





Architect/Engineering Services Needs Assessment Targeting 55 County Courthouses

November 16, 2011

Submitted to: State of West Virginia

Submitted by:



Matthew S. Munter, PE Senior Vice President

EMG

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TURCHASING DIVISION STATE OF WV



November 15, 2011

Department of Administration Purchasing Division 2019 Washington Street, East P.O. Box 50130 Charleston, WV 25305-0130

SUBJECT:

ARCHITECT/ENGINEERING SERVICES, NEEDS ASSESSMENT TARGETING 55 COUNTY COURTHOUSES [CFA100611]

Dear Mr. Whitaker:

EMG is pleased to provide the enclosed proposal in response to The West Virginia Courthouse Facilities Improvement Authority's request for a Facilities Condition Assessment. EMG has provided similar assessment services of courthouse and judicial facilities. The following proposal details EMG's qualifications for this work due to the following factors:

- ✓ 25 years of experience with Facility Condition Assessments and knowledge of the applicable codes and regulations.
- ✓ A robust team of with exemplary experience conducting assessments, and programming of courthouses and historic properties.
 - Fentress, Inc. Programming
 - Quinn Evans Historic Preservation (West Virginia licensed Arch.)
- ✓ Detailed experience preparing long-range and Life-Cycle based capital budgets and plans. Our cost estimating is based on detailed platform calibrated to local client experience.
- ✓ In addition to delivering comprehensive facility assessment, repair and rehab budgeting, we propose our AssetCALC™ database application as part of our deliverables on the project in order to allow the users to run multiple funding and priority scenarios based on aggregated condition and life-cycle data.
- ✓ Recent Courthouse experience focused on Condition Assessments and Capital Planning:
 - Arlington General District Court Arlington, VA
 - Loudoun County Historical Courthouse Leesburg, VA
 - Madge Bradley Courthouse San Diego, CA
 - Red Brick Courthouse Rockville, MD
 - Strom Thurmond Federal Building & U.S. Courthouse Columbia, SC

EMG consistently demonstrates our corporate commitment to quality, continual improvement, and client satisfaction. We appreciate the opportunity to propose on this project and look forward to working with you.

Sincerely,

Matthew S. Munter, P.E. - Senior Vice President

Architectural/Engineering Services to Produce a Needs Assessment

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1. Concept

A. Project Understanding

EMG understands the goal of this project for The West Virginia Courthouse Facilities Improvement Authority (hereinto referred to as "The Authority") is to conduct a Comprehensive Facility Assessment and Space Planning/Utilization Study of the state's fifty-five (55) county courthouse buildings. Subsequently, a comprehensive report identifying and prioritizing immediate needs, deferred maintenance and required life-cycle component replacement over a fifteen (15) year projection will be prepared. Further, we understand that the details of these facility needs reports may be the basis for a prioritized Short-term and Long-term Capital Plan, and maintenance plan that will drive priority of funding over the long term.

B. Work Flow

EMG has prepared a detailed project plan that outlines our approach to the project. EMG is prepared to deploy various field assessment teams to ensure the project is completed efficiently and within the agreed upon time period. These multi-discipline teams will include Registered Architects, and Professional Engineers. We are prepared to use available drawings to support the field assessment.

EMG has designed this program to be consistent with the mission and goals of The Authority. We understand the needs of the program, and have successfully completed similar condition assessments of numerous courthouse and judicial facilities nationwide. To achieve these goals, our assessment team will thoroughly survey, inventory, and assess all building systems and components to identify deficient conditions and accurately estimate the cost to correct each deficiency.

At project implementation, EMG will conduct kick-off meetings to introduce key team members and to present key activities to be conducted. Within this meeting, we will address:

- Review work plan and schedule for the entire contract with key milestones
- Confirm the final scope of work
- Determine the availability, condition, and location of existing drawings and documentation
- Collect all base data on each courthouse
- Site Plan for each courthouse
- Confirm the square foot data for each courthouse
- Review any available descriptive information about each courthouse (i.e. year built, history, and major renovations)
- Interview those familiar with the courthouse, such as building engineers, to collect pertinent data for integration into the assessment

Architectural/Engineering Services to Produce a Needs Assessment

- Review available construction and maintenance documents, such as as-built drawings, specifications, and maintenance logs
- Analyze the findings of any existing engineering analyses, such as accessibility, air quality issues, environmental, and life-safety.
- Document code violations and estimate costs to upgrade the building to current codes, standards.
- Recommended physical improvements and recommendations for improvement.

During the term of the project, EMG will conduct periodic progress meetings (3-5) with the project team, and the Authority to maintain open communication. In these meetings, EMG's agenda will include a focus on work plan, schedule, and project needs. This will permit the opportunity to proactively address challenges encountered and discuss adjustments. Each meeting will conclude with task assignments, schedules, and goals to be met. During these meetings, EMG will provide the Authority with a written status report that tracks and monitors the progress of the assessments against the schedule submitted.

In summary, the project approach presented by EMG for this project is uniquely customized to address the specific requirements of the Authority. EMG has demonstrated experience in the assessment of a significant number of courthouses, including projects for the General Services Administration (GSA) and state and local governments.

C. Facility Condition Assessment

The Facility Condition Assessment will be conducted in compliance with state of West Virginia, federal and municipal laws, and building codes. The completed report will include an executive summary in a format compatible with the summary format specified by the Authority. The Facility Condition Assessment will be led by a team that includes a Registered Architect, or Professional Engineer. EMG will collect, document, and analyze the facilities assessment data to achieve the following:

- Identify deficient conditions in terms of deferred maintenance, building condition, and life-safety code non-compliance issues.
- Provide a reasonable cost analysis for the above-mentioned efforts.
- Provide a detailed report for each courthouse that details the assessment data.
- Provide individual cost tables and digital photographs to document the deficient conditions at each courthouse.

Based on observations and information obtained from available on-site personnel, EMG will visually inspect each courthouse and its facilities. Specifically, EMG's assessment will comply with the Authority's ten (10) priority categories as determined by the Board of Director's, and will focus on the following components:

Life-Safety

EMG will identify the material life-safety/fire protection systems at the courthouse, including sprinklers and stand pipes (wet or dry), fire hydrants, fire alarm systems, smoke detectors, fire extinguishers, emergency lighting, stairwell pressurization, and smoke evacuation.

Structural Improvements

EMG will evaluate the columns, footings, foundations, beams, and slabs as part of the structural inspection for soundness.

Roofing

The assessment team will observe the general conditions of the roof system such as membranes, flashings, skylights, pitch pans, attachment methods, gravel stops, parapets, miscellaneous appurtenances, and insulation.

EMG will identify the material roof systems, including roof type, reported age, slope, drainage, etc.; identifying any unusual roofing conditions or rooftop equipment.

The team will observe for evidence of material repairs, significant ponding, or evidence of material roof leaks, and identify the material rooftop equipment or accessories including antennas, lightning protection, HVAC equipment, solar equipment, etc.

Electrical/Data

The assessment team will identify the electrical service provided and distribution system at the courthouse.

The evaluation will include material switchgear disconnects, circuit breakers, transformers, meters, emergency generators, general lighting systems, and other such equipment or systems.

The team will observe general electrical items such as distribution panels, type of wiring, energy management systems, emergency power, lightning protection, sensors, and busway systems.

Exterior Improvements

EMG will identify the material elements of the building exterior, to include walls, doors, windows, and fire escapes. This will also include the foundation system, floor framing system, roof framing system, façade or curtain-wall system, glazing system, exterior sealant, exterior balconies, doors, and stairways. Observations may be subject to grade, accessible balconies, and rooftop vantage points.

Interior Improvements

The team will identify common areas, offices and special use areas and courthouse standard finishes. The evaluation includes doors, hardware, flooring, ceilings, walls, stairwells, and handrails. EMG will identify material building amenities or special features.

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Mechanical

Plumbing

The team will identify the material plumbing systems at each courthouse, including domestic water supply, domestic hot water production, sanitary sewer, or any special or unusual plumbing systems (such as water features, fuel systems, gas systems). The team will also observe meters, catch basins, lift stations, and irrigation systems.

Heating and Cooling

The assessment will identify burners, insulation, compressors, thermostats, steam traps, valves, heating coils, ventilators, boilers, tanks, and dryers.

Ventilation

The team will identify the ventilation systems at the courthouse, such as ductwork, intakes, filter rooms, fan rooms, bearings, hoods, and HVAC centralized zone units.

Air Conditioning Systems

The team will identify the material air-conditioning, including cooling towers, chillers, window units, insulation, thermostats, heat pumps, and controls.

Accessibility

EMG will provide a general statement of the subject building's compliance to the Americans with Disabilities Act (ADA) to help identify whether the state/county may be exposed to issues and whether there is the need for further review.

EMG will provide an Accessibility Checklist, which addresses the most common accessibility violations outlined within ADA Accessibility Guidelines, Section 504 of the Rehabilitation Act of 1973.

New Construction/Space

EMG will prepare a Space Analysis that includes evaluating courthouse/room capacities and detailing building shortfalls with respect to spaces required to support the population. These components will be combined into conclusions and recommendations detailing which courthouses should be considered for expansion, or modernization.

A Space Analysis shall be conducted to either establish new, or confirm existing capacities for each courthouse. In addition to the evaluation of existing facilities based on cost to maintain and shortfalls and deferred maintenance, EMG will identify shortfalls in space required to support current and future needs.

Special Systems and Equipment

The assessment will include all special systems and equipment, such as elevators, escalators, equipment lifts, chair lifts, chemical storage or treatment areas, storage tanks, dumbwaiters, vaults, public address systems, and telephone systems.

Dining Facilities and Food Service Equipment

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Should a courthouse include dining facilities, the team will assess all Food Service equipment and spaces including the Kitchen, Cafeteria, and serving areas. Food Service equipment will be evaluated for adherence to life-safety code and ventilation requirements as well for condition and capital replacement.

Environmental

EMG will review the environmental features of the courthouse, to include appearance, cleanliness, acoustics, ventilation, and humidity.

Lead and Asbestos

EMG will review exist Lead and AHERA reports for existence and compliance with Operational and Maintenance Plans. Additional services offered include Hazardous Materials Testing and Analysis. EMG has in-house licensed technicians capable of performing asbestos, lead paint, and indoor air quality testing.

Energy Efficiency and Recommendations for Improvement

- Evaluate energy consumption data, including electrical, natural gas, oil, and water consumption.
- Benchmark the development to establish a rating against a national average for energy performance for courthouse facilities.
- Survey 100% of court rooms, office areas, maintenance facilities and mechanical rooms to document utility related equipment, including heating systems, cooling systems, air-handling systems and lighting systems.
- Itemize the energy consuming equipment (i.e. air conditioning, fans and blowers);
 review lighting systems both exterior and interior; review appliances; review envelope characteristics, review monitoring of energy and review efficiency of all such equipment.
- Inspect the characteristics and conditions of the building envelope, checking insulation values and conditions. This also includes the inspection of the conditions of walls, windows, doors, roof areas, insulation and special use areas (laundries, computer rooms, kitchens, other areas).
- Identify opportunities to save energy and provide probable construction costs, projected energy/utility savings and provide a simple payback analysis.
- Identify which equipment is using the most energy and what equipment upgrades may be necessary. This information will be used to identify which equipment upgrades or replacements that may provide a reasonable return on the investment by the Authority.

D. Identification and Prioritization

Based upon our observations, research and judgment, along with consulting commonly accepted empirical Expected Useful Life (EUL) tables; EMG will render our opinion as to when a system or component will most probably necessitate replacement. Accurate historical replacement records provided by the property manager are typically the best source for this data. Exposure to the weather elements, initial system quality and installation, extent of use, the quality and amount of preventive maintenance exercised are all factors that impact the effective age of a system or component. As a result, a system or component may have an effective age that is greater or less than its actual age. The Remaining Useful Life (RUL) of a component or system equals the EUL less its effective age.

In addition to determining the EUL and the RUL for each major prime system and building component, EMG will categorize each cited deficiency within one of the following five priorities:

Priority 1: Currently Critical or Replacement Required (Immediate)

Items in this category require immediate action and include corrective measures to:

- Return a building component to normal operation
- Stop accelerated deterioration
- Replace items that have reached or exceeded their useful service life
- Correct a cited safety hazard
- Significant cost to the Authority to defer

Priority 2: Major Action Required (Years 1-2)

Items in this category require action in the next 1-2 years and include corrective measures to:

- Return a building component to normal operation
- Stop rapid deterioration
- Correct potential life-safety issues and/or code hazards
- Intermittent operations

Priority 3: Moderate Action Required (Years 3-5)

Items in this category require appropriate attention to preclude predictable deterioration, potential downtime, additional damage and higher costs to remediation if deferred further.

Priority 4: Minor Action Required (Years 6-10)

Items in this category represent a sensible improvement to the existing conditions. These are not required for the most basic function of the facility; however, Priority 4 projects will improve overall usability and/or reduce long-term maintenance costs.

Priority 5: Long Term capital expenditures (Years 11-20)

Items in this category represent anticipated required capital expenditures due to Estimated Useful Life (EUL) only. These systems are generally in good operational condition, but will require replacement due to the system(s) finite life expectancy.

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In addition to identifying and prioritizing all of the observed deficiencies, EMG will also provide the physical conditions of building components. The physical condition is typically defined as being in one of four categories: Good, Fair, Poor and Not Applicable. For the purposes of our assessments, the following definitions are used:

Good (G)	Component or system is sound and performing its function. However, it may show signs of normal wear and tear, commensurate with its age; some minor remedial work may be required.
Fair (F)	Component or system is performing adequately at this time but exhibits deferred maintenance, evidence of previous repairs, workmanship not in compliance with commonly accepted standards, is obsolete, or is approaching the end of its typical expected useful life. Repair or replacement is required to prevent further deterioration, restore it to good condition, prevent premature failure, or to prolong its expected useful life. Component or system exhibits an inherent deficiency of which the cost to remedy is not commensurate with the deficiency but is best remedied by a program of increased preventative maintenance or periodic repairs.
Poor (P)	Component or system has either failed or cannot be relied upon to continue performing its original function as a result of: having realized or exceeded its typical expected useful life, excessive deferred maintenance, state of disrepair, an inherent design deficiency or workmanship. Present condition could contribute or cause the deterioration of contiguous elements or systems. Repair or replacement is required.
N/A	= Not Applicable

E. Evaluation

At the conclusion of each building's assessment, EMG will prepare a report for each courthouse that:

- A five-year capital with an Executive Summary with graphic presentation of results to provide a quick, "user-friendly" summary of the property's observed condition and estimated costs assigned by category. These estimated costs shall be cross-referenced to report sections where an elaboration of cost issues will be presented
- Components observed that are exhibiting deferred maintenance issues and provide estimates for "immediate" and "capital repair" costs based on observed conditions, available maintenance history and industry-standard useful life estimates. If applicable, this analysis will include the review of any available documents pertaining to capital improvements completed within the last five-year periods, or currently under contract. EMG shall also inquire about available maintenance records and procedures and interview current available on-site maintenance staff.
- Recommended schedule for replacement or repairs (schedule of priorities).
- Provide a general description of the property and improvements and comment generally on observed conditions.

Architectural/Engineering Services to Produce a Needs Assessment

- Address critical repairs and life-safety issues separately from repairs anticipated over the term of the analysis.
- Provide a discussion regarding the property's general compliance with Title III of the Americans with Disabilities Act as it relates to common areas and major means of egress and ingress. This will not constitute a full ADA survey, but will help to indicate whether The Authority is exposed to accessibility issues and whether a more comprehensive review is advisable.
- List the current utility service providers, and inquire as to whether there are any documented life safety/code violations on record with local building, zoning, and fire departments.

In addition to each building report, EMG will develop a Program-wide report that includes a ranked system-wide Capital Plan for all fifty-five (55) courthouses with programmatic conclusions and recommendations. The "Program Report" includes a brief narrative description of each courthouse / building component and system, and discusses the current, anticipated repairs, deficiencies, and of all buildings assessed.

Program-wide Priority 1 and 2 deficiencies will be included in an Implementation Plan for the area noted for correction and type of work required to bring the building system or component to good condition.

The Program Report analyses will include tables sorted by building system and ranked by priority for repair. The format of the tables will allow for the several perspectives of reporting by FCI, building, by system, or by priority for repair, and a year-by-year analysis of capital needs.

F. Cost Estimating

Each report will include a Capital Needs Analysis including an estimated cost for each system or component repair or replacement anticipated during the evaluation term. The report narrative will discuss options for repair of the deficiency, and the capital needs analysis will be presented as an Excel-based cost table that includes a summary of the description of each component, the age and estimated remaining useful life, the anticipated year of repair or replacement, quantity, unit cost and total cost for the repair of each line item. A consolidated Capital Needs Analysis will be presented that includes all anticipated capital needs for all courthouses.

In addition to the detailed description of the deficiencies, we will provide cost estimates for the deficiencies noted. The cost estimate for capital deficiencies will be based on the estimate for maintenance and repair, but may, at the Authority's option, also include project management costs, construction fees, and design fees. Project management costs, construction fees, and design fees will be derived using actual costs from previous projects. After determining these costs, we will confirm these costs with the Authority's staff.

EMG uses the Uniformat system and the RS Means model for cost estimating. EMG maintains and updates our cost estimating system with information received from the field. Through our construction monitoring work, we have current cost data from hundreds of in progress construction and rehabilitation projects. This allows us to project costs based on local conditions

Architectural/Engineering Services to Produce a Needs Assessment

and to maintain a cost database that in most cases is more current than published RS Means' models.

G. AssetCALC™

EMG proposes utilizing AssetCALC™ as the platform for all data collected on this project. AssetCALC™ is a non-proprietary, web-based system that lets users query information regarding specific items or across the entire asset portfolio. This streamlines the capital planning process by compiling funding requirements for deficiencies and creating budget models based on project priority, life cycle maintenance, and repair requirements. Seat Licenses and on-going hosting agreements are not required with AssetCALC™.

Prior to populating the database, EMG will work with the Authority to establish the attributes and data points required to be associated with each courthouse. This will include a discussion of relative priority of the courthouse. The first step in populating the database is to create an inventory of the 55 courthouses. This will include all the Authority assets and will be grouped based on a hierarchy based on site location, asset group, and function.

AssetCALC™ features include:

- Location hierarchy (up to four levels)
- Deficiency classifications (up to two levels)
- Deficiency priority codes (described above)
- Reporting: Standard reports have deficiencies grouped by priority, location, replacement year, and deficiency classification. A cost summary is also included
- Searching: Individual deficiencies can be searched by location, deficiency classification and priority
- Deficiency management:
 - Add new deficiencies
 - Re-prioritize and re-classify existing deficiencies
- Proprietary EMG cost database (with adjustable inflation assumptions)
- Facility condition index calculation report (by building)
- Backlog and funding projection module (recalculates FCI based on funding assumptions)

AssetCALC™ includes many features applicable to asset managers and budget officials, including:

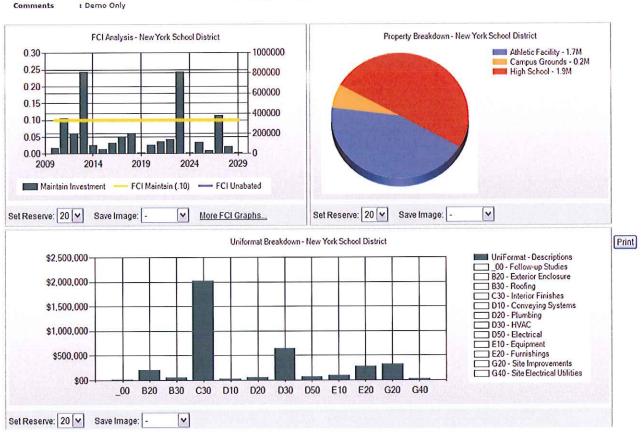
- Ranking and Prioritizing capital improvement projects
- Viewing complete deferred maintenance backlog
- Reporting by building, priority, system, or \$ deficiency amount
- Innovative search screen allows deficiency classifications, reporting and management
- Capital budget planning
- Year-by-year capital need analysis
- 5, 10, and 20-year breakdown reports
- Priority codes
- Standardized cost database
- Searching ability (property names, age, cost, deficiency status/priority)
- Split project costs over multiple years.

Please refer to the sample screenshots on the following pages:

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AssetCALC™ Dashboard

New York School District



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13	Pending	Site	Building	Address
19	bem List Published 0 Documents	Peterboro Elementary	Peterboro Elementary School	220 Peterboro Street
Ħ	em List Published 0 Documents	Roberts Street Complex	Roberts Street Complex	120 Roberts Street
3	Published O	Southside	South Side School	High Street

Clinton		The second second			
		Pending	Site	Building	Address
Item List	em List Published Documents	0	Elementary School	Clinton Elementary School	75 Chenango Avenue
Item List	tem List Published Documents	0	fiddle School	Clinton Middle School	75 Chenango Avenue
Item List	em List Published Documents	0	Sr. High School	Clinton Sr. High School	75 Chenango Avenue

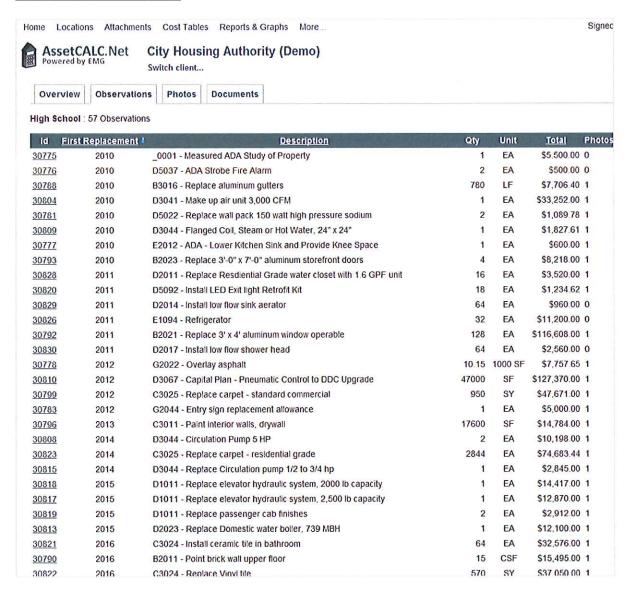
		Pending Sire	Building	Address
Item List	Item List Published o	Barringer Road Elementary	Barringer Road Elementary	326 Barringer Road
Item List	tem List Published 0	Ilion High School	Ilion High School	99 Weber Avenue
Item List	Item List Published 0 Documents	Remington Elementary	Remington Elementary	77 East North Street

	Pending	Site	Building	Address
em List	Item List Published 0 Documents	Andrews Elementary School	Andrews Elementary School	55 Eaton Street
em List	Item List Published 0 Documents	Morrisville Bus Garage	Morrisville Bus Garage	4535 South Butler
em List	Item List Published 0	Morrisville-Eaton Middle/High School	Morrisville-Eaton Middle/High School	5601 Fearon Road

Mount A	Mount Markham			
	Pending	Site Site	Building	Address
tem List	tem List Published 0 Documents	Bus Storage Building	West Winfield Bus Garage and Storage	Fairground Road
tem List	tem List Published 0 Documents	Leonardsville Elementry School	Leonardsville Elementary School	Route 8
tem List	tem List Published 0 Documents	Mount Markham Senior High	Senior High School	Fairground Road
tem List	ttem List Published 0 Documents	W. Winfield Elementary	Elementry school	Fairground Road
Item List	tem List Published 0 Documents	W. Winfield Middle School	West Winfield Middle School	Fairground Road

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Sample Deficiency Cost Table



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Sample Deficiency Cost Table —Property Type

		1	9	By Type	ale						
□A1	☐ Athletic Field	☐ Field House		☐ Garage		Office	School	GodS □	Stadium	я	8
Printer Friendly		Athletic Field	Til	Field House	Se	Sar	Garage Office	School	Shop	Stadium	
			Field	Field House							0
Building Year Required Sub E	Sub Elements	Elements Description Quantity Cost per Unit Unit	Quantity (Cost per Unit	Unit	Total Cost T	Total Cost Total Inflated Cost				
Exterior Wall Construction	struction	Paint exterior walls	н	\$2,500.00	Si	\$2,500.00	\$2,759.53				
Traffic Toppings 8	& Paving Membranes	Traffic Toppings & Paving Membranes Replace roof membrane 27	27	\$500.00	\$ bs	\$13,500.00	\$14,901.47				
Exterior Wall Construction	struction	Paint exterior walls		\$2,500.00	Is	\$2,500.00	\$3,362.22				
				-	Cotal: S	Total: \$18,500.00	\$21,023.23				
		Report Subtotal:	abtotal:	\$18,500.00					Report	Report Total: \$21,023.23	023.23

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Sample: 5-Year Cost Summary Tables – District-Wide

			by 8	by Building, Year, Group Elements	oup Elements			
Start Date:	- Select-	End Date:	ate:	- Select-		©	K	
Albany Elementar	Albany Liementary - Albany Liementary School Print to Excel Group Elements 2009	2009	2010	2011	2012	2013	2014	Total
Exterior Enclosure		\$77,818.81	23,394.22	20.00	20.00	\$0.00	8.8	\$81,213.03
Foundations		51,655.72	20.00	20.00	20.00	20.00	80.08	S1,655.T2
HVAC		\$6,622.88	20.00	20.00	20.00	20.00	20.00	\$6,622.88
Interior Finishes		\$87,774.89	20.00	\$0.00	\$1.717,0CZ	71,021,182	20.00	\$198,642.20
Plumbing		\$1,986.86	20.00	\$0.00	20.02	00.05	8.8	\$1,986.86
Roofing		\$61,813.52	20.00	\$0.00	80.08	80.00	\$0.00	\$61,813.52
Site Improvements		\$50,268.74	20.00	\$0.00	20.00	18,205,23	80.08	\$52,474.05
Site Mechanical Utilities		\$105,966.04	\$0.00	\$0.00	00.02	20.00	80.00	\$105,966.04
Special Construction		55,877.80	20.00	\$0.00	\$0.00	80.00	80.08	\$5,877.80
Total		\$399,735.27	\$3,394,22	\$0.00	\$17.17.14	583,356.47	\$0.00	\$516,252,11

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Group Elements	2009	2010	2011	2012	2013	2014	Total
Exterior Enclosure	71.509,92	20.00	80.00	8.8	\$0.00	00.03	\$9,603.1
Foundations	27,555,72	\$0.00	20.00	20.00	20.00	\$0.00	\$1,655.7
Interior Construction	45:21,22	\$0.00	20.00	20.00	80.08	80.08	52,152.4
Interior Finishes	\$46,663.69	12.83.733.21	20:00	\$4,635.87	\$0.00	\$28,411.63	\$35,464.4
Roofing	\$1,655.72	20.00	20:00	20.00	20.00	\$0.00	\$1,655.7
Site Improvements	\$6,865.72	\$62,651.59	20.00	80.08	\$0.00	80.08	\$75,517.30
Stairs	16:017,12	\$0.00	\$0.00	\$0.00	20.00	\$0.00	9.017,18
Total	\$70.307.36	\$74,404.30	\$0.00	\$4,635.87	\$0.00	\$28,411.63	\$177,759.6

Barringer Road Elementary - Barringer Road Elementary Print to Excel

Group Elements	2009	2010	2011	2012	2013	2014	Total
Exterior Enclosure	49.ETO,002	\$0.00	\$1,697.11	\$0.00	\$0.00	\$0.00	\$100,771.05
Interior Finishes	\$126,233.12	30.00	\$0.00	8.03	\$0.00	39,442.62	\$135,675.74
Roofing	\$599,505.01	20.00	\$0.00	8.8	20.00	00.02	\$599,505.01
Site Improvements	\$5,492.14	20.02	20.00	8.8	\$0.00	\$4,386.25	\$9,873.39
Special Construction	\$3,155.29	80.08	\$0.00	80.08	\$0.00	00.02	\$3,155.29
Total	\$333,459.50	\$0.00	\$1,697.11	\$0.00	\$0.00	\$13,828.57	\$343,985.48

2. Team's Qualifications



Founded in 1986, EMG is an Architectural, Engineering, and Environmental consulting firm serving clients in State, Local and Federal Government, K-12 and Higher Education, and Finance industries. Our multidiscipline team is comprised of more than

250 individuals with expertise in various disciplines within the built environment. They include, but are not limited to Registered Architects, Professional Engineers, Certified Energy Managers, and Environmental professionals. Headquartered in Hunt Valley, Maryland, EMG's presence spans the nation with locations in thirty-two (32) states.

Our core assessment services include Capital Planning, Facility Condition and Physical Needs Assessments, Accessibility Assessments, Energy Audits and Construction Monitoring. Annually, EMG performs thousands of assessments of different types of facilities, including courthouse and judicial.

EMG's recommendations are based on the client's objectives, knowledge of property conditions, market conditions, and regulations. Our core Architectural, Engineering, and Environmental, expertise is the foundation on which we team with clients to create and implement real property management solutions. These can range from complex, web-based facility and portfolio management programs to traditional property assessments.

Courthouse Experience

EMG regularly provides Facility Condition Assessments (FCA), Capital Needs Planning for courthouses throughout the United States similar to the one sought by the Authority.

We understand that a key factor to performing Condition Assessments is the evaluation of physical needs and accurate forecasting for capital repair and replacement budgets. Preemptive measures to manage maintenance budgets and programs are essential in ensuring the elimination of potential issues, which can range from deferred maintenance, or premature replacement of building systems that can prove costly.

With each identified replacement or repair, the assessment results include estimates of cost and a numerical ranking of importance based upon the client's priorities and estimated useful lives of the building systems and components. As a result of our partnership with agencies and institutions, we can assure a reflection of their priorities and goals. Also reflected in the assessment's results is the incorporation of any previously collected information in the client's possession. EMG reviews all information collected to ensure accuracy.

Representative Projects

Facility Condition Assessment, Arlington General District Court - Arlington, VA

Facility Condition Assessment, Loudoun County Historical Courthouse - Leesburg, VA

Facility Condition Assessment, San Diego Superior Court - San Diego, CA

Facility Condition Assessment, Madge Bradley Courthouse - San Diego, CA

ADA Assessment, Red Brick Courthouse - Rockville, MD

ADA Assessment, District Courthouse - Rockville, MD

Architectural/Engineering Services to Produce a Needs Assessment

Building Evaluation Report, Edward J. Schwartz Federal Building & U.S. Courthouse - San Diego, CA

Building Evaluation Report, Strom Thurmond Federal Building & U.S. Courthouse - *Columbia, SC*Building Evaluation Report, Herman T. Schneebeli Federal Building & Courthouse - *Williamsport, PA*

Historic Preservation Experience

EMG understands the courthouse portfolio includes properties of historic significance. We have performed assessments on hundreds of historically designated properties nationwide. Two of the aforementioned projects, *Red Brick Courthouse* and *Loudoun County Historical Courthouse* are recognized by the National Register of Historic Places, and demonstrate our capabilities. Our architects and engineers have experience with these assessments and the accurate cost estimating of the repair of deficiencies in a historic envelope.



Fentress, Inc.'s unique organizational structure enables our clients to benefit from consistency in approach, as well as national coverage from our professional staff. Our approach is customized to address the specific concerns of the client and complexity of each assignment.

Fentress Incorporated is an innovative real property consulting firm that specializes in court facilities. Since its inception in 1988, the company has provided planning and programming services for over 850 federal, state, and local court facilities throughout the country. Fentress has worked in West Virginia on multiple occasions to provide needs assessments services for federal court facilities in Beckley, Bluefield, Charleston, Clarksburg, Elkins, Huntington, Martinsburg, Parkersburg, and Wheeling. Fentress performed the original needs assessment work in the 1990s for the Robert C. Byrd U.S. Courthouse in Charleston, and the new award-winning annex in Wheeling. Our most recent assessment work was conducted on the facilities in the Northern District of West Virginia in 2008-2009.

- Fentress' range of services to federal, state, and local courts includes:
- Conducting needs assessments
- Performing space programming
- Developing master plans
- Estimating project costs
- Prioritizing court projects
- Developing five-year capital improvement plans to optimize available funding
- Developing design standards
- Designing optimum courtroom layouts
- Assisting courts in identifying cost- and space-saving strategies
- Conducting studies on special court issues, including courtroom-sharing studies, workload and staffing analyses, and asset management planning

Fentress' services have helped clients develop award-winning facility planning and programming practices. For example, Fentress assisted the Administrative Office of the U.S. Courts (AOUSC) in

Architectural/Engineering Services to Produce a Needs Assessment

developing a long-range facilities planning program, which won a best practices award for innovation in real property management from the U.S. General Services Administration (GSA). According to the GSA, the program "communicates the courts' needs for space and facilities to GSA in a way that results in the best value to the taxpayer."

As court consultants, Fentress assists both courts and architectural/engineering firms in understanding courthouse space requirements. Our knowledge of court design standards, adjacencies, and security requirements helps our clients to plan and design space that enhances court operations. In addition, we help our clients to accurately plan and justify space needs for both new facilities and renovation projects, including historic facilities, by maintaining automated design standards for both project types. These design standards include a range of dimensions to fit the needs of courts of varying sizes and budgets. We also maintain a set of performance measures for courthouses, which helps our clients to accurately identify needs and justify projects. Through these metrics that rate court functionality, security, and building systems, we help courts determine the most cost-effective options for housing its personnel and related agency components. Fentress' real property consulting efforts have allowed our clients to justify the collective need for over \$1.3 billion in facility funding.

The figure below provides an overview of our court needs assessment process. This is a proven process tested on hundreds of courthouses. Fentress excels at studying entire court systems and our specialized process, based upon our years of experience with court facilities, underscores our unparalleled experience in this area. Our mix of architecture, analysis, and information technology is uniquely designed to plan and manage the data for a portfolio of multiple court facilities.



The experienced professionals at QUINN EVANS | ARCHITECTS are committed to elegance in design and well-crafted solutions that sustain and renew the tradition of our built environment.

Sensitive planning and design solutions involve the preservation and reuse of important buildings, as well as the development of new structures that complement and respect their surrounding environment. In practice, this philosophy results in an appropriate blend of old and new that creates vibrant, interesting and humane places to live.

Over the past two decades, QUINN EVANS | ARCHITECTS has contributed significantly to America's built heritage. Our work has involved the restoration of nationally significant buildings, the rehabilitation of vernacular structures, and the preservation and interpretation of historic sites.

To meet the challenges of working with existing structures and historic sites, our professionals combine expertise in restoration architecture with knowledge of the special issues involved in developing context sensitive new construction. This enables us to renew important cultural landmarks, while maximizing the structure's economic viability and fostering community pride in the built environment.

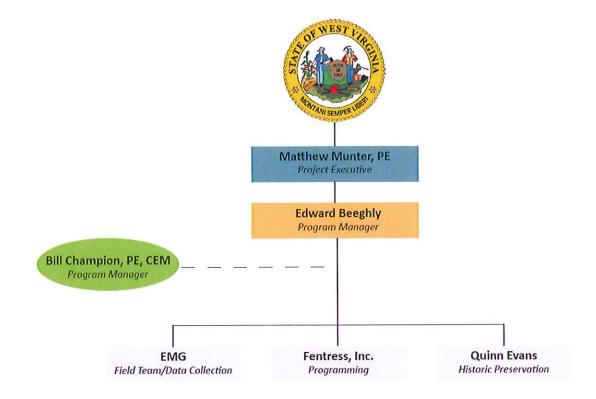
We understand the importance of preserving and maintaining the historic fabric and characterdefining elements of buildings, while providing for their contemporary use.

Architectural/Engineering Services to Produce a Needs Assessment

Our practice helps strengthen communities by revitalizing neighborhoods, by building environmentally appropriate structures that contribute to our architectural heritage, and by planning new villages that reflect characteristics of traditional towns.

More than 80 projects in the firm's portfolio have been honored with over 100 awards for quality design, outstanding restoration work, and innovative approaches to adapting existing facilities for new uses.

3. Project Organization



Matthew S. Munter, P.E. Project Executive

EMG

Education

Bachelor of Science, Mechanical Engineering - Clemson University, 1986

Licensing

Professional Engineer, State of Maryland (#22604)
Professional Engineer, Commonwealth of Virginia (#024858)

Similar Experience

Facility Condition Assessment, Arlington General District Court, Arlington County – Arlington, VA

Facility Condition Assessment, Loudoun County Historical Courthouse, Loudoun County – Leesburg, VA

ADA Assessment, Red Brick Courthouse, Montgomery County - Rockville, MD

ADA Assessment, District Courthouse, Montgomery County - Rockville, MD

Building Evaluation Report, Edward J. Schwartz Federal Building & U.S. Courthouse, GSA - *San Diego, CA*

Building Evaluation Report , Strom Thurmond Federal Building & U.S. Courthouse, GSA - *Columbia, SC*

Building Evaluation Report, Agriculture South Building, GSA- Washington, DC

Condition Assessment, North Fork Sol Duc Shelter – Olympic National Park, National Park Service – *Port Angeles, WA*

Affiliations

Council of Educational Facility Planners International (CEFPI) The Association of Higher Education Facilities Officers (APPA) The Society of American Military Engineers (SAME)

Industry Tenure

A/E: 1987 EMG: 1998

Industry Experience

Government

K-12

Higher Education

Office Industrial

Hospitality

Retail Housing

Edward Beeghly Program Manager

EMG

Education

Masters of Engineering, Project Management – University of Maryland, College Park, 2010.

Bachelor of Science, Civil Engineering - Ohio Northern University, 1995. Associate of Arts, Business - Valley Forge Military College, 1991.

Similar Experience

Facility Condition Assessment, Arlington General District Court, Arlington County – Arlington, VA

Facility Condition Assessment, Loudoun County Historical Courthouse, Loudoun County – *Leesburg, VA*

ADA Assessment, Red Brick Courthouse, Montgomery County - Rockville, MD

ADA Assessment, District Courthouse, Montgomery County - Rockville, MD

Affiliations

Association of State Highway Engineers

Industry Tenure

A/E: 1995 EMG: 2006

Industry Experience

Government

K-12

Office

Healthcare

Industrial

Retail

Hospitality

Housing

Bill Champion, PE, CEM Quality Assurance Manager

EMG

Education

Master of Business Administration - University of Rochester, 2001.

Master of Science, Mechanical Engineering - State University of New York at Buffalo, 1998.

Bachelor of Science, Mechanical Engineering - State University of New York at Buffalo, 1994.

Licensing

Professional Engineer, State of New York, (#087867)

Certified Project Management Professional (PMP), Project Management Institute, (# 50241)

Certified Energy Manager

Similar Experience

Facility Condition Assessment, Arlington General District Court, Arlington County – Arlington, VA

Facility Condition Assessment, Loudoun County Historical Courthouse, Loudoun County – *Leesburg, VA*

ADA Assessment, Red Brick Courthouse, Montgomery County - Rockville, MD

ADA Assessment, District Courthouse, Montgomery County - Rockville, MD

Building Evaluation Report, Edward J. Schwartz Federal Building & U.S. Courthouse, GSA - *San Diego, CA*

Building Evaluation Report, C. Bascom Slemp Federal Building & U.S. Courthouse, GSA - Big Stone Gap, VA

Building Evaluation Report , Strom Thurmond Federal Building & U.S. Courthouse, GSA - Columbia, SC

Building Evaluation Report, Agriculture South Building, GSA-Washington, DC

Building Evaluation Report, Gus J. Solomon Federal Courthouse, GSA – *Portland, OR*

Affiliations

American Society of Mechanical Engineers (ASME)

Industry Tenure

A/E: 1994 EMG: 2002

Industry Experience

Government

K-12

Higher Education

Office

Industrial

Hospitality

Retail

Housing

Kenneth Kulbeda *Project Manager*

EMG

Education

Bachelor of Science, Architecture – University of Illinois, 1975.

Similar Experience

Facility Condition Assessment, San Diego Superior Court, County of San Diego – San Diego, CA

Facility Condition Assessment, Madge Bradley Courthouse, County of San Diego – San Diego, CA

Facility Condition Assessment, Arlington General District Court, Arlington County – *Arlington, VA*

Building Evaluation Report, C. Bascom Slemp Federal Building & U.S. Courthouse, GSA - *Big Stone Gap, VA*

Industry Tenure

A/E: 1971 EMG: 2003

Industry Experience

Government

K-12

Higher Education
Green Assessments

Office

Industrial

Housing/Multi-family

Hospitality Healthcare

Retail/Wholesale

Darrin Holly, PE Project Manager

EMG

Education

Master of Science, Engineering Management - University of Maryland, 1995. Bachelor of Science, Mechanical Engineering - University of Delaware, 1988.

Licensing

Professional Engineer, State of Maryland (23405), 1998

Similar Experience

Facility Condition Assessment, Loudoun County Historical Courthouse, Loudoun County – *Leesburg, VA*

ADA Assessment, Red Brick Courthouse, Montgomery County - Rockville, MD

ADA Assessment, District Courthouse, Montgomery County - Rockville, MD

Building Evaluation Report, Max Rosenn U.S. Courthouse, GSA - Wilkes Barre, PA

Building Evaluation Report, Agriculture South Building, GSA- Washington, DC

Building Evaluation Report, Herman T. Schneebeli Federal Building & Courthouse, GSA – Williamsport, PA

Industry Tenure

A/E: 1991 EMG: 2002

Industry Experience

Government

K-12

Higher Education

Office

Industrial

Housing/Multi-family

Hospitality

Charles Milcarek Project Manager

EMG

Education

Bachelor of Science, Electrical Engineering, Johns Hopkins University, Baltimore, MD

Similar Experience

Building Evaluation Report, Robert J. Dole U.S. Courthouse, GSA - Kansas City, KS

Building Evaluation Report, Gus J. Solomon Federal Courthouse, GSA – *Portland, OR*

Building Evaluation Report, Herman T. Schneebeli Federal Building & Courthouse, GSA – Williamsport, PA

Building Evaluation Report, Agriculture South Building, GSA - Washington, DC

Industry Tenure

A/E: 1974 EMG: 2004

Industry Experience

Government

Office

Industrial

Housing/Multi-family

Hospitality

Keith T. Fentress

Principal



EDUCATION

Virginia Polytechnic Institute and State University – pursuing Ph.D. in Public Administration and Policy Analysis (completed all coursework and Ph.D. qualifying exam)

Virginia Polytechnic Institute and State University, M.A., Political Science, concentration in Public Administration – 1987

Virginia Polytechnic Institute and State University, B.A., Political Science – 1985

PROFESSIONAL EXPERIENCE

Mr. Fentress has an extensive history of providing court consulting services, including performing needs assessments, space programming, and policy studies for court systems. Since founding Fentress Incorporated in 1988, he has worked as a consultant to the federal judiciary to assist in developing and implementing its award-winning long-range facilities planning program and asset management planning process. Through this work, Mr. Fentress has provided needs assessment and space programming services on over 800 federal court facilities. Mr. Fentress has also provided similar services for numerous state and local courthouse projects.

Mr. Fentress has a thorough understanding of court design guidelines and standards, including court technologies and security. He has successfully used this knowledge to assist court systems and architectural firms in designing courthouses that meet the functional and operational needs of the courts.

As a recognized court consulting expert, Mr. Fentress understands the role that quality needs assessments play in developing a successful program budget. He has spoken at national court conferences in both the U.S. and Australia and has published an article in the Australian Journal of Justice Administration entitled *Long-Range Facility Planning for Federal Courts* (2000).

PROJECT EXPERIENCE

U.S. Courts Long-Range Facilities Planning Program

Mr. Fentress has worked as an executive consultant with the Administrative Office of the U.S. Courts (AOUSC) to develop and implement the Long-Range Facilities Planning (LRFP) program. The LRFP program won a best practices award from the U.S. General Services Administration for innovation in real property management in 1998. Mr. Fentress was originally hired in 1988 to design the conceptual framework of the LRFP program. From this effort, he went on to support the AOUSC in implementing the program, including facilitating LRFP meetings in every court district and circuit in the nation, and managing teams of architects and analysts that perform needs assessments.

Mr. Fentress has also worked with the AOUSC to develop and implement the courthouse project scoring methodology and the resulting *Five-Year Courthouse Project Plan*. Additionally, he has overseen the development of computer applications including the Project Tracking System, AnyCourt Model, Courthouse Planning Program, Project Scoring Program, and the Caseload and Personnel Forecasting Program.

Matt Hemphill, RA Senior Architect



EDUCATION

The Catholic University of America, Washington D.C., Bachelor of Architecture – 1992; Bachelor of Science in Architecture – 1991

The Catholic University of America, Foreign Study Program, 1991 - Ecole Des Beaux-Arts, Palais De Fontainebleau; Fontainebleau, France

PROFESSIONAL EXPERIENCE

Mr. Hemphill is an experienced architect, knowledgeable in both the design and assessment of court facilities. Mr. Hemphill joined Fentress Incorporated in 2005 as a senior planner and assessment architect. His broad knowledge of design and construction planning, management, and implementation has enabled him to identify facility and operational inconsistencies that affect overall program performance.

Mr. Hemphill's professional experience has also included involvement in the overall needs assessment, space programming, and space planning for hospitals, outpatient medical office buildings, assistant living facilities, medical departments, and general offices.

PROFESSIONAL CERTIFICATIONS

Registered Architect: Commonwealth of Pennsylvania, License #RA015008X - June 2001

PROJECT EXPERIENCE

Administrative Office of the U.S. Courts (AOUSC)

Mr. Hemphill is the lead architect for the asset management planning process for the AOUSC. He has been responsible for preparing plans, conducting and monitoring his team's performance in the physical assessment of facilities, documenting existing space conditions and shortages, preparing facility benefit assessments, developing current and future space programming alternatives, and producing schematic drawings for court expansion plans. In his six-year tenure with Fentress, Mr. Hemphill has provided planning and programming services on more than 50 court facilities. He has also been involved in the design and development of a court project cost model, space planning tools, and national prioritization methods that are used in the asset management planning process.

In addition to his role in the asset management planning process, Mr. Hemphill assisted in developing specific criteria for the AOUSC to define what constitutes a judicial space emergency. These criteria provide a consistent list of parameters the AOUSC can use to determine whether a project submitted by a district should receive expedited project funding.

U.S. General Services Administration (GSA), Office of the Chief Architect

From November 2008 to December 2010, Mr. Hemphill assisted the GSA's Office of the Chief Architect in the development of the Integrated Design Excellence Analysis tool. This tool was designed to evaluate the design quality of existing and/or proposed courthouses, land ports of entry, and federal office buildings. Mr. Hemphill helped develop the criteria to be assessed and produced a trial analysis for the E. Barrett Prettyman Courthouse in Washington, D.C. Mr. Hemphill also gathered input from key internal business partners and external stakeholders to develop the list of the key elements of integrated design, including factors and performance measures related to functionality and security.

U.S. District Court, Middle District of Pennsylvania

From 1998 until 2005, prior to joining Fentress, Mr. Hemphill served as the Space and Facilities Project Manager for the Middle District of Pennsylvania, and was responsible for the overall management of construction and maintenance projects for the U.S. District Court. He worked directly with federal judges, court staff, U.S. Marshals Service, U.S Attorney's Office, GSA, and construction personnel to ensure that project goals and deadlines were met. During this time, the prospectus-level annex and the renovation and alteration project at the William J. Nealon Federal Building and U.S. Courthouse in Scranton, PA were completed, as well as a major renovation project at the U.S. Courthouse in Williamsport, PA. In addition, Mr. Hemphill was a member of the site selection committee, and a key contributor in the development of the space program and selection of the design architect for a new courthouse in Harrisburg, PA. His work for the Middle District of Pennsylvania also included the design, procurement, and overall management of electronic courtroom installations in the district, in addition to the management of construction projects undertaken by the U.S. Bankruptcy Court and U.S. Probation Office.

Mr. Hemphill was also a key participant in the development of the U.S. Courts' Courthouse Design Reference Manual, issued by the Administrative Office of the U.S. Courts in 2002.

LARRY BARR, AIA

PRINCIPAL

Mr. Barr has over 20 years of experience managing architectural services for renovation of historic buildings. He has demonstrated ability in working with institutional clients to develop projects that reflect the aesthetic and programmatic desires of the client. Mr. Barr has nationally recognized expertise in the master planning and rehabilitation of cultural institutions. His work has focused on heritage projects and features many mixed-use venues for major institutional clients throughout the country. Included in his portfolio are a number of nationally recognized and publicly visited facilities.

Selected Relevant Experience



Principal-in-charge for the complete restoration and rehabilitation of the site, building interior, and building exterior of the 182,344 sf facility. The project was awarded under the GSA Design Excellence Program and has been designed to achieve LEED Silver.

NATIONAL ACADEMY OF SCIENCES, WASHINGTON, DC

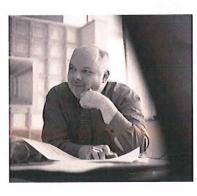
Principal-in-charge for the comprehensive rehabilitation and restoration of the headquarters facility for this national organization flagship building. The project integrates the use of sustainable design technologies with conservation and preservation treatments within the historic building to modernize the space and provide modern workplaces and meeting facilities.

SMITHSONIAN INSTITUTION IDIQ, MULTIPLE LOCATIONS, WASHINGTON, DC

Principal-in-charge for a multi-disciplined team providing services under an indefinite delivery contract to the Smithsonian Institution since 1999. Work has encompassed projects located at the National Museum of Natural History, Hirshhorn Museum & Sculpture Garden, National Museum of American History and the 163-acre National Zoological Park as well as other Institution assets.

THE JOHN F. KENNEDY CENTER FOR THE PERFORMING ARTS IDIQ, WASHINGTON, DC

Principal-in-charge for multiple renovation projects over a 18-year period, including \$1.5 million of facility-wide accessibility improvements and the renovation of the National Symphony Orchestra offices and music library. Work also encompassed the renovation of all three major venues within the Center - the Concert Hall, Opera House and Eisenhower Theater. Work is currently underway for the Terrace Theater.



PRESIDENT

Joined QEA in 1984

REGISTRATION

Michigan, 1986

DC, Maryland, North Carolina, Virginia, West Virginia, Alabama, NCARB certification

PROFESSIONAL AFFILIATIONS

American Institute of Architects
National Trust for Historic Preservation
U.S. Institute for Theatre Technology
Virginia Association of Museums

SELECTED ACTIVITIES

Smithsonian Institution Symposium on Construction Management at Risk Panelist; April 2009

Member, Advisory Council on School Facilities and Capital Programs, Arlington County, Virginia, 2004-2010

Government Acquisition Policy Committee and Federal Agency Liaison Group, American Institute of Architects, Chair: 2001-present, Member: 1996-2000

Board of Directors, Washington Chapter, American Institute of Architects, 1994-96

Editor, DC|AIA News, 1994-95

SELECTED PRESENTATIONS

"Advocating Effectively for Accessibility in Renovations and New Construction," Leadership Exchange in Arts and Disability Conference, 2004

"Pursuing Federal Government Work," AIA National Convention, 2001, 2002

EDUCATION

University of Michigan, Master of Architecture, 1982 Bachelor of Science in Architecture, 1980



1214 TWENTY-EIGHTH ST, NW WASHINGTON, DC 20007 202 298 6700

WASHINGTON, DC ANN ARBOR, MI DETROIT, MI MADISON, WI

TINA ROACH, AIA, LEED AP

PROJECT ARCHITECT

Ms. Roach specializes in finding the synergies between sustainable design and preservation practices in existing buildings. She is experienced with "greening" best practices, such as design charrettes and energy modeling, as well as preservation best practices, such as the investigation, documentation, and analysis of buildings with historic significance. Her work includes a range of historic preservation, rehabilitation, and new construction projects.

ASSOCIATE

Joined QEA in 1998

REGISTRATION

Virginia, 2005

PROFESSIONAL AFFILIATIONS

American Institute of Architects
Association for Preservation Technology

HONORS

Richard Morris Hunt Fellow, 2009-2010 "The Intersection of Sustainability and Preservation in France" University of Texas at Austin, Scholarships, 1997, 1996, 1994

CERTIFICATIONS

LEED Accredited Professional, 2003

SELECTED ACTIVITIES

Association for Preservation Technology International: Technical Committee on Sustainable Preservation, 2006-present DC Building Code Advisory Committee Sustainable Design Committee, 2007 Association for Preservation Technology

DC Chapter: Co-Secretary, 2002; Secretary, 2000-

Seminar Organizing Committee: Approaching Cultural Landscapes Preservation, 1999

SELECTED PRESENTATIONS

"Green Strategies for Historic Buildings", National Preservation Institute, South Dakota SHPO, 2008 "Sustainable Practice for Preservation

Architects", Design DC, 2008 Montgomery College Historic Preservation Program, guest speaker, 2004

EDUCATION

University of Texas at Austin, Master of Architecture, 1998 Certificate in Historic Preservation University of Chicago Bachelor of Arts in Art / Architectural History, with Honors, 1990



SELECTED RELEVANT EXPERIENCE

LOUDOUN COUNTY COURTHOUSE, LOUDOUN, VIRGINIA
Project architect for the preparation of an historic
structures report and report including historical
research, conditions assessment and the development
of rehabilitation and design treatments. Subsequently
designed the exterior repairs and minor interior structural
upgrades for short-term treatment and long-term
improvements.

U.S. TAX COURT BUILDING, WASHINGTON, DC

Project architect for the analysis and assessment of interior finishes within this courthouse. Work included consulting on wood finishes and a study of the interior architectural concrete was also undertaken to assess potential powdering and efflorescence.

EASTERN MARKET, WASHINGTON, DC

Project architect for rehabilitation of 1873 market building and 1908 addition. Design included installation of air conditioning and a fire sprinkler system; updated heating, electrical systems and plumbing; restoration of interior and exterior surfaces, and making the building accessible. The project required approval by the U.S. Commission of Fine Arts and the DC Historic Preservation Review Board. Section 106 Review was also required.

OLD NAVAL OBSERVATORY $\!\!\!/$ BUILDING 2 POTOMAC ANNEX, WASHINGTON, DC

Architectural staff for phased exterior repairs of the National Historic Landmark building, built in 1840s, with subsequent additions through the 1910s. The first phase focused on roof repairs. The second phase repaired exterior masonry and stucco work. The current phase will provide repair treatments for 200+ original windows.

UNITED STATES MAIN TREASURY BUILDING, WASHINGTON, DC Architectural staff for the exterior renovation of this National Historic Landmark building. Work entailed the restoration of key elements integral to the preservation of the historic fabric of the building including ornamental metals, stone, and original windows and frames

WASHINGTON, DC ANN ARBOR, MI DETROIT, MI MADISON, WI

4. Experience in Completing Projects of a Similar Size and Scope

PROJECT	EMG	FENTRESS	QUINN EVANS
Loudoun County Historical Courthouse	✓		✓
Red Brick Courthouse	✓		
USDA Complex	✓		
Administrative Office of the U.S. Courts		✓	
Montgomery County Circuit Court		✓	
Dona Ana County District Court		✓	
Robert S. Vance Federal Building & US Courthouse			✓
Potter Stewart Federal Building			✓
Federal Building / U.S. Courthouse			✓
U.S. Tax Court			✓
National Academy of Sciences			✓



Project Detail

Under an open end contract with Loudoun County for facility assessment and life-cycle planning, EMG was tasked with assessing the historic courthouse building and developing a comprehensive specification for repair and preservation.

Solution

EMG assembled a multi-discipline team, including architects, mechanical engineers, structural engineers, and historic preservation architects. The scope of repairs included:

- Design specifications, construction documents for the selected brick replacement and mortar re-pointing
- Wood structural repairs
- Slate roof repair, including chimney, snowguard and gutter replacement
- Inspection of lightning terminals
- Specifications for bird protection

Results

The team prepared a Historic Structures report including historical research, conditions assessment and the development of rehabilitation and design treatments. The report indicated the exterior repairs and minor interior structural upgrades needed for short-term treatment, followed by long-term improvements to preserve the building for centuries of future use.

Market Segment Government

Building Type Courthouse Historic

Service Provided Facility Condition Assessment

Completion 2008

Reference
Tom Trask
Contract Manager
Loudoun County Dept. of
General Services
211 Gibson Street, NW,
Suite 123
Leesburg, Virginia 20176
Tel: (703) 737-8441
ttrask@loudoun.gov



National Register Historic District #86003352

Project Detail

EMG performed an ADA compliance assessment with a team of code assessors for more than 3.5 million square feet of facilities in Montgomery County. One of the properties was The Red Brick Courthouse. The courthouse is listed in the National Register of Historic Places in 1986, and designated in a City of Rockville Historic District in 1979 (both designations also encompass the 1931 Courthouse). An exterior and partial interior easement is held by the Maryland Historic Trust.

Solution

EMG reviewed the Department of Justice report and created a working matrix by building to identify non-compliant issues. All deficiencies were assessed and non-compliant areas were documented, including accessible parking, curb ramps, entrances, and stairs. EMG also documented any issues identified by the DOJ where EMG did not concur with the findings.

Results

We provided an ADA Property Survey report, which included a summary of non-compliant ADA issues and cost estimates to address non-compliant issues. Deficiencies were prioritized into three categories: Immediate/Life Safety Repairs, In-House Repairs, and Outside Contractor/Existing Capital Improvement Plan.

Market Segment Government

Building TypeCourthouse Historic

Service Provided ADA Assessment

Size 2.1 MM SF 17 buildings

Completion 2008

Reference Victor Sousa Montgomery County, MD Division of Operations, DPWT 101 Monroe Street 9th Floor Rockville, Maryland 20850 Tel: (240) 777 - 6036 victor.sousa@montgomerycountymd.gov



Project Detail

EMG performed Building Engineering Reports (BER) on the United States Department of Agriculture complex in Washington, D.C., consisting of the Agricultural Annex, Agricultural Building, and the James L. Whitten building.

Solution

EMG assessed these buildings, located on Independence Avenue west of the Smithsonian. The Agricultural Annex is the largest of the three buildings, at 2,169,360 GSF. The Agricultural Building is eight stories and 89,000 GSF. The Whitten property consists of a central core and two wings, and comprises 382,235 GSF. EMG observed, made recommendations on, and estimated the cost of \$200 Million worth of repairs and alteration requirements in these historically registered and eligible buildings.

As part of the BER, EMG provided a complete and thorough visual inspection of the buildings (interior and exterior), grounds, components, and existing building operational support systems. EMG also provided a Cost Summary with deficiency listings by systems with individual deficiency costs and total cost by system. EMG proposed Repair and Alteration projects required to insure the short-term operational continuity of the building, and to plan for long-term capital reinvestment in the building.

Market Segment Government

Building TypeOffice
Historic

Service Provided Facility Condition Assessment

Size 2,169,360 GSF

Completion 2007

Reference Peter Johnson GSA, National Capital Region Tel: (202) 205-8380

Administrative Office of the U.S. Courts



Long-Range Facilities Planning Program

Reference

Suzanne Allen, Chief, Long-Range Facilities Planning Team (202) 502-1184 suzanne allen@ao.uscourts.gov

Administrative Office of the U.S. Courts Thurgood Marshall Federal Judiciary Building Space and Facilities Division 1 Columbus Circle, Suite G-100 Washington, DC 20544

Summary of Services Provided

Since 1988, Fentress Incorporated has worked with the Administrative Office of the U.S. Courts (AOUSC) on its Long-Range Facilities Planning Program. During this time, we have performed the following services:

- Evaluated the existing facilities planning process of the AOUSC and GSA, researched best practices, and developed recommendations for process improvement and additional efficiencies
- Used recommendations to develop the processes and tools needed for a successful Long-Range Facilities
 Planning Program
- Implemented the planning program in over 800 court facilities nationwide to identify capital construction projects and to seek ways to save taxpayer dollars
- Prioritized the identified projects using an urgency scoring methodology
- Used the prioritized projects to develop the Five-Year Courthouse Project Plan, which communicates courthouse project needs to GSA and Congress
- Conducted numerous special studies and tasks, from cost containment initiatives to design guidelines to automated space calculation tools
- Performed a rent validation assessment to examine whether was the judiciary's space was classified correctly and whether it was being charged appropriately for rent; the study save the judiciary millions of dollars annually
- Developed an asset management planning process, which included establishing performance metrics for courthouses, performing a cost-benefit analysis of alternative housing strategies, and developing a budget scenario generator to optimize facilities funding

Through our work on the Long-Range Facilities Planning Program, Fentress has become expert in effectively planning for courthouse space needs. In doing so, we have conducted hundreds of interviews with judges and court executives that focus on courthouse functionality, security, technology, and design standards. As testimony to its success, the Long-Range Facilities Planning Program won a best practices award from GSA in 1998 for *Innovation in Real Property Management*.



U.S. District Courthouse - Clarksburg, WV



U.S. Bankruptcy Court - Clarksburg, WV



U.S. Courthouse - Elkins, WV



U.S. Courthouse - Wheeling, WV



U.S. Courthouse - Martinsburg, WV

Montgomery County Circuit Court



Court Planning + Programming

Reference

Lewis Howie (formerly of URS Corporation – current company and address provided)
Mark G. Anderson Consultants
5525 Lakeview Drive, Suite 200
Kirkland, WA 98033
(425) 822-7800

Montgomery County, MD Circuit Court Subcontractor to URS Corporation 2020 K Street, N.W., Suite 300 Washington, DC 20006

Summary of Services Provided

From 2002 to 2004, Fentress worked as a subcontractor to URS Corporation to provide court planning and programming services to the Montgomery County Circuit Court. The scope of our services included:

- Assessing the existing workload, staffing, operations, and facilities for all circuit court components and related agencies.
- Providing projections of court workload, judges, staffing, and space.
- Analyzing the impact of the legislative transfer of the juvenile court to the jurisdiction of the circuit court.
- Identifying and evaluating scenarios for providing sufficient space for court and court-related components through the year 2025, with a focus on the efficient use of space and cost savings.

In accomplishing these objectives, Fentress reviewed past planning efforts and gathered historic workload, staffing, and operational data. Using the data, Fentress established a growth model that included other counties in the nation with economic and demographic trends similar to Montgomery County. The objective of the growth model was to examine Montgomery County's workload and judge levels in comparison to trends of similar counties. The analysis produced useful benchmarks for projecting trends in Montgomery County.

Fentress conducted group and individual interviews with court personnel and related agency executives, including circuit court judges, court administration, the Family Court Division, the Clerk's Office, Register of Wills, Office of the State's Attorney, and the Sheriff's Office. Architectural assessments of the existing facilities were also performed to identify current space conditions and shortages. The areas assessed included the quantity and quality of existing space, security needs, and the impact of technology and automation on the need for space. Based on the interviews and assessments, workload forecasts were calculated for each court and related agency component. The workload forecasts were then used in conjunction with planning assumptions to develop judge and personnel forecasts. Using a space calculation model, the personnel forecasts were converted into a program of requirements for the period of 2003 through 2025.

The conclusion of the study was that the most cost-effective and functionally suitable solution would be an annex to the existing Montgomery County Judicial Center with two connecting bridges. The analysis was used to develop a *Facility Space Requirement Program* that was used by URS Corporation for conceptual design work of the annex. In support of this effort, Fentress presented information on the study methods and conclusions to the circuit court judges and the county council.

Additionally, the services of Fentress Incorporated were retained to perform a *Courtroom Utilization Study*. The purpose of the study was to assess the utilization of existing courtroom space to determine the layout that would best enhance judicial productivity and efficient case processing in the annex, with the goal of space savings. The study concluded that the Montgomery County Circuit Court has achieved a high level of judicial efficiency compared to other courts in the state of Maryland and in the nation. This efficiency was largely attained by employing a Differentiated Case Management System, by assigning cases according to defined workload tracks, by restricting the number of continuances granted, and by having sufficient courtroom space available to hear cases.

The study concluded that all courtrooms in the proposed annex should be the same size and have the same functionality (i.e., all jury-capable courtrooms). Furthermore, a one-to-one ratio should be maintained between courtrooms and chambers, and the chambers should be located in close proximity to assigned courtrooms. These recommendations were designed to ensure that the court would retain its high level of efficiency even with the addition of the new annex, and that taxpayer dollars would be spent wisely.



Existing Montgomery County Judicial Complex - Rockville, MD



South View of Proposed Court Annex

Dona Ana County District Court



Condition Assessment + Space Analysis

Reference

Ted Shelton (505) 526-3111

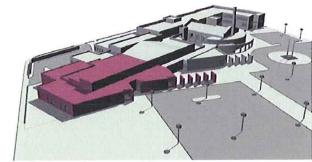
Dona Ana County, NM District Court Subcontractor to ASA Architects 201 N. Alameda Las Cruces, NM 88004

Summary of Services Provided

Fentress was hired as a subcontractor to ASA Architects in Las Cruces, NM, to assess the current court facilities for the district court, project future space needs, develop short-, mid-, and long-term housing options, and develop a detailed space program. Fentress' work included (1) conducting several on-site assessments of the existing court facilities, which consisted of a multi-building campus; (2) conducting interviews with subject matter experts and other judicial and community representatives; (3) gathering historical caseload and personnel data, as well as local demographic, economic, and law enforcement data; (4) preparing a report and presentation that described the current conditions, future needs, and housing options for the court and related agencies; and, (5) preparing a detailed space program that included a trend analysis, court component descriptions, space needs, security, and adjacency and housing requirements. The primary goal of the analysis was to plan for future court space needs in light of funding constraints and the need to maximize the use and efficiency of existing space to the extent possible, while enhancing court functionality and security. Fentress' work was used as a comprehensive planning guide for the court and ASA Architects in implementing the plans for the immediate space needs of the court.



Existing Dona Ana District Courthouse (structure is a renovated and adapted school) - Las Cruces, NM

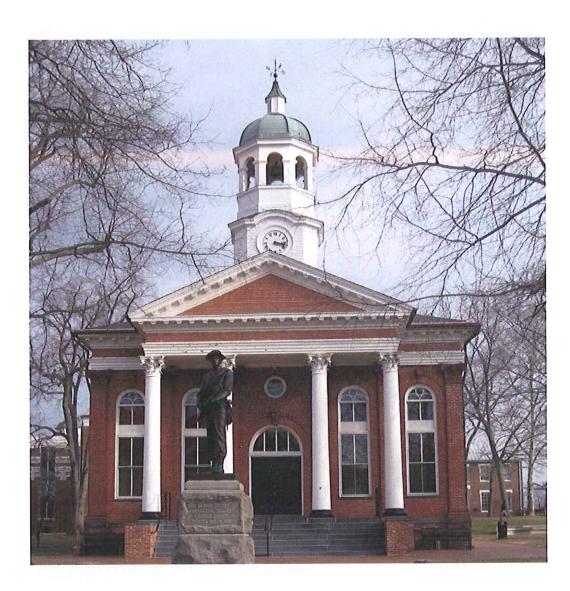


South View of Proposed Annex

HISTORIC LOUDOUN COUNTY COURTHOUSE

LEESBURG, VIRGINIA





PROJECT SUMMARY

Quinn Evans Architects prepared an Historic Structures report including historical research, conditions assessment and the development of rehabilitation and design treatments. Subsequently the firm designed the exterior repairs and minor interior structural upgrades for short-term treatment which be followed by long-term improvements to preserve the building for future centuries of use.

PROJECT DETAILS

DESIGNED BY WILLIAM C. WEST IN 1895

CLASSICAL REVIVAL BRICK STRUCTURE

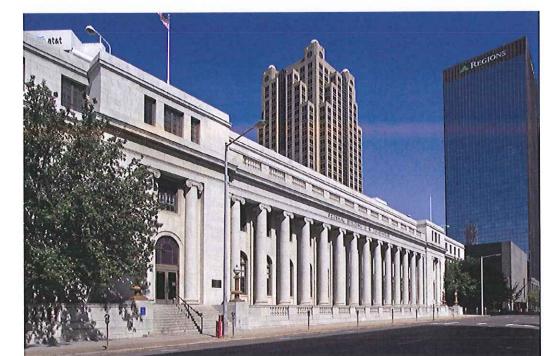
PART OF LEESBURG HISTORIC
DISTRICT, WHICH IS LISTED ON THE
NATIONAL REGISTER OF HISTORIC
PLACES AND THE VIRGINIA
LANDMARKS REGISTER

CLIENT

LOUDOUN COUNTY, VIRGINIA

ROBERT S VANCE FEDERAL BUILDING & US COURTHOUSE

BIRMINGHAM, ALABAMA







Quinn Evans Architects is currently designing a comprehensive interior and exterior rehabilitation of this historic courthouse located in Birmingham, Alabama. Originally built in 1921 as a federal courthouse and post office, the Classic Revival building is listed on the National Register of Historic Places. Enabled by the American Reinvestment and Recovery Act of 2009, the project is part of GSA's High-Performance Green Buildings and Design Excellence Programs. The project will meet LEED Silver requirements.

PROJECT DETAILS

GSA DESIGN EXCELLENCE PROJECT COMPREHENSIVE REHABILITATION OF 180,000-SQUARE-FOOT FEDERAL BUILDING

DESIGNING FOR LEED SILVER RATING

CLIENT

GENERAL SERVICES
ADMINISTRATION

WASHINGTON, DC ANN ARBOR, MI DETROIT, MI MADISON, WI

QUINN EVANS

ARCHITECTS

POTTER STEWART FEDERAL BUILDING

CINCINNATI, OHIO









PROJECT SUMMARY

QEA is leading a \$30 million modernization and renovation of this facility. The work includes exterior masonry repairs and restoration and a new roof. To improve the building's thermal efficiency and blast resistance, the lower level windows will be replaced. On the upper level, window frames will be retained and sashes replaced.

Major mechanical, electrical, and plumbing work, and expansion of the fire suppression sprinkler system will be implemented. All public restrooms are being renovated, and a first-floor lobby renovation will be completed. New space alterations include design of a new courtroom, chambers, jury suite and offices.

PROJECT DETAILS

COMPREHENSIVE BUILDING
MODERNIZATION; DESIGN OF NEW
COURTROOM AND GRAND JURY SUITE
485,000-SF; 9 STORY BUILDING
CONSTRUCTION WHILE OCCUPIED
LEED REGISTERED BUILDING

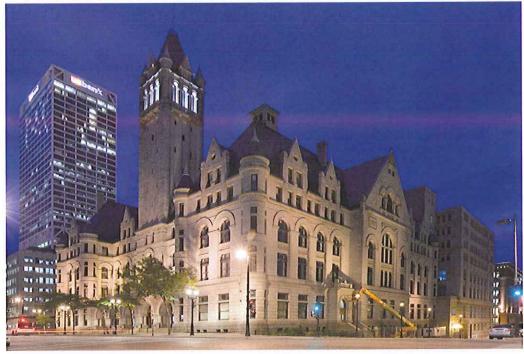
CLIENT

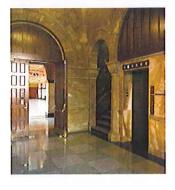
GENERAL SERVICES ADMINISTRATION

FEDERAL BUILDING/ U.S. COURTHOUSE

MILWAUKEE, WISCONSIN











PROJECT SUMMARY

The nearly 500 finely-crafted double-hung and casement windows in this 1893 structure were in advanced stages of deterioration. Quinn Evans designed the windows' reconstruction, addressing variations in condition, size and type, and removing 100 years of lead-based paint while retaining as much of the original old-growth Northern White Pine material as possible. In addition to having greatly improved aesthetics, the windows are now thermally better than ever, with new 5/8-inch insulating glass, weatherstripping and a much better fit.

PROJECT DETAILS

SPACE PLANNING, RENOVATION AND RELOCATION OF COURTS FACILITIES TO AN EXISTING 35,000-SF FACILITY FAST-TRACK MODIFIED DESIGN/BUILD CONSTRUCTION

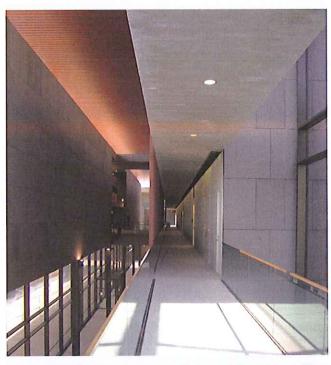
CLIENT

GENERAL SERVICES ADMINISTRATION

U.S. TAX COURT

WASHINGTON, DC











PROJECT SUMMARY

Quinn Evans Architects prepared the original Historic Structures Report and Preservation Plan for the building—this was the first such documentation effort commissioned by GSA for a building of this comparatively young age. Subsequently, as a preservation consultant, QEA restored the three ceremonial courtrooms within the building. All work complies with the Secretary of the Interior's Standards for Rehabilitation to preserve and enhance the historically significant aspects of the original architecture.

PROJECT DETAILS

DESIGNED BY VICTOR LUNDY
LISTED ON GSA'S LIST OF HISTORIC
PROPERTIES
HISTORIC STRUCTURES REPORT
RESTORATION OF ARCHITECTURAL
FINISHES WITHIN A MODERN-ERA
BUILDING

CLIENT

GENERAL SERVICES
ADMINISTRATION - REGION 3

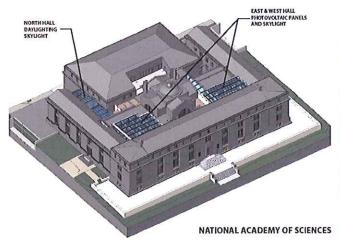
NATIONAL ACADEMY OF SCIENCES

WASHINGTON, DC











PROJECT SUMMARY

Quinn Evans Architects is leading the preservation and design for comprehensive rehabilitation, repair and upgrades to the National Academy of Sciences Building. The project integrates the conservation and preservation of the existing building while sensitively incorporating sustainable strategies and technologies. The design seamlessly integrates contemporary systems and engineering infrastructure within the historic fabric of the existing structure.

PROJECT DETAILS

COMPREHENSIVE REHABILITATION
OF 192,000-SQUARE-FOOT
BUILDING

DESIGNED BY BERTRAM GROSVENOR GOODHUE IN 1924

LOCATED ON THE NATIONAL MALL ADJACENT TO THE LINCOLN MEMORIAL

CLIENT

NATIONAL ACADEMY OF SCIENCES