrative personnel, we are small enough to give your project the personal attention needed by our project managers and principals, and yet large enough to increase manpower as necessary to support the project schedule.

RN&M has extensive experience working in occupied schools across the state. We help to optimize the balance between budget, disruption, schedule, functionality. We know how to team with administration, teachers, facilities / maintenance, and contractors to develop a scope and plan of attack that takes into consideration the numerous (and sometimes competing) interests of everyone involved. With our team, we are uniquely qualified to understand the challenges that come with working in existing, occupied schools. We are also well equipped and experienced with working alongside contractors to develop realistic phasing plans that meet the needs of the owner, as well as, to solve challenges that are sure to arise in renovation projects.

Following are a few examples of the considerations that we are experienced and equipped to handle:

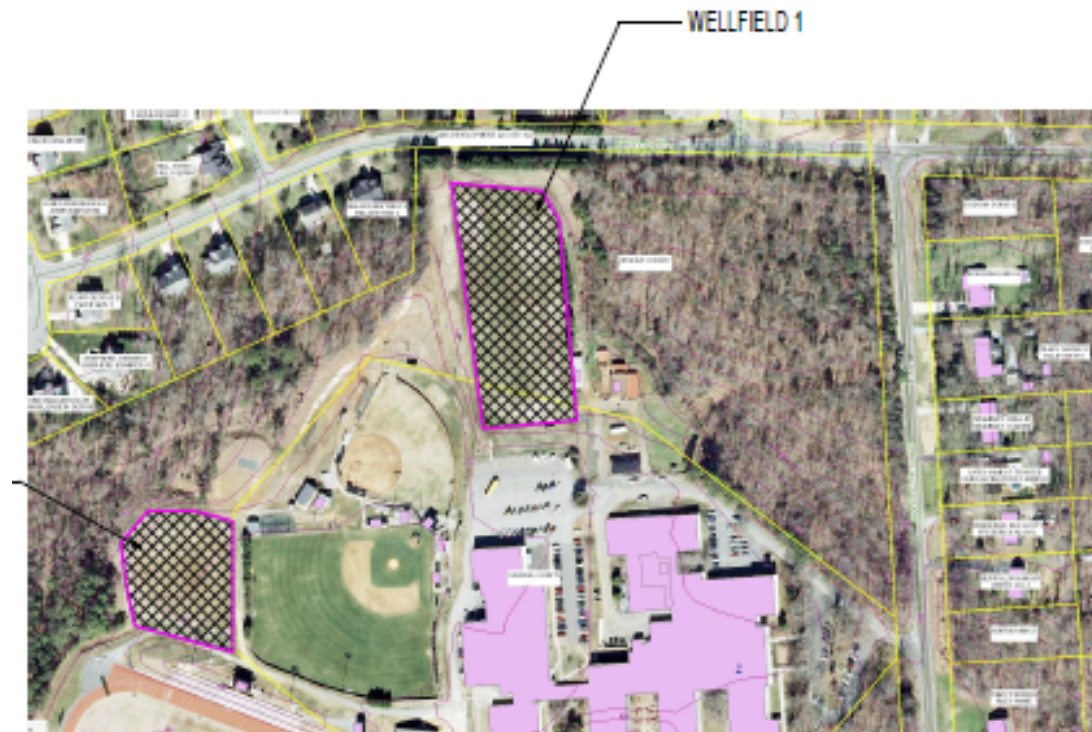
- We utilize a team approach.
- Split contracts or packages as required in order to optimize schedules and improve phasing. We can handle the administration of separate bids and contractors, permitting requirements, other AHJ requirements, etc.
- We develop realistic, professional cost estimates that attempt to include all aspects of the project.
- Contractor schedules / phasing to accommodate teachers, students, community, and facilities staff. We can accommodate almost any situation (i.e. work in one classroom at a time, one wing at a time, work where vacating spaces is not possible, etc.).
- We are familiar with working around sports seasons / schedules, test schedules, community events / usages, and utilizing holidays, after-hours, weekends, etc. to ours and the contractor's advantage.
- We can phase simultaneous operation of old systems and decommissioning / demolition as new systems are built parallel to old and brought on-line. We utilize / reuse existing elements to the fullest extent possible if there are distinct budget or schedule advantages.
- We understand the demands of the modern classroom and always minimize the impact of our project on: aesthetics, space consumption, noise, air quality etc. In most cases these elements are vastly improved at the end of our projects.



EXISTING SCHOOLS EXPERIENCE

- We foresee and plan appropriately for issues with capacities of existing utilities that may arise from maintaining existing systems, while building new systems alongside existing.
- We foresee and plan appropriately for project impacts or potential impacts to the site (parking areas, sports fields, etc.), landscaping, concealed utilities, building finishes, etc.

The Orange High School Geothermal HVAC System installation in Hillsborough, NC is a great example of what we can do. Essentially, we have been able to accomplish an entire mechanical system replacement / enhancement over multiple school years, without significant disruption to the operations of this 1500 student comprehensive high school. The project involved replacement of the existing 4-pipe boiler/chiller HVAC system with a new geothermal heat pump system. In addition, new geothermal dedicated outside air units were added providing ventilation rates which comply with current code, and a new building energy management system was added. Finally, we were able to improve classroom acoustics by installing the heat pumps for each classroom in new insulated closets, whereas the existing units were ceiling mounted exposed in the classrooms. Therefore, we were able to improve comfort, energy efficiency, noise, air quality, and reliability – all without significant disruption to the operation of the school.





EXISTING SCHOOLS EXPERIENCE



OPTION B -
CLOSET UNIT



Orange High School
Home of the Mighty Panthers

Jackson County Schools System Wide HVAC Replacements: RNM has worked directly with the Jackson County North Carolina school system over the last several years to replace aging HVAC systems located at all of their school campus'. Typical of many school districts throughout the country, budget constraints had forced Jackson County Schools to neglect timely replacement/upgrade of the HVAC systems at their facilities. This resulted in their maintenance staff being totally overwhelmed with a constant flow of work orders to repair/replace failed equipment. The district, in conjunction with Jackson County government, effectively utilized the Federal Qualified Zone Academy Bond Program (QZAB) to finance these HVAC systems improvements over a multi- year period. RNM worked closely with the school system and the county finance departments to ensure our bid documents were in compliance with all Federal requirements. The Contractors were required to document Davis Bacon Act minimum wage requirements and submit these with their monthly application for payments. Full compliance was required before payments were made. Other Federal Contracting requirements were also included. All of these contracts were successfully executed and the county was able to take full advantage of the QZAB program.

The school system had numerous HVAC system types in place including 4-pipe boiler/chiller systems, single zone rooftop units, multi-zone roof top units, split system heat pumps, and Bard console units. RNM worked diligently with the district administrative and maintenance staffs to address these systems replacements with minimal disruptions to campus operations by maximizing the use of holiday periods, summer breaks, and off hours (second shift) construction operations.



RNM has assembled the perfect team to deliver this project successfully. We would like to highlight some of the characteristics of the members of the team to emphasize this point.

Scott Denton, who will serve as the principal/project manager for this work has over 25 years of experience with this type of project. Serving as President of RNM Engineers, Scott also will provide electrical support for the HVAC retrofit work, designing revised circuiting to new equipment. Scott has extensive experience dealing with occupied buildings and school facilities as well.

Mark McDowell and Jason Moody are experienced professional engineers who both have extensive experience with the design of HVAC systems, as well as design in existing occupied school facilities. Between them they have recently designed numerous HVAC retrofit projects for RNM. Jason serves as our mechanical department head and designed the Orange County Geothermal project highlighted in this package. Mark was previously the head of our mechanical department, but has shifted focus to handling retrofit projects directly for our institutional and industrial clients.

We are comfortably busy right now due to the current growth in the construction industry. However our 17 person team along with our consultants can easily meet your schedule needs. The project appears to fit well in with our current work load and anticipated future work.

District Comprehensive Facilities Assessments:

Orange County Schools – Hillsborough, NC
Chatham County Schools – Pittsboro, NC
Jackson County Schools – Sylva, NC

K-12 School HVAC Systems Replacements:

CW Stanford Middle School HVAC System Replacements – Hillsborough, NC
Cedar Ridge High School Chiller Replacements - Hillsborough, NC
Orange County Community Geothermal Retrofit – Hillsborough, NC
Smoky Mountain High School HVAC Systems Replacements – Sylva, NC
Smokey Mountain Elementary HVAC Systems Replacements – Cherokee, NC
Blue Ridge School HVAC Systems Replacements – Cashiers, NC
Fairview Elementary HVAC Systems Replacements – Sylva, NC
Cullowhee Valley Elementary HVAC Systems Replacements, Cullowhee, NC
The School of Alternatives HVAC Systems Replacements, Sylva, NC
Highlands School HVAC Systems Replacements – Highlands, NC
Union Academy HVAC Systems Replacements – Franklin, NC
East Swain Elementary School HVAC Systems Replacements – Bryson City, NC
West Swain Elementary School HVAC Systems Replacements – Bryson City, NC
Swain Middle School Boiler Replacements – Bryson City, NC
Chapel Hill High School HVAC Systems Replacements – Chapel Hill, NC
Tuscola & Pisgah High School Gyms Air Conditioning – Haywood County, NC
Bethel Middle School Gym Air Conditioning – Canton, NC
Waynesville Middle School HVAC Systems Replacements, Waynesville, NC



DISTRICT WIDE FACILITIES ASSESSMENTS

RN&M has partnered with teams of architects, civil engineers, structural engineers, and food service consultants to perform comprehensive building assessments for three North Carolina Public School Systems. Facility studies were performed in Jackson, Orange and Chatham counties to evaluate the material condition of the mechanical, electrical, plumbing, fire protection and information technology systems for all educational buildings. The age of the equipment, material condition and current adherence to standards and codes were evaluated. Recommendations were made as to the repair and/or replacement of each of the systems reviewed. We then worked with the counties to prioritize the recommendations and prepare scope of work packets with budget estimates for each item.

We began each study by conducting meetings with stakeholders to determine the scope of the assessment to be conducted. Stakeholders included county personnel, school superintendents, principals, and maintenance staff for each facility. Once the scope was defined, we began the assessment by conducting document reviews of any drawings, specifications, etc. that were available to familiarize our team with each facility prior to conducting walkthroughs. We then conducted our onsite walkthroughs of all buildings focusing on the items identified for review by the scope and any other material conditions observed while onsite. We noted equipment types, installation dates, overall material condition and any other relevant information needed to support the assessment.

This information was then reviewed by our engineers and the process of developing recommendations began. Age of equipment was compared against the latest equipment life databases to determine likelihood of failure. Material condition was compared against design documents to determine if equipment was functioning as designed and/or operating correctly. Overall design was compared against the latest standards to determine if the facility was meeting current goals for indoor air quality and student/staff comfort. A final report was then developed after reviewing the latest ASHRAE recommendations for schools and the guidance of the North Carolina Department of Public Instruction. The final report and recommendations were presented to each county for review.

RN&M then worked closely with the counties and our partners to develop, design and then construct the solutions as their budgets allowed. By first assessing the needs of each facility and then working closely with school and county personnel we were able to assist the counties in making the best use of their available funding. We were also able to establish the order in which future repair/replacement work should be accomplished to maximize the material readiness of their educational facilities.

Randy Drumheller

Director of Maintenance & Construction
Chatham County Schools
401 S. 6th Avenue
Siler City, NC 27344
(919) 542-3626

Jake Buchanan

Director of Operations & Logistics
Jackson County Schools
398 Hospital Road
Sylva, NC 28779
(828) 586-2311 ext. 1930

Patrick Florence

Capital & Facilities Director
Orange County Schools
200 East King Street
Hillsborough, NC 27278
(919) 732-4581

Zach Shoaf

Maintenance Director
Haywood County Schools
401 Farmview Drive
Waynesville, NC 28786
(828) 456-2402

THIS PROJECT IS PERFECT FOR RNM!!

- We love tackling projects as the prime designer, and have extensive experience administering contracts for public work, including federally funded projects.
- We have extensive experience with projects involving existing occupied facilities. We actually enjoy developing the best possible solutions for the design challenges occupied facilities provide. We can help you achieve the best possible compromise between inconvenience and cost effectiveness.
- We have assisted our public school clients in North Carolina for many years with the operation of their existing facility HVAC systems. We have surveyed all of the facilities in multiple districts, and assisted their administrations prioritizing and budgeting systems upgrades and replacements.
- We have closely monitored the recommendations of the CDC and ASHRAE throughout this pandemic, and assisted our clients in their efforts to create safe environments to facilitate in person instruction.
- Our many years of experience with public schools will be a huge asset for this work. It will require particular sensitivity to the operational requirements of the schools in Transylvania County. We believe that RNM will be your best choice due to our extensive experience in the design (and operation) of public school facilities.
- We are located in a county adjacent to Transylvania, which will allow us to respond quickly to your needs. This will be very important when tackling complex renovation projects.



J. Scott Denton
PRESIDENT +
ELECTRICAL DEPARTMENT
HEAD

EDUCATION

Appalachian State University

- B.S. Physics, 1995

University of Tennessee

- BSEE, 1997

REGISTRATION

Professional Engineer

- NC #35223
- TN #112290
- SC#27646

Mr. Denton is the President of RNM Engineers and electrical department head. In addition to leading our firm, he provides oversight of all electrical design functions during design for coordination and system application. Projects include electrical design for renovations and new construction for medical, institutional, educational, and industrial facilities. Work scope includes load calculations, lighting design, electrical system design and layout, power distribution design, and equipment selection. Scott has experience in design of daylighting with light level controls and photovoltaic systems.

SUMMARY PROJECT EXPERIENCE

Medical Facilities

- Angel Medical Center
- Anmed Health
- Ashe Memorial Hospital
- Caromont Health System
- Chatham Hospital
- Granville Medical Center
- Highlands-Cashiers Medical Center
- MedWest Health System
- Murphy Medical Center
- Pender Memorial Hospital
- Shriners Hospital
- St. Francis Downtown Hospital
- St. Francis Eastside Hospital
- VA Hospital, Asheville, NC
- VA Hospital, Salisbury, NC

Universities

- Western Carolina University Center for Applied Technology
- Western Carolina University Athletics Facilities
- UNC Asheville NC Center for Health Partnerships

Community Colleges

- Blue Ridge Advanced Technology Training Center
- AB Tech Azalea Building Renovations

Public Schools

- Chapel Hill Schools
- Chatham County Schools
- Haywood County Schools
- Jackson County Schools
- Orange County Schools

Public Sector

- Haywood Courthouse Renovation
- Orange County Courthouse Additions / Renovations
- Cherokee Wastewater Renovations
- Cherokee Emergency Operations Center



Jason L. Moody
Professional Engineer

FIRM

Reece, Noland, and McElrath, Inc.

EDUCATION

Old Dominion University
BSET 2001, Magna Cum Laude
Western Carolina University
MPM, 2005
United States Navy
Naval Nuclear Power Program
1993-2001
Engineering Duty Officer Program
2004-2012

REGISTRATION

Professional Engineer
NC# 32224
VA# 41750
SC# 39314

AFFILIATIONS / ACTIVITIES

ASHRAE
Project Management Institute

Mr. Moody leads our mechanical department, with specialties in energy analysis/modeling and sustainable design. His depth of experience includes everything from engineering and design of all aspects of a facility to equipment replacements and controls upgrades at existing facilities. He specializes in geothermal heat pump systems and sustainable designs that have been successful in achieving up to LEED Gold certification. Prior to working at our firm he worked for a major controls manufacturer which gave him an in-depth knowledge of HVAC controls which he applies to all aspects of his designs.

PROJECT EXPERIENCE

Watauga County Schools, Boone, North Carolina

* New Watauga High School

Jackson County Schools, Sylva, North Carolina

* Smoky Mountain High School Energy Management System Installation
*Cullowhee Valley Elementary School HVAC System Replacement

Swain County Schools, Bryson City, North Carolina

* Swain High School Boiler Replacements
* East Swain Elementary HVAC Systems Replacement
* West Swain Elementary HVAC Systems Replacement

Henderson County Schools, Hendersonville, North Carolina

* The Innovative High School

Chatham County Schools, Pittsboro, NC

* Margaret Pollard Middle School
*Central Services Facility

Orange County Schools, Hillsborough, North Carolina

*Orange High School Geothermal HVAC System

Southwestern Community College, Sylva, North Carolina

* Academic, Administrative, Book Store Facility

AB Technical Community College, Asheville, North Carolina

* Allied Health Education Center

Caromont Health Care, Gastonia, North Carolina

* New 100 Bed Hospital - Belmont
* 1200 Ton Chiller Replacement



Mark R. McDowell
Professional Engineer
Principal

FIRM

Reece, Noland, and McElrath, Inc.

EDUCATION

North Carolina State University
BSME, 1992 -- Cum Laude

REGISTRATION

Professional Engineer
NC #24539
SC #31463
OH #86310
LEED, AP

AFFILIATIONS / ACTIVITIES

NSPE -- National Society of
Professional Engineers

Mr. McDowell is currently the plumbing/fire protection department head but has extensive experience with oversight of all mechanical design functions during design for coordination and system application. Scope of recent work includes all aspects of HVAC systems and system upgrades for several existing facilities.

PROJECT EXPERIENCE

Orange County Schools, Hillsborough, NC

- * Cedar Ridge High School & Auxiliary Gym
- * Gravelly Hill Middle School
- * CW Stanford Middle School HVAC Replacements
- * Orange High School Renovations

Watauga County Schools, Boone, North Carolina

- * New Watauga High School

Macon County Schools, Franklin, North Carolina

- * Iotla Valley Elementary School
- * Mountain View Intermediate School
- * Highlands School Renovations & HVAC Upgrades
- * Union Academy Renovations & HVAC Upgrades

Chatham County Schools, Pittsboro, NC

- * Seaforth Road High School
- * Chatham Grove Elementary School
- * Margaret Pollard Middle School
- * Virginia Cross Elementary School
- * Bus Garage/Maintenance Facility
- * Central Services Facility

Haywood County Schools, Waynesville North Carolina

- * New Bethel Elementary School
- * Waynesville Middle School HVAC System Replacements
- * New Clyde & Hazelwood Elementary Schools

AB Technical Community College, Asheville, NC

- * New Allied Health Facility
- * Birch Building HVAC Upgrades