

New Jefferson Elementary School

Special Inspections & Testing Services



Transportation



Geotechnical



Bridge & Structural



Site Design



Geospatial



Environmental

Discover the AEI Difference

www.aei.cc



February 26, 2020

Henderson County Board of Education
c/o Codell Construction Company
Mrs. Marganna Stanley, Superintendent
4475 Rockwell Road
Winchester, KY 40391

**RE: Response to Henderson County Board of Education RFP
New Jefferson Elementary School - Special Inspections & Testing Services**

Mrs. Stanley,

American Engineers, Inc. (AEI) is pleased to provide a response to the Request for Proposal (RFP) for Special Inspections & Testing Services in Henderson, KY. AEI has assembled a qualified and diverse team with the capacity to complete the required work.

The AEI Team has a wealth of construction engineering inspection (CEI) project experience including over 20 completed CEI projects in the past five years. Our Team has six dedicated inspectors for your project who meet or exceed the certifications required by the RFP. AEI has solid experience with projects involving Educational Establishments.

I will serve as the contact person for this proposal. AEI looks forward to working with the Henderson County Board of Education on this very important project. We sincerely appreciate your consideration of our proposal. Please let me know if you have questions or need additional information regarding our selection.

Respectfully,
AMERICAN ENGINEERS, INC.

A handwritten signature in blue ink, appearing to read "Dennis Mitchell", is written over a light blue horizontal line.

Dennis Mitchell, PE, PMP
Director of Federal Geotechnical Services

APPENDIX A

Statement of Qualifications



Transportation



Geotechnical



Bridge & Structural



Site Design



Geospatial



Environmental

Special Inspections

American Engineers, Inc. (AEI) is a full-service, award-winning civil engineering firm with a 35-year history of project successes throughout the Southeast and Midwest. We offer diverse experience in civil site engineering, geospatial (surveying, UAV/UAS, bathymetric), geotechnical, structural, environmental, transportation, and construction phase services. As an **SBA Classified Small Business**, our staff of over 100 engineers, geologists, surveyors, engineering technicians, and CAD specialists serve clients from offices in Glasgow, Louisville, and Owensboro, Kentucky; and Kennesaw, Georgia. We work every day with Federal agencies, State DOTs, local municipalities, and private industries.

We have a **large staff of field technicians** providing soil, concrete, and asphalt testing as well as **Special Inspections** for vertical construction to meet state building codes. AEI has provided materials testing and inspection services for over 30 years and Special Inspections and testing services since the inception of this requirement in 2002. Our **AASHTO certified and USACE accredited laboratory** provides the necessary backup support with capabilities of performing concrete, and masonry compressive strength testing, standard and modified Proctor tests, CBR, Atterberg limits tests, aggregate/soil grain size analysis—including sieve and hydrometer testing and unconfined compressive strength. AEI can also utilize its mobile laboratory for on-site testing and inspection services throughout construction.

AEI brings **extensive knowledge of welding technology and various welding codes** including American Welding Society D1.1 Structural Welding of Steel, D1.3 Structural Welding of Sheet Steel, D1.5 Bridge Welding, D17.1 Aerospace Fusion Welding, American Petroleum Institute API 1104 Welding of Pipelines and Related Facilities, American Society of Mechanical Engineers ASME Section IX Welding and Brazing Qualifications.

Our projects have included multi-story healthcare and public-use facilities, educational facilities, large industrial facilities, cellular communication towers, and renovation of historic and modern building structures.



Contact:

AMERICAN ENGINEERS, INC. (AEI)
Brad High, PG, PMP
65 Aberdeen Drive
Glasgow, Kentucky 42141
(270) 651-7220 office
bhigh@aei.cc

AEI



Transportation



Geotechnical



Bridge & Structural



Site Design



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APPENDIX B

Firm Profile



Transportation



Geotechnical



Bridge & Structural



Site Design



Geospatial



Environmental

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AMERICAN ENGINEERS, INC.

DESIGNING YOUR FUTURE

including site civil, geotechnical, geospatial/surveying/geophysical, transportation, structural, and environmental services. As an **SBA Classified Small Business**, our staff of over 100 engineers, geologists, surveyors, engineering technicians, landscape architects, and CADD specialists serve clients from offices in Glasgow, Louisville, Lexington, and Owensboro, Kentucky; Kennesaw, Georgia; and Clarksville, Tennessee. We work every day with Federal agencies, State DOTs, local municipalities, and private industries.

For dependable, repeat performance, our experienced **Project Management Professionals (PMPs)** develop project and quality control plans customized to meet the specific needs of your project, identifying the methodologies, tools, processes and procedures, project milestones, and staff dedicated to completion of each project assignment in accordance with scope and schedule. Our efforts have been rewarded with the most important measure of customer satisfaction—*repeat business*.

- A self-certified SBA Small Business with large business qualifications, capabilities, and capacity
- Nationwide project delivery from six offices in the Southeast
- In-house AASHTO certified and USACE validated materials testing laboratory
- Design/Bid/Build and Design/Build Delivery
- Experience with IDIQ and On-call Contracts
- Prequalification with DOTs and other State agencies



Specialized Experience and Technical Expertise

Civil/Site

Civil Site development was a significant contributor to AEI's push to be diverse since it requires virtually every service discipline to be successful. It starts with communication. The AEI way is to listen, understand, and translate visions for a site into reality. This approach has earned us a reputation as the go-to site design firm among many private developers, institutions, and public agencies and utilities that we value as clients. AEI has participated in commercial and industrial development projects on a large and small scale for public and private entities. The AEI team develops detailed, accurate plans that effectively incorporate roadways; parking and site circulation; utilities including water, sewer, and drainage; stormwater management; and cost-effective site grading. These services are further complemented by our knowledge of regulatory agency requirements, permitting procedures, and an ability to expedite projects on time and on budget. Our philosophy is to develop sites that meet your objectives, while ensuring they are functional, compliant, aesthetic, and ready for construction.



*AEI provided full civil site design, geotechnical, surveying, and testing and inspection for the **Magna-Bowling Green Metalforming Development** in the Kentucky Transpark, the largest of its type in the US when initiated with a 1 million-SF facility on 140 acres including rail service and retention for stormwater and irrigation.*



Geotechnical Exploration

AEI has provided all three phases of geotechnical investigative services (drilling, laboratory, engineering) for public and private clients. Our **drilling fleet** includes a track-mounted CME-55, track-mounted Diedrich D-50, a truck-mounted CME-45B, and a truck-mounted BK-51, all equipped with automatic hammers and all required safety equipment. Our drill rigs are equipped with tooling necessary to support both deep soil sampling projects as well as rock coring. We also maintain an inventory of spare parts and expendable items to **minimize down-time** in the field. Our fleet also includes two dozers, several varying size water tanks, three stand-alone positive displacement pumps, and numerous trash pumps for supporting our drilling activities. In addition to primary drilling equipment, AEI has HQ & PQ sized coring equipment, NQ and HQ sized packer testing equipment and mobile grout pump. All equipment is in excellent condition, minimizing the potential for mechanical breakdowns and delays. Our drilling services include:

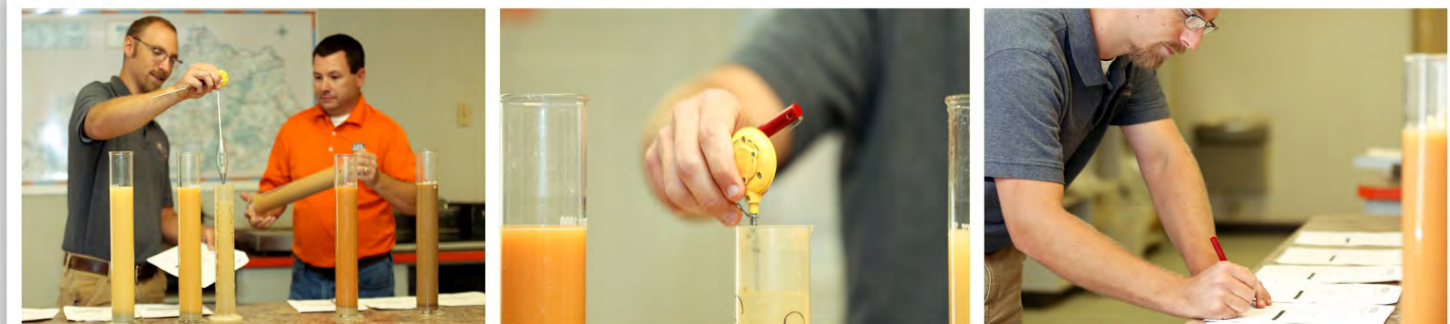
- Comprehensive Soil Sampling/Collection
- Soil Test Borings
- Undistributed Tube Sampling
- Standard Penetration Tests
- Rockline Soundings
- Packer Testing
- Groundwater Observation/Monitoring Wells
- Slope Inclinator Installation



Materials Testing

AEI has a 5,000-SF **American Association of State Highway and Transportation Officials (AASHTO) certified and U.S. Army Corps of Engineers (USACE) validated laboratory** located in Glasgow, Kentucky. The lab is fully equipped, our equipment is on a calibration standard protocol, and our lab personnel are constantly trained and independently evaluated as part of the AASHTO accreditation. The lab is certified annually through a Proficiency Sample Program (PSP) that grades our performance with respect to other labs across the country. AEI geotechnical engineers use the Unified Soil Classification System (USCS) for field classification and logging of soils for all projects. AEI can perform the following laboratory tests:

- Natural Moisture
- Grain Size Analyses
- Atterberg Limits
- Specific Gravity
- Unconfined Compressive Strength
- Standard Proctor
- California Bearing Ratio
- Slake Durability Test, Jar Slake Test
- Unconsolidated Undrained Triaxial
- Consolidated Undrained Triaxial
- One-Dimensional Consolidation
- Soil Resistivity
- Loss on Ignition
- Permeability
- Hydraulic Conductivity
- Water Soluble Sulfate



Geotechnical Analysis

AEI's geotechnical services include settlement, slope stability, seepage analyses, foundation and retaining wall design, landslide repair design, liquefaction analysis, and seismic engineering. Using the latest technology, techniques, and comprehensive services, we offer exceptional engineered geotechnical solutions for highways, dams, buildings and other structures.

- Foundation Type and Bearing Strata Analysis
- Bearing Capacity Analysis
- Dam Design
- Pavement Evaluation and Design
- Geotechnical Design Recommendations
- Rock Anchors
- Helical Piers
- Stone Columns
- Micropiles
- Drilled Shafts
- H-Piles
- Spread Footings
- Mat Foundations
- Compaction Grouting

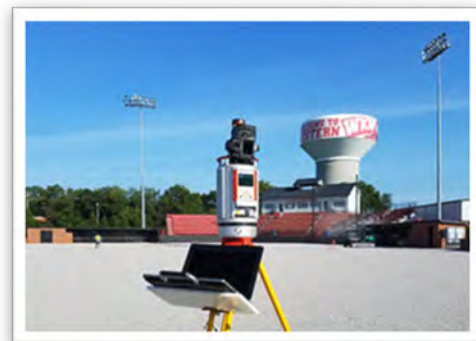
Construction Phase Services

AEI has provided staking, structural shoring, testing, inspection, supervision, and other construction phase services for over 30 years. We maintain and monitor a submittal and RFI register from procurement through construction completion. All actions are recorded and noted. AEI's Construction Phase Services include:

- Stormwater Monitoring
- Construction Monitoring and Inspection
- Special Inspections and Testing for IBC
- Complete Subgrade Evaluations
- Nuclear Density Testing
- Concrete Field Testing
- Pre-stressed Concrete Testing
- Masonry Field Testing
- Proof-Roll Observation
- Structural Steel Bolting and Welding Review
- Vapor Emissions Testing (Concrete Slab)
- Floor Flatness/Floor Levelness
- Spray-Applied Fireproofing Testing
- Pile Load Testing
- Dam and Levee Inspection

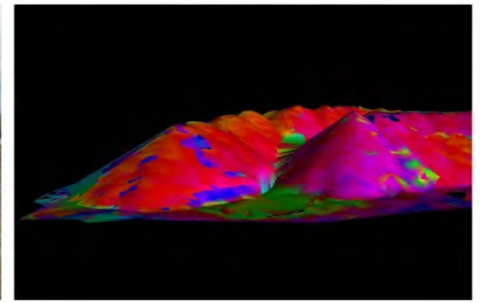
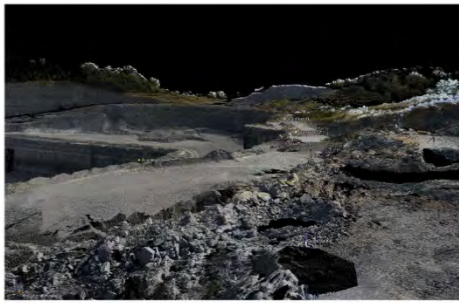
Geospatial/Surveying

AEI is well equipped to provide all types of geospatial services including Boundary/Cadastral/Real Property, Aerial Photography, Land Surveying, Mapping, Hydrographic/Bathymetric, Engineering Support, Subsurface Utility Engineering (SUE Level A thru D), and GIS services. AEI prides itself in keeping up with technology and staying abreast of the trends and changes in the geospatial/surveying and engineering profession. Today's surveying data collection includes **LiDAR 3D scanning, underwater sonar, and aerial UAV/UAS (drone)**. We can mobilize **nine survey crews** equipped with the latest in equipment and GPS technology, all supported by licensed Professional Land Surveyors. Field and office personnel acknowledge the emphasis on safety, property entry, data collection, record keeping, and control measures. AEI's full complement of Geospatial services include:



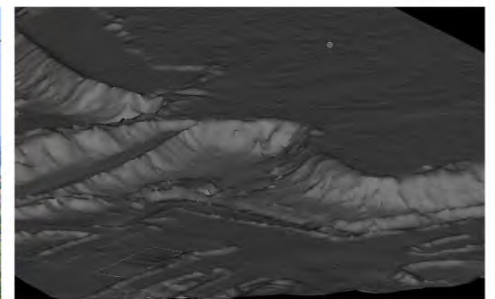
- LiDAR (Terrestrial Based)
- GPS Surveying
- Subsurface Utility Engineering (Level A-D)
- Ground Penetrating Radar (GPR)
- Underwater Sonar Surveys and Inspections
- Electrical Resistivity Analysis
- Boundary and Easement Surveys
- Topographic Surveys
- ALTA/ACSM Land Title Surveys
- Subdivision Platting
- Construction Staking/Layout
- Bathymetric Surveys
- Hydrographic Surveys
- Aerial Mapping Coordination
- Linear Network Mapping
- Control Networks

- Airport Geodetic Control Networks/Control Monumentation (PACS and SACS)
- Airport Obstruction Survey
- FAA AGIS Survey
- Building/Column Layout, Alignment, and Control
- As-Built Surveys
- Right-of-Way and Easement Surveys
- Route Surveys for Railroad, Water, Transportation and Utility Corridors
- FEMA Flood Certifications
- Volumetric Surveys
- Underground (Cave and Quarry Surveys)
- Pre- and Post-Condition Surveys
- Horizontal and Vertical Settlement and Movement Monitoring



LiDAR Surveying. AEI can also provide terrestrial LiDAR surveying using the RIEGL VZ-400 3D Stop-and-Go Terrestrial Laser Scanner for high speed, non-contact data acquisition. RIEGL's unique echo digitization and online waveform processing affords the surveyor the ability to evaluate multiple target echoes and to achieve superior measurement capabilities even under adverse atmospheric conditions. The RIEGL scanner's unique combination of key components, scanner, software, and high-resolution camera results in automatic generation of high resolution textured meshes, photorealistic 3D reconstruction, and exact identification of detail. This scanner also has Total Station-like registration.

Unmanned Aerial Vehicle/System (UAV/UAS) Mapping. AEI can deploy an Unmanned Aerial Systems (aircraft) or UAS under remote control by a licensed remote operator to collect survey data and aerial imagery. This drone service assists in areas where manned aircraft and vehicles are not practical and/or the data needs enhancing and supplementing. AEI's full-time employees pilot the UAS and process the data. The Inspire 1 Pro x5 has unparalleled performance equipped with 4k video and a 16.0-MP camera. Our latest acquisition, the WingtraOne PPK RX1 with 42 MP Sony camera hybrid drone with propeller aeropoints, provides super clear imagery and precise target capture. WingtraOne can map a quarry the size of 240 football fields in an hour's flight with resolution capable of zooming in on a coin lying on the ground.



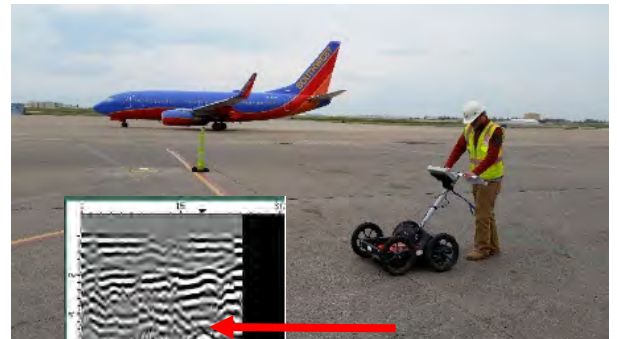
Hydrographic/Bathymetric Surveys. AEI can also go under water with our remotely-controlled Unmanned Surface Vehicle (USV) for Hydrographic/Bathymetric surveys. The flexible propulsion system allows the Z-Boat 1800P to be effective even at very low velocities (30 cm/s), providing a total solution to river discharge measurement. The CEE HydroSystems is a unique and new single beam echo sounder survey system designed specifically for shallow water with working ranges between 1.5 feet and 600 feet. Using HYPACK and other software packages, the CEESCOPE-USV telemetry link allows the operator to steer the USV along the survey line just like in any manned boat survey. The CEESCOPE-USV offers users a range to their vehicle of over 3,000 feet. RTK or PPK GPS is used for high accuracy hydrographic surveys through a base station setup on a known horizontal and vertical control point. Extended range RTK is possible using a network of reference stations which create a VRS (Virtual Reference Station) for each user location. AEI is an expert in hydrographic data collection and processing using the HYPACK software. The data is analyzed and processed by experienced technicians and survey professionals following established QA/QC procedures.



Subsurface Utility Engineering (SUE)

AEI has completed multiple Level A-D Subsurface Utility Engineering (SUE) projects public and private necessary to develop accurate mapping of underground utilities. This geophysical service is becoming more and more of a necessity to avoid unexpected construction conflicts that are not easily resolved, severely alter schedules and can slam a project with significant unexpected cost. Using both Vacuum Excavation Technology (Vactron) and Ground Penetrating Radar (GPR) equipment, we accurately locate and elevate underground utilities at multiple locations. At any level of SUE, our staff will create a digital map of the utilities in a 3D model for design implications. We recognize the importance of accurate data and our experience has paid off for our clients. Our SUE equipment:

- **LSubsite 950 R/T.** This hand-held unit can locate any metallic type utility such as telephone, CATV, ductile iron, water, electricity or fiber optic. It can locate any non-metallic utility that has a tracer wire buried in the trench.
- **Ground Penetrating Radar (GPR).** GPR can locate underground materials/objects including plastics, concrete, ceramics, and asphalt composite at a walking speed for quick inventory. The data provides location for cables, pipes, conduits, duct banks, unmarked graves and depth to bedrock. The unit can be adjusted for varied soil types and different supporting antenna can penetrate up to 15 feet.
- **Vacuum Excavation Technology.** After roughly locating utilities, we provide positive identification using our Vactron PMD 500 GT Vacuum System. This unit allows our field surveyors to “pothole” utilities and use conventional surveying to accurately locate underground utilities, a necessity for urban area projects.



GPR scan showing location and top of existing gas pipeline beneath a concrete apron at Nashville International Airport



Commercial Development Portfolio

McDonald's
 Wal-Mart
 K-Mart
 Target
 Lowes
 Home Depot
 Office Depot
 Meijer
 Arby's
 QT – QuikTrip
 Thornton's
 Olive Garden
 Outback Restaurants
 Kohl's
 Marquee Cinemas
 Red Lobster
 Culvers Restaurants
 TSC - Tractors Supply
 Chick-fil-A
 Speedway

Years ago, Meijer was looking for a more local company to work on our projects in southern Indiana and Kentucky. After completing several projects, it was clear that we selected the right company to do the job. They picked up on our corporate standards quickly and always performed the various disciplines of service, on time, and within our budget expectations. We look forward to working with AEI in the future.

- Bob Bernock, Manager of Site Development, Properties/Real Estate, Meijer



Geotechnical Portfolio



TDOT I-440

**KY Lock Expansion
Nashville District,
USACE)**

**Pine Creek Lake
Rehabilitation Tulsa
District, USACE**

Logan Aluminum

Dart Container

Marzetti's

**WKU Downing
University Center**

TDOT SR-13

**KYTC Mountain
Parkway**

**Hardin County Early
College and Career
Center**

**VA Medical Center,
Canandaigua, NY**

**Rogers Group
Murfreesboro**

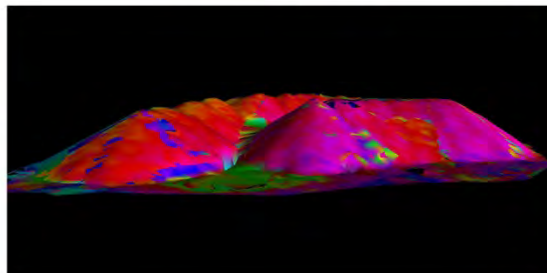
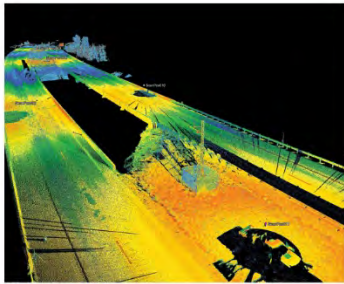
**Owensboro
Convention Center**

CSX

WKU

American Engineers performed the work for this task order with very good quality and exceptional customer care. They were very responsive and flexible throughout the entire period of performance and worked diligently to ensure the full scope of services was delivered for the District and the VA without impacting operation of the existing medical facility. All work was conducted with the highest level of safety and professionalism. Remarks by Ryan Jeffries, USACE Louisville District. Task order completed for our Geotechnical IDIQ. Referenced pulled from our CPAR rating for TO 13.

- Ryan K. Jeffries, PE, Chief, Civil Engineering Branch, USACE - Louisville District



Geospatial Portfolio

USACE Huntington District, Geospatial IDIQ

USDA/NRCS, Kentucky

USDA/NRCS, Tennessee

KYTC Statewide Survey Contract, Survey and (S.U.E.)

KYTC Statewide Aerial & Photogrammetric Contract,

Arnold Airforce Base, TN, Utility Location

Fort Campbell Army Airfield, Runway City of Springfield, TN 19-mile Corridor Waterline Extension

General Aviation, KY Airports, Aeronautical Surveys

Wendell H. Ford National Guard Training Center

Rogers Group, Inc., Sumner Co. TN,

AEI has an "Exceptional" Contractor Performance Assessment Report (CPAR) rating from the U. S. Army Corps of Engineers (USACE), Huntington District for the base year of the Geospatial Services Contract. The evaluation areas include Quality, Cost Control, Boundary Survey, and LiDAR Scanning. The Assessing Official Comment's for Quality, Schedule, Cost Control and management include "Performance meets contractual requirements and exceeds many to the Government's benefit". Recommendations from the Assessing Official, "Given what I know today about the contractor's ability to perform in accordance with this contract or order's most significant requirements, I would recommend them for similar requirements in the future".

- Geospatial Contract - USACE Huntington District

Key Technical Staff

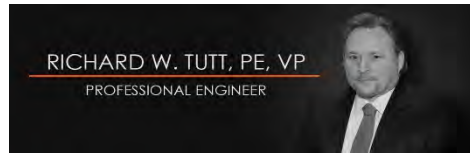


BEN T. QUINN, Jr., PE, PRESIDENT
PROFESSIONAL ENGINEER

BSCE, University of Kentucky
30 Years of Experience
benq@aei.cc

AEI

Ben has 31 years of design and management experience across a broad range of projects. He has extensive transportation expertise, serving as Project Manager on many roadway projects. He also has considerable private site development history and was the lead in securing AEI as a regional consultant for McDonald's, helping to direct AEI on over 100 fast-tracked new build and remodel projects in the Midwest/southeast, many moving at the same time. He is adept at seeing the owner's perspective and excels in overall project management and maintaining and ensuring client satisfaction. He is a "hands-on" President.

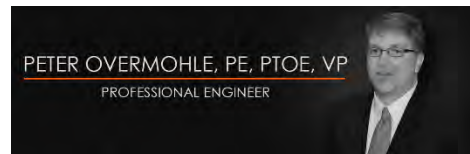


RICHARD W. TUTT, PE, VP
PROFESSIONAL ENGINEER

BSCE, Louisiana State University
31 Years of Experience
rtutt@aei.cc

AEI

Richard's strengths are civil site, transportation, and environmental projects. He has been directly involved with most of AEI's site development work and has been Engineer-of-Record on many projects. Richard is used by several industrial authorities as an industrial recruitment resource and was the lead for securing AEI's regional consultant status with Meijer – an American hypermarket chain from Michigan with over 200 locations. Richard has also served on several large multi-purpose developments including the 1,000-acre Bluegrass Farms Development in Bowling Green, Kentucky.

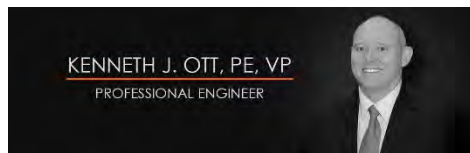


PETER OVERMOHLE, PE, PTOE, VP
PROFESSIONAL ENGINEER

BSCE, Tennessee Tech
26 Years of Experience
povermohle@aei.cc

AEI

Peter serves as Project Manager for the firm's transportation projects. He provides you over 25 years of transportation experience from small two-lane collectors to multi-lane interstates. Peter has also served as Engineer-of-Record on many of AEI's notable interchange projects. He is a designer and manager and can get into the details working in and managing tasks including geometrics, drainage, right-of-way, cost estimating, pavements, environmental and public involvement.

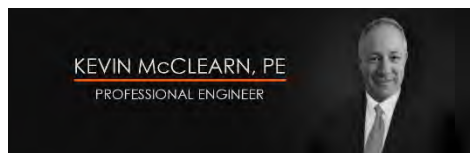


KENNETH J. OTT, PE, VP
PROFESSIONAL ENGINEER

MSCE, University of Louisville
36 Years of Experience
kott@aei.cc

AEI

Kenny provides structural expertise including bridge and culvert design and full site development services on large and small commercial, industrial, and residential projects. His structural design experience includes structural steel, pre-cast and cast-in-place concrete, concrete tilt-up panel construction, pre-stressed concrete and wood framed structures. Kenny was the lead engineer on AEI's extensive involvement with the Jim Beam reconstruction at Clermont, Kentucky involving many simultaneous project goals under an intense spotlight.



KEVIN McCLEARN, PE
PROFESSIONAL ENGINEER

BSCE, Tennessee Technological University
26 Years of Experience
kmclearn@aei.cc

AEI

Kevin joined AEI after a 25-year career with the Kentucky Transportation Cabinet, where he served simultaneously in design and planning departments prior to becoming Chief District Engineer. During his tenure as Chief, over 78 miles of parkways were converted to Interstate 69. He has extensive background in project management, public involvement, planning, safety improvements, complimented by excellent interpersonal skills developed from years of dealing with the public and public officials.

JOE WATSON, PE
PROFESSIONAL ENGINEER



BSCE, University of Kentucky
16 Years of Experience
jwatson@aei.cc

AEI

Joe provides deep and recent experience on commercial and industrial sites and has completed design, site investigation reports, final layout design, access design and traffic studies, cost estimating and permitting for varied projects of all sizes, including over 60 restaurants for McDonald's as well as serving as lead on AEI's work for Meijer and the Thornton's and Quick Trip convenience store chains. He has also served local industrial authorities in their pursuit of industrial clients by providing consultation and site concepts and infrastructure options.

DENNIS MITCHELL, PE
PROFESSIONAL ENGINEER



MSCE, University of Louisville
28 Years of Experience
dmitchell@aei.cc

AEI

Dennis provides geotechnical experience on a wide variety of public and private projects including several geotechnical investigations for roadway and large commercial and industrial efforts. He provides concise, expedient, and site-specific investigations. Working with the AEI Field Services center, Dennis provides recommendations for foundation and pavement design and recommendations for cost efficient site grading activities. Dennis also coordinates field testing and Special Inspections (SI) as required by the IBC and remains involved with construction, providing oversight and guidance on geotechnical and materials related issues.

DUSTY BARRETT, PE
PROFESSIONAL ENGINEER



MS, Civil Engineering, University of Kentucky
13 Years of Experience
dbarrett@aei.cc

AEI

Dusty is responsible for managing AEI's CEI program and frequently serves as Special Inspector of Record. His responsibilities include development of procedures for field and laboratory testing and interaction with clients to determine the specific testing and inspection needs for each project. Dusty is responsible for review of daily field reports and verification that critical items requiring inspection are being properly reviewed with results appropriately documented and transmitted.

DON PEDIGO, PLS
PROFESSIONAL LAND SURVEYOR



KCTCS, 1979, Civil Tech, Bowling Green, KY
40 Years of Experience
dpedigo@aei.cc

AEI

Don serves as Director of Geospatial Services for AEI. His 40 years of surveying experience spans all facets of the geospatial profession. He has been the principal surveyor/in responsible charge for federal projects for the U.S. Army Corps of Engineers, Air Force Reserve, U.S. Department of Agriculture, and U.S. National Park Service; commercial and general aviation clients; Departments of Transportation including KYTC, TDOT, and GDOT; TVA, LG&E and KU; and both large and small commercial and industrial developments.

BOB NEUHAUS, PLS
PROFESSIONAL LAND SURVEYOR



BS, Surveying & Mapping, East Tennessee State University
18 Years of Experience
rneuhaus@aei.cc

AEI

Bob serves as our Land Surveying Manager/QA-QC for AEI's surveying operations. He is responsible for all GPS surveying, establishment of horizontal/vertical control, photogrammetric control, deed research, scheduling of survey field crews, meeting with property owners/clients, data management, and overseeing coordination with local utility companies. Bob has 18 years of surveying experience which includes both field surveying and office management, working on both government related projects and private developments.

APPENDIX C

Scope of Services & Fee



Transportation



Geotechnical



Bridge & Structural



Site Design



Geospatial



Environmental

Discover the AEI Difference

www.aei.cc



February 26, 2020

Henderson County Board of Education
Mrs. Marganna Stanley, Superintendent
4475 Rockwell Road
Winchester, KY 40391

RE: Proposal for Special Inspections & Testing Services
New Jefferson Elementary School

Mrs. Stanley,

AEI is providing this proposal to Henderson County Board of Education for Special Inspections & Testing services for the proposed new Elementary School project in Henderson, KY.

Quality Assurance / Quality Control Scope (SI&T)

AEI will provide a civil engineering technician for part-time special inspection and testing services as requested for the project once construction begins. The inspector will observe and test earthwork, concrete and masonry placement activities and review reinforcing steel. Molding of compressive strength cylinders, air content testing and slump testing will also be performed in accordance with the current edition of the Kentucky Building Code. Masonry testing will also be performed per the Kentucky Building Code and project plans and specifications, including testing of grout and mortar and review of reinforcing steel. Structural steel will be reviewed in relative accordance with the Statement of Special Inspections and the Kentucky Building Code. For estimation purposes, it has been assumed that fabrication shops utilized for the project are certified or accredited as applicable and will not require separate inspections.

Discrepancies identified during special inspections and/or testing will be immediately reported to the Contractor. The Structural Engineer and/ or Architect will then be contacted for further direction with regard to found discrepancies. Discrepancies will be documented in daily field reports in addition to corrective actions taken by the Contractor to remediate deficient work or materials per direction of the Structural Engineer.

In our in-house AASHTO R18/ Corps of Engineers accredited laboratory, concrete cylinders and masonry specimens will be broken. Other lab tests will be performed as required by the project plans and specifications in our lab.

Daily field reports will be prepared prior to leaving the site and will be reviewed by our lab manager and distributed on a weekly basis. A final letter of Special Inspections will be provided upon completion of construction items requiring special inspections.

Special Inspections & Testing Services – Cost Plus Fixed Fee - \$123,230.00 (detailed breakdown on Page 18)

Please refer to Pages 18 to 20 for a detailed fee breakdown and hourly rates for all persons working on the project. Please let me know if you have questions or need more information.

Respectfully,
AMERICAN ENGINEERS, INC.

A handwritten signature in blue ink, appearing to read "Dennis Mitchell".

Dennis Mitchell, PE, PMP
Director of Federal Geotechnical Services



**New Jefferson Elementary School
Henderson, KY**

	Quantity	Unit Price	Unit	Total
Earthwork Testing & Inspection				
Engineering Technician	300	\$65	Hour	\$19,500
Standard Proctor	4	\$150	Hour	\$600
Structural Concrete Testing & Inspection				
Engineering Technician	400	\$65	Hour	\$26,000
Concrete Breaks and Reports	260	\$20	per break	\$5,200
Masonry Testing & Inspection				
Engineering Technician	300	\$65	Hour	\$19,500
Grout Prism Breaks and Reports	60	\$26	per break	\$1,560
Mortar Cube Breaks and Reports	60	\$20	per break	\$1,200
Project Management/ Report Review (Clerical)				
Lab Manager (Report Review & Scheduling)	20	\$60	Hour	\$1,200
SIR Site Visits	20	\$100	Hour	\$2,000
	100	\$160	Hour	\$16,000
Structural Steel/ Welding Inspection				
Engineering Technician	100	\$85	Hour	\$8,500
Miscellaneous/Exterior Testing & Inspection/Sample Retrieval				
Engineering Technician	100	\$65	Hour	\$6,500
Concrete Breaks and Reports	40	\$20	per break	\$800
Mileage				
	24,450	\$0.60	Each	\$14,670
Special Inspections Total				\$123,230

Currently it is our understanding that the Geotechnical Engineer of Record will be retained by the Owner for inspections and any necessary testing of ground densification which would include rammed aggregate pier (RAP) installation. AEI has not included estimated for these services in this cost proposal.

APPENDIX D

Rate Sheet



Transportation



Geotechnical



Bridge & Structural



Site Design



Geospatial



Environmental

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STANDARD AEI STAFF & FIELD SERVICES RATES

Effective 05/26/2019

HOURLY STAFF RATES

CEO/Principal/Project Engineer	\$ 210.00
Principal Project Engineer	\$ 190.00
Principal Project Engineer-Geotech	\$ 190.00
Sr. Project Engineer	\$ 180.00
Project Engineer	\$ 160.00
Project Engineer-Geotech	\$ 160.00
Jr. Project Engineer	\$ 120.00
Prof Land Surveyor	\$ 115.00
EIT I	\$ 95.00
EIT II	\$ 115.00
Professional Geologist	\$ 100.00
Geologist-in-Training	\$ 65.00
Civil Designer I	\$ 95.00
Tech I: Civil/Survey/Field Inspector	\$ 50.00
Tech II: Civil/Survey/Field Inspector	\$ 60.00
Tech III: Civil/Survey/Field Inspector	\$ 70.00
Tech IV: Civil/Survey/Field Inspector	\$ 85.00
2-Man Survey Crew	\$ 165.00
3-Man Survey Crew	\$ 195.00
Party Chief I	\$ 70.00
Party Chief II	\$ 75.00
Party Chief III	\$ 80.00
Executive Assistant	\$ 125.00
Admin Assist I	\$ 55.00
Admin Assist II	\$ 80.00
Landscape Architect	\$ 115.00
Sr Environmental Tech	\$ 140.00

MILEAGE

Standard Vehicle	mile	\$ 0.60
Support Vehicle	mile	\$ 0.75
Drill Rig	mile	\$ 3.00

SOIL TESTING

California Bearing Ratio (CBR)	\$ 200.00
Modified Proctor	\$ 175.00
Standard Proctor	\$ 150.00
Unconfined Compression Strength (qu)	\$ 50.00
Consolidation Testing	\$ 300.00
Organic Content	\$ 50.00

Grain Size Analysis	\$ 60.00
Atterberg Limits	\$ 50.00
Natural Moisture Content	\$ 7.00
Visual Classification	\$ 2.00
Field Density*	Hourly Rate see below

AGGREGATES/ASPHALTS

Gradation/Extraction	\$ 100.00
Gradation	\$ 55.00
Extraction	\$ 55.00
Specific Gravity	\$ 35.00
Asphalt Coring	Hourly Rate \$ 100.00
Field Density Test(Nuclear)*	Hourly Rate

CONCRETE

Compressive Strength	Per Cylinder	\$ 20.00
Concrete Cylinders *	Hourly Rate	see below
Concrete Slump Test*	Hourly Rate	see below
Air Entrainment*	Hourly Rate	see below
Concrete Beams"	Hourly Rate	see below

DRILLING SERVICE

Drill and Crew for Soil Auger		
Borings (w/SPT)	Hourly Rate	\$ 180.00
Rock Coring	Per Foot	\$ 55.00
Rock Coring Setup	Hourly Rate	\$ 100.00
UD 3-in Tube Sampling	Each	\$ 50.00
Dozer Work	Hourly Rate	\$ 100.00
Slab Coring	Hourly Rate	\$ 100.00

SUBSURFACE UTILITY ENGINEERING

Level A	Hourly Rate	\$ 230.00
Level B	Hourly Rate	\$ 160.00

GEOSPATIAL

LIDAR (Terrestrial)	Per Day	\$ 650.00
UAV/Drone (Rotor)	Per Day	\$ 100.00
Hydro/Bathymetric (single beam)	Per Day	\$ 255.00

*Tech I, II, III, IV dependent upon availability and/or complexity. Additional testing may be available upon request