



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

**Request for Quotation**

RFQ NUMBER  
**COR61447**

PAGE  
**1**

ADDRESS CORRESPONDENCE TO ATTENTION OF  
**JOHN ABBOTT  
 304-558-2544**

RFQ COPY  
 TYPE NAME/ADDRESS HERE

MOSELEY ARCHITECTS  
 3200 NORFOLK STREET  
 RICHMOND, VIRGINIA 23230

DIVISION OF CORRECTIONS  
 VARIOUS LOCALES AS INDICATED  
 BY ORDER

DATE PRINTED <b>01/14/2010</b>	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
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BID OPENING DATE: **02/02/2010** BID OPENING TIME **01:30PM**

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		906-07		
<p>ARCHITECT SERVICES, PROFESSIONAL</p> <p>EXPRESSION OF INTEREST</p> <p>CONTRACT TO PROVIDE ARCHITECT &amp; ENGINEERING SERVICES FOR THE WEST VIRGINIA DIVISION OF CORRECTIONS, FOR FOUR (4) PROJECTS IN VARIOUS LOCATIONS WITHIN THE STATE, PER THE ATTACHED DOCUMENTATION.</p> <p>EXHIBIT 3</p> <p>LIFE OF CONTRACT: THIS CONTRACT BECOMES EFFECTIVE ON ..... AND EXTENDS FOR A PERIOD OF ONE (1) YEAR OR UNTIL SUCH "REASONABLE TIME" THEREAFTER AS IS NECESSARY TO OBTAIN A NEW CONTRACT OR RENEW THE ORIGINAL CONTRACT. THE "REASONABLE TIME" PERIOD SHALL NOT EXCEED TWELVE (12) MONTHS. DURING THIS "REASONABLE TIME" THE VENDOR MAY TERMINATE THIS CONTRACT FOR ANY REASON UPON GIVING THE DIRECTOR OF PURCHASING 30 DAYS WRITTEN NOTICE.</p> <p>UNLESS SPECIFIC PROVISIONS ARE STIPULATED ELSEWHERE IN THIS CONTRACT DOCUMENT, THE TERMS, CONDITIONS AND PRICING SET HEREIN ARE FIRM FOR THE LIFE OF THE CONTRACT.</p> <p>RENEWAL: THIS CONTRACT MAY BE RENEWED UPON THE MUTUAL WRITTEN CONSENT OF THE SPENDING UNIT AND VENDOR, SUBMITTED TO THE DIRECTOR OF PURCHASING THIRTY (30) DAYS PRIOR TO THE EXPIRATION DATE. SUCH RENEWAL SHALL</p>						

RECEIVED  
 2010 FEB -2 P 12:33  
 PURCHASING DIVISION  
 STATE OF WV

SEE REVERSE SIDE FOR TERMS AND CONDITIONS		
SIGNATURE <i>Tyler J. Lewis</i>	TELEPHONE (804) 794-7555	DATE 2/2/2010
TITLE VICE PRESIDENT	FERN 54-0901270	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



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LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>BE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE ORIGINAL CONTRACT AND SHALL BE LIMITED TO TWO (2) ONE (1) YEAR PERIODS.</p> <p>CANCELLATION: THE DIRECTOR OF PURCHASING RESERVES THE RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM TO THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN.</p> <p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THE CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.</p> <p>THE TERMS AND CONDITIONS CONTAINED IN THIS CONTRACT SHALL SUPERSEDE ANY AND ALL SUBSEQUENT TERMS AND CONDITIONS WHICH MAY APPEAR ON ANY ATTACHED PRINTED DOCUMENTS SUCH AS PRICE LISTS, ORDER FORMS, SALES AGREEMENTS OR MAINTENANCE AGREEMENTS, INCLUDING ANY ELECTRONIC MEDIUM SUCH AS CD-ROM.</p> <p>REV. 05/26/2009</p> <p style="text-align: center;">NOTICE</p> <p>A SIGNED BID MUST BE SUBMITTED TO:</p> <p style="text-align: center;">DEPARTMENT OF ADMINISTRATION        PURCHASING DIVISION        BUILDING 15        2019 WASHINGTON STREET, EAST        CHARLESTON, WV 25305-0130</p>						
SEE REVERSE SIDE FOR TERMS AND CONDITIONS						
SIGNATURE <i>Lygh J. Francis</i>			TELEPHONE (804) 794-7555	DATE 2/2/2010		
TITLE VICE PRESIDENT		FSIN 54-0901270		ADDRESS CHANGES TO BE NOTED ABOVE		

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### Request for Quotation

RFQ NUMBER  
**COR61447**

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**3**

ADDRESS CORRESPONDENCE TO ATTENTION OF  
**JOHN ABBOTT**  
**304-558-2544**

VENDOR

RFQ COPY  
 TYPE NAME/ADDRESS HERE  
**MOSELEY ARCHITECTS**  
**3200 NORFOLK STREET**  
**RICHMOND, VIRGINIA 23230**

SHIP TO

**DIVISION OF CORRECTIONS**  
**VARIOUS LOCALES AS INDICATED**  
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LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
<p>THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:</p> <p>SEALED BID</p> <p>BUYER: JOHN ABBOTT (32)-----</p> <p>RFQ. NO.: COR61447-----</p> <p>BID OPENING DATE: 2/2/2010-----</p> <p>BID OPENING TIME: 1:30 PM-----</p> <p>PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY TO CONTACT YOU REGARDING YOUR BID:            -----            (804) 355-5690</p> <p>CONTACT PERSON (PLEASE PRINT CLEARLY):            TAYLOR M. MUNIZ, AIA, LEEDap, VICE PRESIDENT            -----</p> <p>***** THIS IS THE END OF RFQ COR61447 ***** TOTAL: _____</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Taylor M. Muniz</i>	TELEPHONE (804) 794-7555	DATE 2/2/2010
TITLE VICE PRESIDENT	FEN 54-0901270	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

RFQ No. \_\_\_\_\_

STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owned is an amount greater than one thousand dollars in the aggregate

**DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, Limited Liability Company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

**EXCEPTION:** The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated

**WITNESS THE FOLLOWING SIGNATURE**

Vendor's Name: TAYLOR MICHAEL MUNIZ

Authorized Signature: Taylor Michael Muniz Date: 1/26/10

State of Virginia

County of Chesterfield, to-wit:

Taken, subscribed, and sworn to before me this 27 day of January, 2010

My Commission expired October 31, 2010

AFFIX SEAL HERE

NOTARY PUBLIC Leeann M. Pratt

Embossed Hereon Is My  
Commonwealth of Virginia Notary Public Seal  
My Commission Expires October 31, 2010  
LEEANN M. PRATT

Expression of Interest  
for  
Division of Corrections  
Work Release / Training  
Center

RFP# COR61447

West Virginia Division  
of Corrections

February 2, 2010

# MOSELEYARCHITECTS

CHARLOTTE  
HARRISONBURG  
RALEIGH-DURHAM  
RICHMOND  
VIRGINIA BEACH  
WARRENTON

February 2, 2010

Re: Expression of Interest – Division of Corrections Work Release/Training Center  
COR61447

Attn: John Abbott  
West Virginia Division of Corrections  
Department of Administration  
Purchasing Division  
Building 15  
2019 Washington Street, East  
Charleston, West Virginia 25305


Dear Mr. Abbott and Members of the Selection Committee:

Moseley Architects and Alpha Associates, Inc. are enthusiastic about the opportunity to partner with the West Virginia Division of Corrections to help you successfully achieve your facilities' goals. We have extensive experience in planning and designing detention facilities. Although there are several architectural firms that are qualified to perform the work outlined in your RFP, we can give you of at least five good reasons to choose our team:

1. Our team understands how detention facilities operate, how needs change, and how things must function and work together.
2. Our team understands the big picture as well as the nitty-gritty details, to help you achieve efficiency and receive high value for the dollars you will spend.
3. Our team has an extremely successful track record for delivering economical solutions tied to a realistic budget for the design, construction, operation, and security of detention facilities.
4. Our team actually understands the process you are about to undertake and how to get through the red tape quickly. Your project is likely to go more smoothly if you choose a firm that has well-established relationships with, and a solid understanding of the unique requirements - a firm that knows the ropes and can get you through the maze of regulations.
5. Our team will work closely with you, communicate with you, and give you necessary guidance and advice so that you can make the best decisions as to what can be done, should be done, or must be done.

We would welcome an opportunity to present our qualifications and our approach to your facility, and we are excited about the opportunity to share with you our ideas about how we can assist you in making sound decisions for the future. If you have any questions about this submittal, or wish to schedule an interview, please call me at (804) 794-7555, or email me at [tmuniz@moseleyarchitects.com](mailto:tmuniz@moseleyarchitects.com)

Sincerely,

  
Taylor M. Muniz, AIA, LEEDap  
Vice President

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**Firm Overview**

Moseley Architects was founded in 1969 and is a full-service architectural, engineering, planning, and interior design firm dedicated to serving public sector clients, such as Pittsylvania County. The firm has grown to six offices, offering the talents of more than 150 professionals and has completed projects in several states. Office locations include the firm headquarters in Richmond, VA; Harrisonburg, VA; Virginia Beach, VA; Warrenton, VA; Raleigh, NC; and Charlotte, NC.

Our firm's broad base of skills and experience allows us to respond to clients' needs with comprehensive services, including:

Office Locations:

3200 Norfolk Street  
 Richmond, VA 23230  
 804.794.7555 (p)  
 804.355.5690 (f)

50 West Market Street  
 Harrisonburg, VA 22801  
 540.434.1346 (p)  
 540.434.0150 (f)

780 Lynnhaven Parkway  
 Suite 200  
 Virginia Beach, VA 23452  
 757.368.2800 (p)  
 757.368.2233 (f)

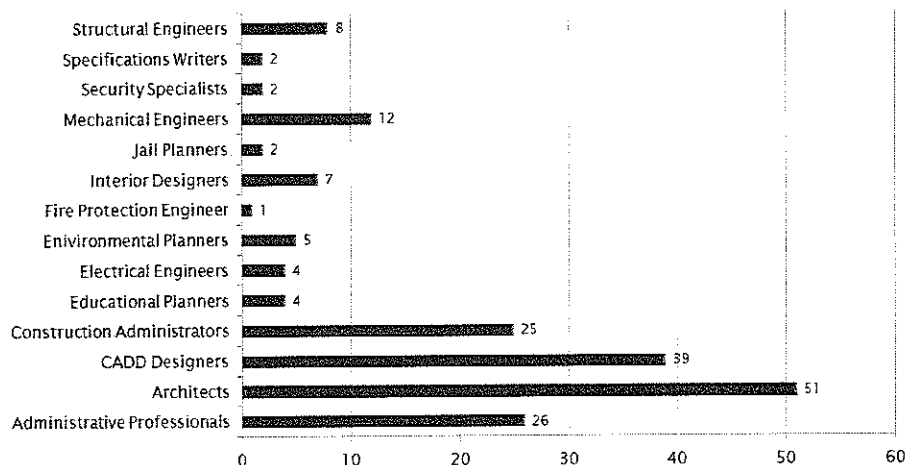
50 Sullivan Street, Suite B  
 Warrenton, VA 20186  
 540.351.0030 (p)  
 540.351.0031 (f)

11430 North Community  
 House Road  
 Gibson Building, Suite 225  
 Charlotte, NC 28277  
 704.540.3755 (p)  
 704.540.3754 (f)

3000 RDU Center Drive  
 Suite 217  
 Morrisville, NC 27560  
 919.840.0091 (p)  
 919.840.0045 (f)

- Feasibility Studies
- Master Planning
- Facility Planning
- Architectural Design
- Structural Engineering
- Electrical Engineering
- Mechanical Engineering
- Space Needs Analysis and Programming
- Construction Administration
- Building Information Modeling (BIM)
- Security Systems Design
- Furnishings Design
- Sustainable Design/LEED® Certification
- Interior Design/Furnishings Design

To demonstrate our ability to provide and maintain qualified professional staff and the required support services for your project, we have included below a graphic breakdown of our staff by discipline:





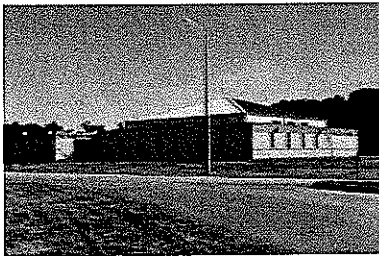
# EXPERIENCE

## Representative Experience

### *What does the Moseley Architects team provide that no other team provides?*

1. We have extensive experience in planning, designing, and constructing facilities similar to yours in accordance with the Division of Corrections Guidelines, including facilities for the counties of Chesterfield, Henrico, Goochland, Rockingham, Alleghany, Botetourt, and Amherst; as well as the Pre-Release Center for the Riverside Regional Jail— just to name a few!
2. Our proposed project leader is **Cary Gill, AIA**, a vice president of the firm. He will be your managing principal. **Taylor Muniz, AIA**, will be your project manager. Cary and Taylor have worked together for several years assessing needs and developing sound solutions for several localities facing the same needs as the West Virginia Division of Corrections.
3. We understand that these facilities serve special functions in the community and they cannot be regarded as “just another building.” Our experience has proven that it is absolutely critical to understand the functional and operational requirements of the facilities we design.
4. Moseley Architects has established an in-house security team with national experience in the design, specification, selection, and operation of security hardware and electronics. **Dale J. Horton, AIA**, will serve as the Security Specialist for your project. Dale will work closely with you to select systems that are durable, maintenance friendly, and meet your specific security requirements.
5. Our team includes West Virginia based architect, Alpha Associates, Inc. as well as locally based civil engineer, CTL Engineers. Together, we are currently working on a new Federal Correctional Institution in Hazelton, West Virginia. Our established teaming will be of great benefit to your projects.
6. Our firm has made a commitment to sustainable design. We have established an in-house team that is dedicated full-time to environmental planning, design, and research. **We have completed 15 LEED® certified facilities, and currently have 55 projects underway that are LEED® registered.**

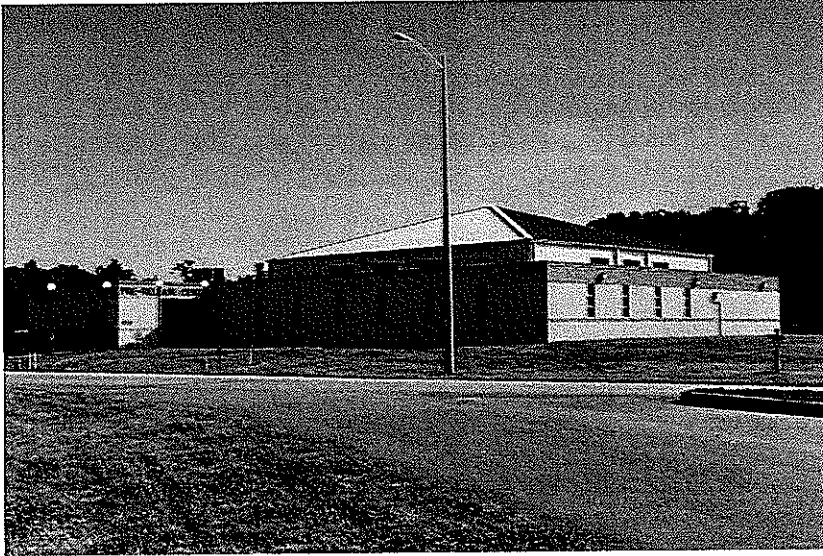
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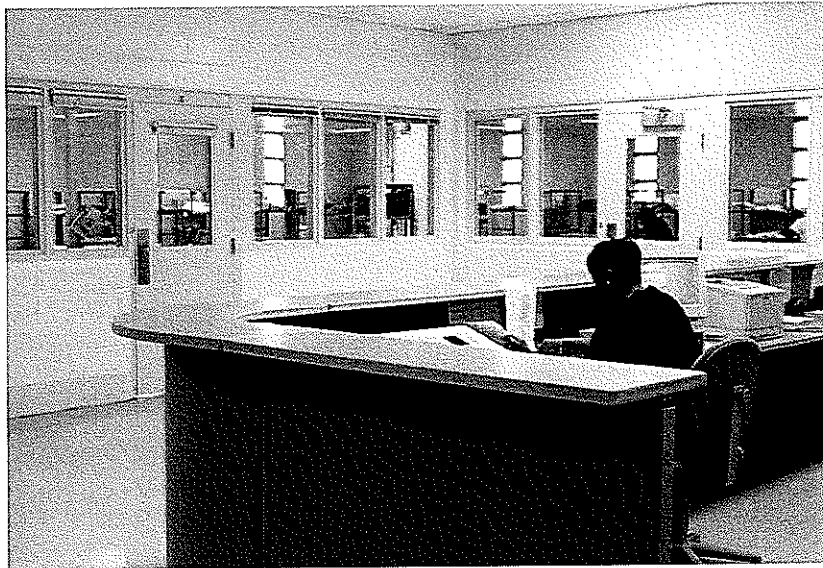
Pre-Release Center  
Riverside Regional Jail

The ability of your A/E team to apply in-depth, directly relevant experience for your benefit will be one of the most important factors in the success of your project. Although each of the clients we have served has unique needs and concerns, there are also many strong similarities and consistent themes. ***Our experience is current and directly relevant.*** We will work in partnership with you to provide valuable insight and reliable answers so that you can make the most of your available resources and budget dollars. **We have included a sampling of our team's representative experience on the following pages.**

## PRE-RELEASE CENTER RIVERSIDE REGIONAL JAIL



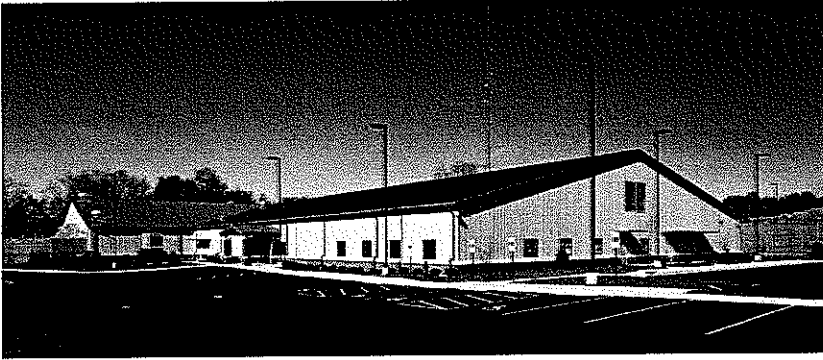
Client:  
Riverside Regional Jail  
Authority, Prince George County,  
Virginia



MoseleyArchitectscompletedthis stand-alone Pre-Release/Work Release Center located adjacent to the new Riverside Regional Jail. The 18,000 SF facility is designed to accommodate 64 inmates of various classifications in four separate housing dormitories inclusive of a four-cell disciplinary segregation unit. Future phases are anticipated increasing ultimate facility capacity to 256 inmates. Also provided are administration offices, visitation, meal preparation areas, triage, inmate locker at inmate release and return, and other ancillary/support spaces. The construction consisted of durable masonry and concrete for ease of maintenance and security.

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## YORK COUNTY PRISON/WORK RELEASE



Client:  
York County, South Carolina

Moseley Architects was selected in August of 2007 to design a new 256-bed, 52,000 square foot minimum security prison for York County's sentenced inmates. The facility is located adjacent to the existing Moss Justice Center. The new prison consists of three 64-bed dormitory housing units with two 20-bed dorms and two 12-bed segregated units, satellite serving kitchen, laundry, warehouse, reception/ release, and administrative offices. This fast-track project was designed and constructed in approximately 12 months, with a fall 2008 completion.

Because of their trust in Moseley Architects, York County also selected our firm to design a 128-bed medium/maximum security expansion to their Detention Center facility, also located at the Moss Justice Center.

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## RICHLAND COUNTY 110-BED MINIMUM SECURITY DORMITORY



Client:  
Richland County, South Carolina

Completed in 1999, the Richland County sentenced minimum security dormitory represents a highly successful, cost-effective housing solution for 110 male inmates. The design-build project actually began construction within one-month of the execution of the contract. The 9,850 square-foot facility came in at less than \$745,000 (Architectural & Engineering fees included). This is translated to approximately \$75 per square foot.

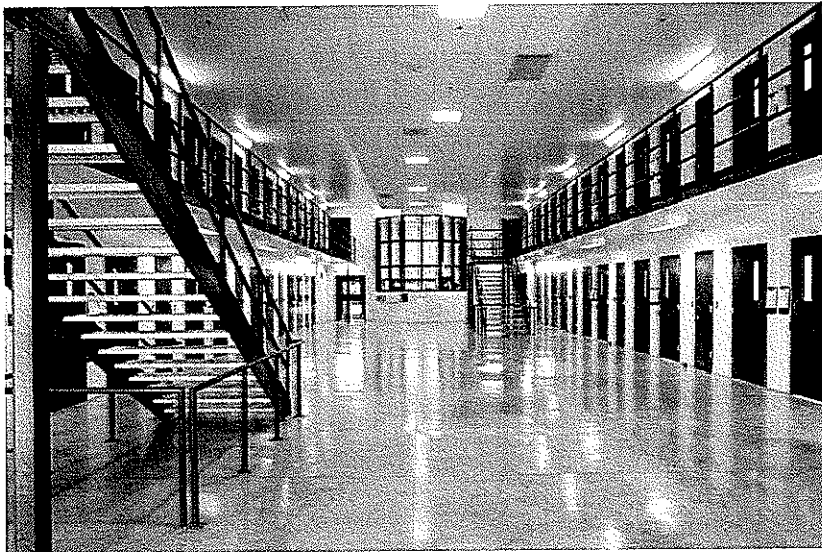
The facility utilizes pre-engineered building components and staff-efficient direct supervision dormitory space. Each of the two dormitory areas of 55-bed capacity have connected associated multipurpose areas, storage, visitation, and service spaces. The dormitories have a single lockdown cell and masonry interior walls. Exterior recreation yards are also provided.

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## CAMILLE GRIFFIN GRAHAM RECEPTION & EVALUATION HOUSING UNIT



Client:  
South Carolina Department  
of Corrections



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Moseley Architects was selected to design a 192-bed female reception and evaluation unit for the Camille Griffin Graham Correctional Institution in Columbia, South Carolina for the SC Department of Corrections. The 32,700-square-foot facility is comprised of an intake unit with holding, shower/change area, and screening areas. A medical suite and an administrative suite is also provided.

The housing configuration consists of two pods of 48 precast concrete cells. Recreation areas are located directly off the dayroom areas. A single control room can visually supervise both housing pods.

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## CHESTERFIELD COUNTY 154-BED REPLACEMENT JAIL



Client:  
Chesterfield County, Virginia



Moseley Architects was commissioned by Chesterfield County to design a replacement facility for the previous jail located at the County Government Campus. The previous jail had outlived its useful life and lacked adequate control, foodservice, visitation, medical, storage and program space. In addition, the housing configurations did not permit proper classification, segregation and observation of detainees. Conditions had become unsafe and with the support of the Virginia Department of Corrections, a replacement facility was planned.

The replacement facility is located on the previous jail site, which was expanded to adjacent county property. The detainee population had to be maintained during construction, hence a phased solution was developed that mitigated disruption yet maintained security and operations. Site restraints were numerous and in addition, utility locations were required prior to general construction. The previous facility, with the exception of an 96-bed minimum security unit ("C" Building), was demolished and removed.

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## EMERGENCY EXPANSION 100-BED ANNEX CHESTERFIELD COUNTY JAIL



Client:  
Chesterfield County, Virginia

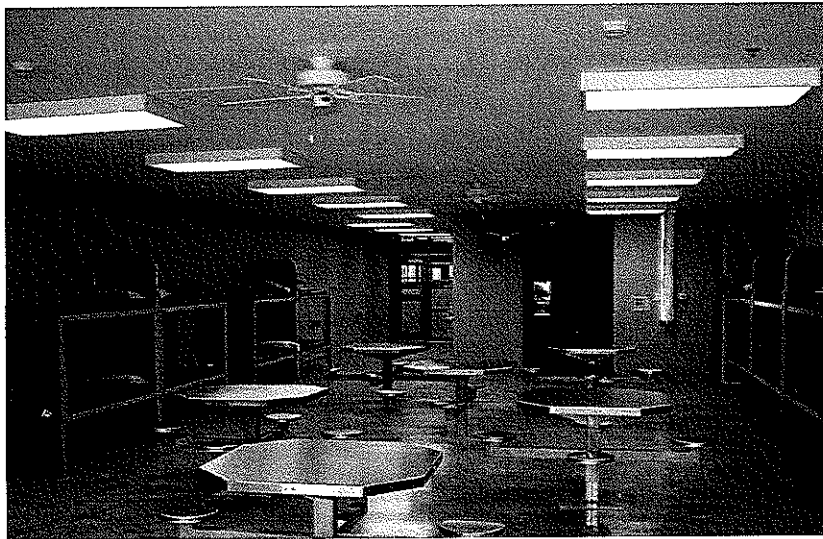
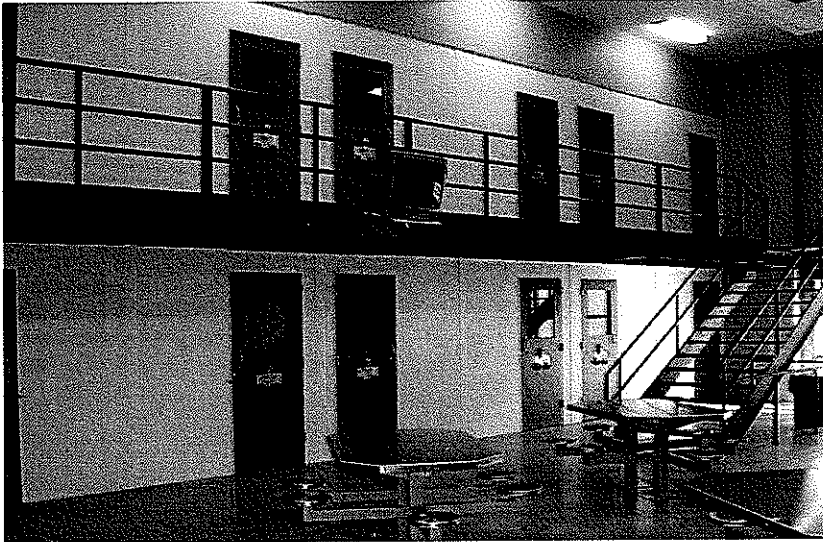
As a result of severe overcrowding at the jail, the County Board of Supervisors declared an “emergency condition” and proceeded to explore options to provide relief to the Sheriff’s Department. With the declaration of an emergency, the County immediately retained the services of Moseley Architects to explore options at several sites. Modular units, prefabricated structures, trailers, metal buildings, and tent structures were investigated. Each option considered cost, speed of erection, life span and security. The study revealed that a pre-engineered metal building outfitted with security improvements best satisfied the County’s need.

This new 22,000 square-foot facility is located adjacent to the existing jail and houses 100 inmates in eight individual dormitories. Also, a 15 cell segregation/isolation unit serves the annex as well as overflow from the main jail.

Space is also provided for visitation, education, recreation, food distribution, laundry, and counseling.

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## CLARENDON COUNTY JAIL ANNEX AND RENOVATIONS



Client:  
Clarendon County, South  
Carolina

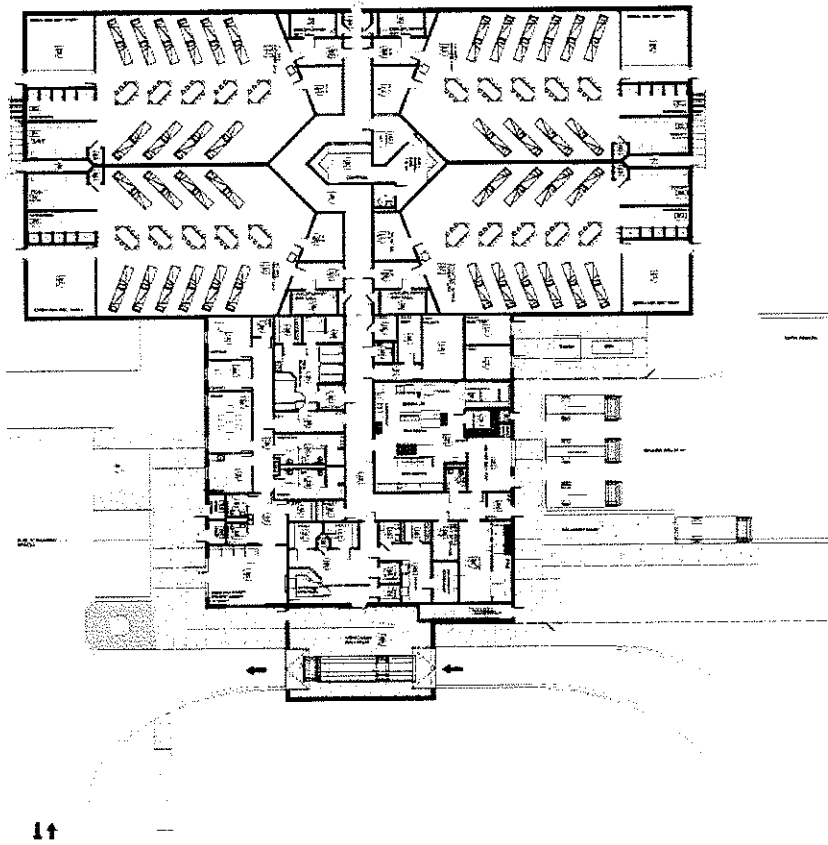
The Clarendon County Design-Build jail renovations and new annex building are located in downtown Manning, South Carolina. The new annex building site is adjacent to the existing jail facility and connected by a covered walkway and vehicular sallyport. The 13,700 square-foot facility has a new intake and booking area. This area accommodates the breathalyzer room, various size holding cells and a negative pressure cell. It services both the existing facility as well as the new annex. The annex houses 58 direct supervision beds and 24 dormitory beds, controlled by a centrally located control room. The exterior secure perimeter of the annex is controlled by central control in the existing jail.

The direct supervision area utilizes the use of steel modular cell components with rear chases for mechanical, plumbing and electrical. This allows for ease of service for the operator of the facility. Other areas inside the annex include offices, video visitation area, and training conference room.

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# ROWAN COUNTY SATELLITE JAIL FACILITY



Client:  
Rowan County, North Carolina

The Rowan County Satellite Jail Facility is a minimum security 160 bed adult facility. The project will be a standalone I-3 Use and extremely staff efficient. Open dormitory housing with four direct supervision pods shall be located adjacent to the main control center for maximizing inmate observation. All dormitories will have direct access to natural daylight and a recreation yard directly accessible from each day room.

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Video visitation will allow inmates to have video conversation with family members

As a smaller jail facility the spaces have been programmed to accommodate needed functions as outlined by the client. Booking with an enclosed sally port allows direct transfer of inmates out of sight of the general public. A warming kitchen to serve 320 inmates will be provided along with laundry services. Administrative offices with private break-room and conference for staff shall be provided.

Total Gross square footage is estimated at 27,000 square feet.

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## BOTETOURT-CRAIG COUNTIES PUBLIC SAFETY BUILDING/JAIL



Client:  
Botetourt and Craig  
Counties, Virginia

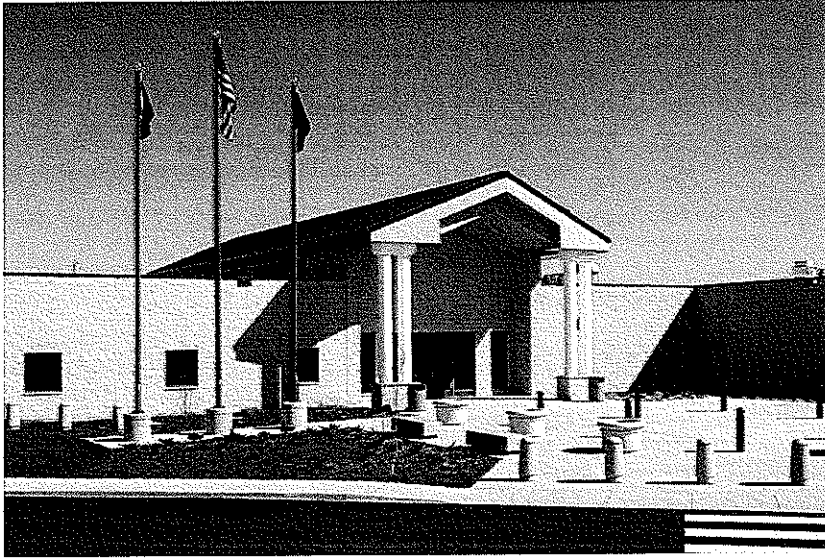
Moseley Architects recently completed the Community-Based Corrections Plan and Planning Study, and was commissioned to build the new Botetourt-Craig Counties Jail. It serves both the pretrial detainees and the sentenced population of the participating jurisdictions by providing 136 secure beds. In addition, the facility houses the Sheriff's Office, Magistrate's Office and Emergency Services. The facility was aesthetically designed to blend with the existing architecture of the historic Town of Fincastle. The total gross floor area of the facility is 83,885 square feet, with 58,210 square feet dedicated for the regional jail's use.

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The facility is two stories with access to the lower level from the north and the east side of the building and access to the upper level from the south side (Main Public and Staff Entry). The facility was designed to allow for future expansion of the jail to the southeast. Additional areas can be added in proximity to the general housing areas to easily expand the general population by a minimum of 56 beds, as well as providing for some programs and special purpose housing.

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moseleyarchitects.com

## MIDDLE RIVER REGIONAL JAIL



Client:  
Augusta County, Virginia  
Verona, Virginia

The Middle River Regional Jail Authority comprises the jurisdictions of Augusta County, City of Staunton, and City of Waynesboro. The Planning Study for the Middle River Regional Jail was prepared by Moseley Architects and approved by the Virginia Department of Corrections.

The jail was designed to serve a population of 436 men and women of various classifications including 40 for special management. The design included a core facility that serves a population of up to 578. The jail utilizes indirect supervision management and is a single floor structure with the exception of the housing pods, which are two levels.

The building area is approximately 212,020 square feet. The jail contains the following components: classroom area with teacher offices, kitchen area, an intake area with holding cells, vehicle sallyport, medical services with x-ray and dentist rooms, laundry, warehouse and administrative offices with armory and muster room. Other components include Classification Housing, Special Management Housing, and Community Corrections for weekend offenders.

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# ROCKINGHAM-HARRISONBURG REGIONAL JAIL



Control Room at Housing Units

**MOSELEYARCHITECTS**  
moseleyarchitects.com

Client:

County of Rockingham,  
City of Harrisonburg, Virginia

Moseley Architects provided programming, an update of existing space needs assessment, architectural design, building engineering, and construction administration services for this new 98,000 SF, 328-bed local regional detention center for Rockingham County and the City of Harrisonburg

The three-story detention center houses male, female, and juvenile inmates with minimum, medium, and maximum security classifications. The center contains all necessary services and programs including indoor/outdoor recreational activities, food service, laundry, canteen, medical, counseling, education, admissions, and segregation/isolation. Seventeen living units are also provided to break the population down into small manageable groups, as well as to provide for the proper classification and separation of detainees. The 30,000 SF main first floor contains the armory, muster room, employee lockers, showers and toilets, training room, secure evidence storage, records and archives, Investigations Division, Patrol Division, Civil Process, Dispatch, uniform storage, lineup and holding, inmate property storage (automated), booking, central control, and a vehicle sallyport.

# ALLEGHANY SHERIFF'S OFFICES AND REGIONAL JAIL



Client:  
Alleghany County  
City of Covington, Virginia



Awarded Citation for Design by the American Institute of Architects Committee on Architecture for Justice and Featured in the 2002-2003 *Justice Facilities Review*

The County Jail, Sheriff's offices, Magistrate, and 911 Center are all housed in the new 37,000 SF building located in Covington, Virginia. The building is sited next to the historic Alleghany County Courthouse, the centerpiece of Covington's downtown, and replaces the 100 year-old jail. The design team of Moseley Architects was able to overcome several challenging site issues in the final building design to create a jail that compliments the Courthouse, and provides an entry plaza around the existing war memorial obelisk. Of great benefit to the County are the two-level interior connections between the new jail and the existing Courthouse.

The three-story building has a stepped back form, which softens the impact of the large mass on its frontage street. The building has a steel frame with masonry infill structure and steel and concrete floors. Granite, located from the same quarry as the granite on the existing Courthouse, and its unique pattern, was used on a portion of the jail veneer.

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## NORTHERN NECK REGIONAL JAIL EXPANSION



"I am extremely pleased with the quality of our last expansion. One would be hard pressed to tell where the existing building ended and the new begins. I am confident in saying that our community has an attractive building to be proud of, one that protects the public and preserves the surrounding area without the menacing appearance of a typical jail."

"I could not have selected a better firm than Moseley Harris & McClintock (now Moseley Architects). They truly have the owner's interest at heart and will go the extra mile to ensure that all concerns and needs are met. Thus, ultimately resulting in an end product that is functional and well designed through forethought and planning."

Jeffrey Frazier,  
Superintendent Northern Neck Regional Jail

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Client:  
Northern Neck Regional Jail  
Warsaw, Virginia

Nestled behind the Richmond County pines of eastbound U.S. Route 360 and moments before entering the growing Town of Warsaw, Virginia you may pass the Northern Neck Regional Jail before realizing it. It's modern "school type" curb appeal and soft nighttime lighting does not indicate to what lies behind the friendly public side elevation. The facility serves Westmoreland, Northumberland, and Richmond Counties, the Town of Warsaw as well as the U.S. Federal Government in its care of federally charged inmates on a per diem basis. The original facility, completed in 1995, (with an immediate 50 bed dormitory expansion September 1996) consisted of approximately 50,000 gross square feet and design rated capacity of 140 inmates. Average daily population, via double bunking, was 267 inmates with counts reaching as high as 296. Construction proceeded shortly thereafter with the result being a total expansion of approximately 28,000 SF.

Smaller renovation projects such as expanded / upgraded food services and a work-release facility were completed in 2008.

## GREEN ROCK CORRECTIONAL CENTER



Client:  
Virginia Department of  
Corrections  
Location: Pittsylvania County,  
Virginia

The Virginia Department of Corrections and Centex Moseley, LLC, executed a contract for the design and construction of a 1,024 bed celled facility located adjacent to the Chatham Men's Diversion Center in Pittsylvania County. The facility houses medium security inmates. The structures are single story, with a mezzanine in the housing units. Total building area is approximately 230,000 square feet. The facility includes four housing buildings, maintenance/warehouse building, administration building, and a programs building with space for academic and vocational classrooms, medical and areas, gymnasium, intake, visitation, and a food service area. A space within the fence was reserved for potential future construction of an industries building.

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## SUSSEX MAXIMUM SECURITY PRISONS NOS. I AND II



Pod Control Room

Client:

Virginia Dept of Corrections  
Sussex County, VA

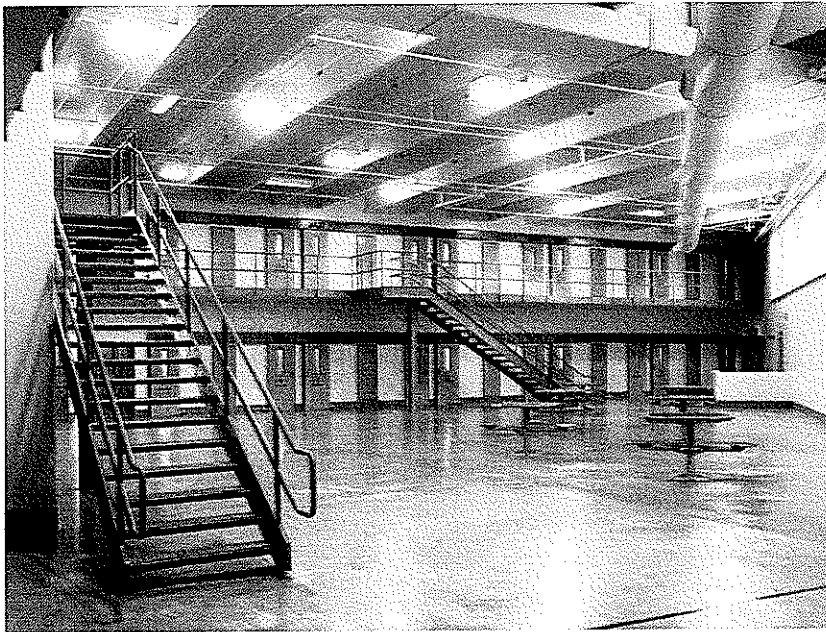
Within the 368,821 SF Maximum Security Institution, No. I, there are two 4-level housing buildings containing eight housing units each, a support building with attached punitive segregation wing, and reception building. There are 718 cells, however, the core facilities are designed to handle 1,200 inmates after double bunking. Guard towers are used for observation of the entire site and to aid the reception building in monitoring the vehicle sally-port. The administration building supports the institution with non-secure duties, including accounting and supervision, acts as situation control for problems, and processes visitors. The warehouse and maintenance buildings serve the needs of the institution on a daily basis, as well as maintaining the buildings and grounds, and there is a power plant building outside of the security fence, which is designed to serve this campus and the adjacent Maximum Security Institution No. II.

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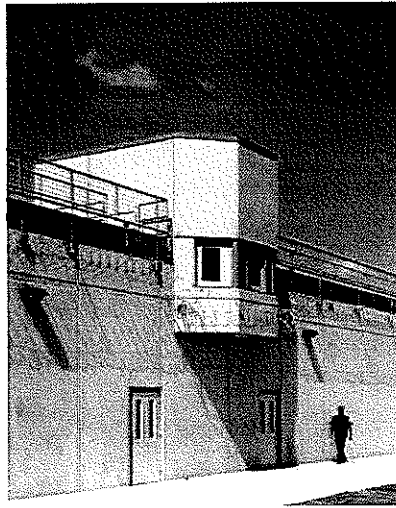
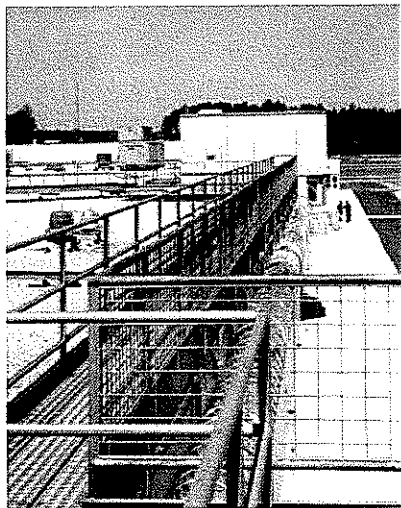
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# SUSSEX MAXIMUM SECURITY PRISONS NOS. I AND II



Typical Housing Unit



Client:  
Virginia Dept of Corrections  
Sussex County, VA

Prior to beginning design of the Sussex Maximum Security No. I, our firm was commissioned by the Department of Corrections to master plan the entire 545-acre site. The challenge was to lay out the campuses on a parcel of land laden with tidal wetlands

The task was achieved without disturbing sufficient acreage of wetlands to require exhaustive and costly Corps of Engineers' permitting

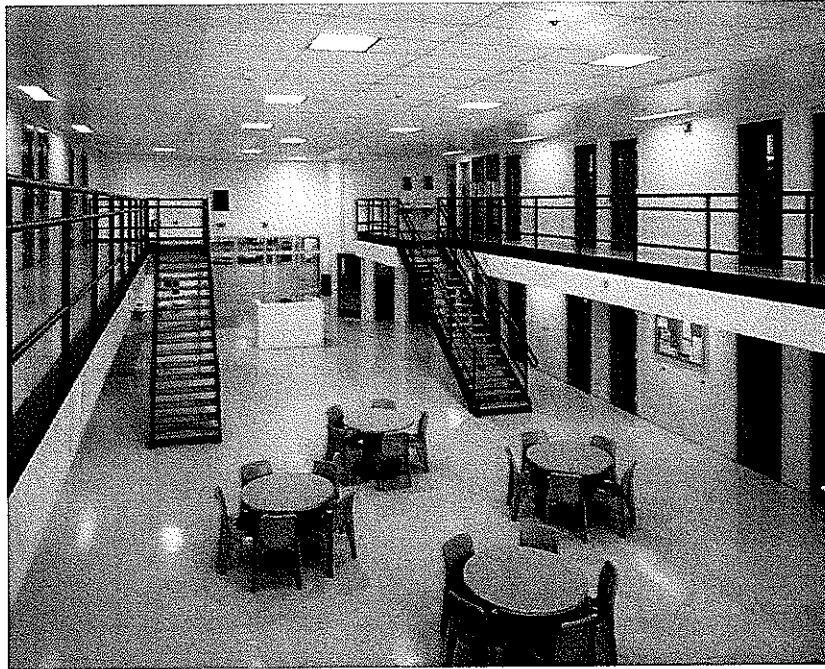
The 346,697 SF Maximum Security No. II is a site adaptation of the Sussex Maximum Security No. I on an adjacent parcel of land owned by the Virginia Department of Corrections.

Once the General Assembly funded the second campus, the Department of Corrections gave direction to quickly proceed with the site adaptation of Institution No. II. The campus is essentially identical to Institution No. I. The orientation of space is identical so that officers working in one institution can easily adapt to working in the other. The two campuses share a central power plant and maintenance building.

# FLUVANNA CORRECTIONAL CENTER FOR WOMEN



Client:  
Virginia Dept. of Corrections  
Troy, VA



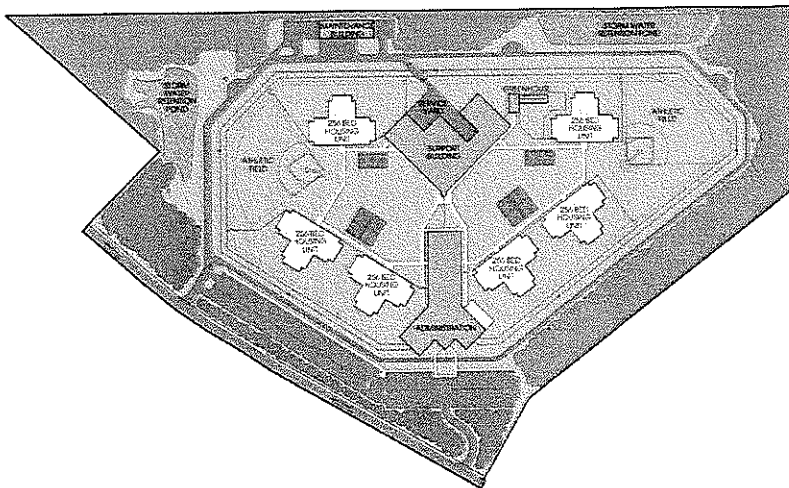
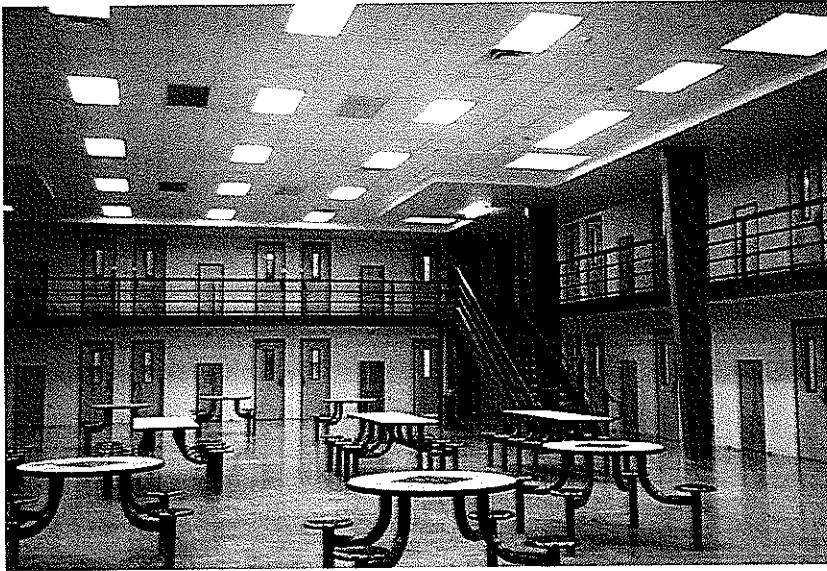
This project was a joint venture with HOK Architects. The project site is located east of Charlottesville on U. S. Route 250, on an old road camp site owned by the State. Although a large facility of 406,500 GSF, the eleven buildings are tightly grouped around a central courtyard, requiring only 35 acres of campus within the perimeter security fence.

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The Owner was originally considering dormitory type housing, but the design team was able to deliver four housing units providing 896 beds in "dry" cell rooms within the project budget. Another 458 beds are provided throughout the facility for Reception, Segregation, Medical, and Mental Health functions, bringing the total facility capacity to 1,354 beds.

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# LAWRENCEVILLE CORRECTIONAL CENTER



Client:

Industrial Development Authority  
of Brunswick County, VA

This 1,500-bed, medium security facility has the distinction of being the first private prison opened in the State of Virginia. The project utilized a design-build approach, including among the team members, a developer, a contractor, a correctional services provider, architects, engineers, and financial and legal counsel.

Our firm, in association with Arrington Watkins Architects, provided architectural services, including preliminary site planning, schematic design, construction documents, construction administration, and record drawings. The completed project has a building area of 347,855 SF, and consists of six housing units (all celled); an administration building containing visitation, isolation/segregation area; recreation space including two full-size gymnasiums/multipurpose rooms; a support building containing dining; vocational and educational facilities; commissary; library; laundry; medical areas; a greenhouse and classroom building to support a horticultural program; and a warehouse.

# ST. MARY'S COUNTY ADULT DETENTION CENTER



Client:  
St. Mary's County, Maryland  
Dept. of Public Works

Full architectural, engineering, and construction administration services were provided for a 67,000 SF, 80-bed detention facility to accommodate minimum, medium, and maximum security inmates, as well as a work release program. The one-story detention center provided program space and housing for the County's 15-year master plan.

Small housing units minimize the number of inmates per dayroom, which reduces the number of staff required for indirect supervision. Spaces include administrative offices, visitation areas, men and women's work release dayrooms and dormitories, areas for observation, photo, property, and booking, cells for holding, segregation, and isolation, medical office with examination and treatment areas, library, multipurpose room, classroom, kitchen, laundry, indoor and outdoor exercise areas, and a sallyport.

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# FEDERAL CORRECTIONAL INSTITUTION BUTNER, NORTH CAROLINA

**The First Federal  
Prison in the U.S.  
to Earn LEED  
Certification**



*Size: 49,150 S.F.  
Budget: \$97,000,000  
Bid: \$98,721,350  
Completed: November 2005*

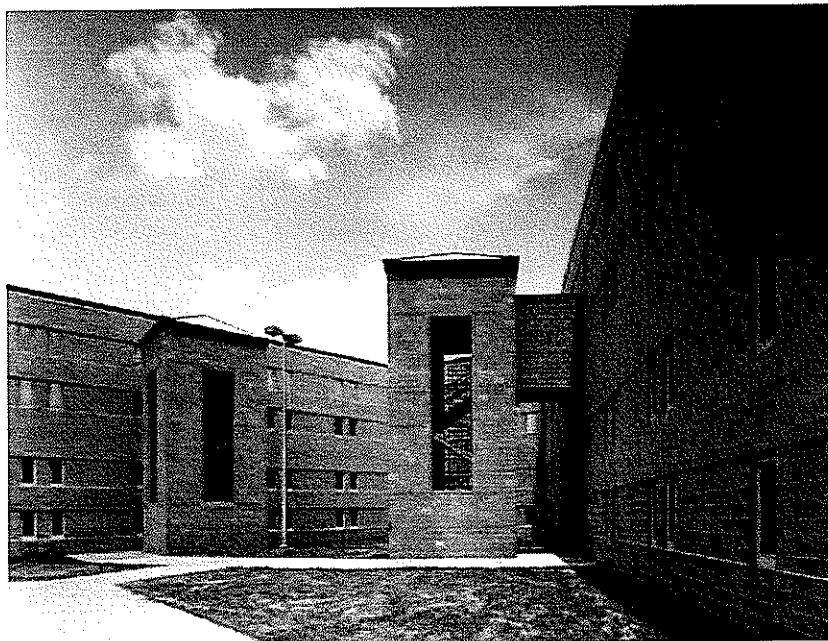
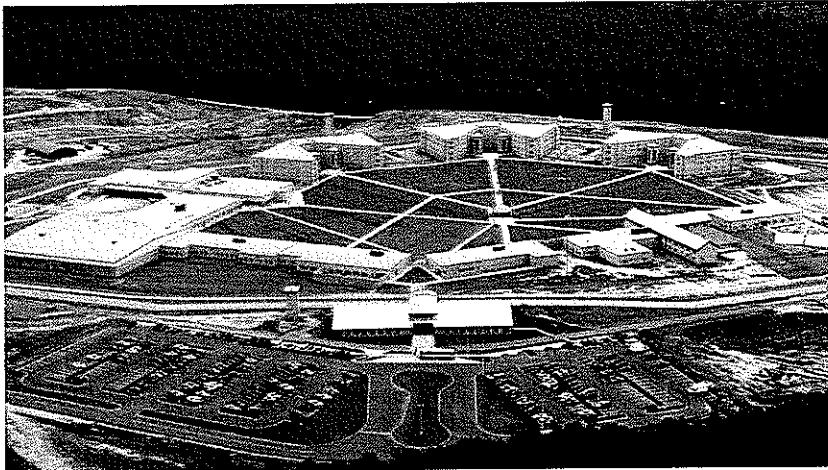
The Federal Bureau of Prisons decided early in the design process to pursue Leadership in Energy and Environmental Design (LEED®) certification and take a high performance approach to the Federal Correctional Institution's design. Steps taken to achieve a high performance design included the following:

- Situating the facility on the site to minimize the disturbance of nearby wetlands and waterways.
- Setting aside an area of land equal to the building footprint to be preserved for the life of the building.
- Incorporating detention basins, a wetland planting area, and settlement for-bays to reduce and cleanse runoff.
- Providing bicycle storage and changing/showering facilities for employees and visitors.
- Adding five compressed natural gas vehicles to the facility's fleet.
- Landscaping only with low-growing grasses, which do not require irrigation.
- Reducing water use by 33 percent through the use of low-flow urinals and ultra low-flow lavatories, showers, and sinks throughout the facility.
- Using materials manufactured within 500 miles of the project site.
- Recycling over 70 percent of construction waste.
- Incorporating permanent entry walk-off systems.
- Using low-emitting adhesives, sealants, carpet, and composite wood products.
- Creating and implementing a "Green Housekeeping Plan."



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## EDGEFIELD FEDERAL CORRECTIONAL INSTITUTION



Client:  
U S. Dept of Justice,  
Federal Bureau of Prisons  
Edgefield, South Carolina

The prison was originally designed as a Medium Security Federal Correctional Institution and Minimum Security Federal Prison Camp. In 1998, during construction, it was upgraded to a Maximum Security facility by the addition of 8 guard towers.

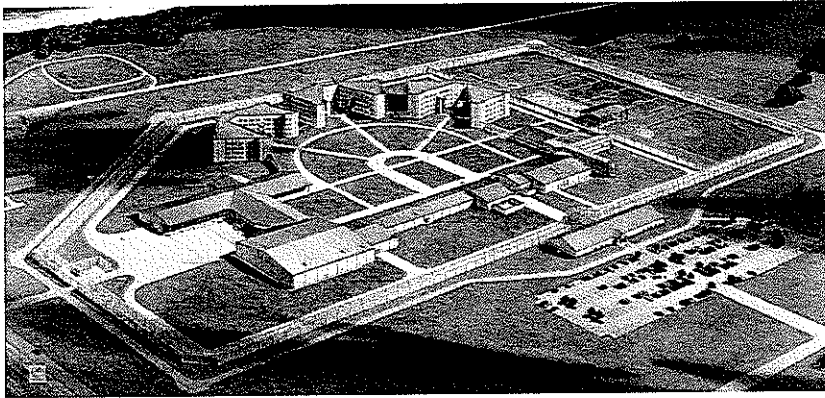
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Located on a site of 250 acres approximately one mile southeast of the Town of Edgefield, South Carolina, the Federal Correctional Institution and the Federal Prison Camp are designed in a campus plan scheme consisting of one-, two-, and four-story steel and masonry buildings. The maximum security prison (FCI) and minimum security prison camp (FPC) provide living quarters for inmates, educational, recreational, medical, financial, vocational, industrial, administrative, religious, and food service programs.

The facility is designed to house a rated capacity of 1,152 maximum security inmates and 512 minimum security inmates.

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# FEDERAL CORRECTIONAL INSTITUTION



Client:  
U.S. Dept. of Justice,  
Federal Bureau of Prisons  
Petersburg, VA

Located between the cities of Petersburg and Hopewell, Virginia, the Petersburg Federal Correctional Institution lies on a 44.04 square hectare site, and is operated by the Federal Bureau of Prisons. The project is a joint design-build project between Hensel Phelps Construction Company of Chantilly, Virginia, the lead team member, and our firm.

The facility is constructed on the same site as the existing low security Petersburg Federal Correctional Institution which was originally built in 1933. The new facility was designed with buildings positioned in a campus plan arrangement with related site utilities and site development. The correctional institution contains 864 cells and houses approximately 1,150 inmates. The facility will have a gross building area of approximately 51,360 square meters.

Each building within the facility is a single-story structure, with the exception of three General Inmate Housing buildings that contain four levels each, and the Special Inmate Housing unit which contains two levels.

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### Green Building / Sustainable Design / Energy Efficiency

Moseley Architects is committed to helping our clients understand the economic and environmental implications of sustainable design approaches so that, together, we can create an environmentally responsible project. We promote the belief that sustainable design is "better design," which reflects a greater understanding of the effect that our facilities have on the environment. As part of our commitment to sustainable design, we have an in-house team that is dedicated full time to environmental planning, design, and research. Team leader Bryna Dunn works closely with all of our staff so that they are current on sustainable design technologies and opportunities. Bryna is the chairperson of the U.S. Green Building Council's Sustainable Sites Technical Advisory Group. She also works directly with our clients, developing life cycle and economic-payback analyses for a variety of sustainable design approaches. Bryna and her staff are regularly included on our design teams so that the integration of sustainable design criteria is addressed with the various disciplines involved in the project.

Incorporating sustainable design elements can greatly benefit a facility's users. The Leadership in Energy and Environmental Design (LEED®) Green Building Rating System® is a national standard for planning and designing sustainable, high performance buildings. This system provides a guide for evaluating performance and meeting sustainability goals, as well as emphasizing state-of-the-art strategies for sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. Studies have repeatedly proven that incorporating sustainable design elements into the design of a facility may result in many of the following outcomes:

- reducing a facility's environmental impact by utilizing energy and water efficient systems/practices, using nontoxic materials that are high in recycled content and that can be recycled again, protecting wetlands, and minimizing the impact on our landfills;
- reducing energy and operating costs;
- reducing liability given the continued increase in health-related lawsuits;
- improving attendance at work; and
- increasing staff retention.

As a measure of quality control, the USGBC offers a Green Building Rating System Training Workshop for individuals and companies who are committed to sustainable design approaches. **Currently, more than 50% of our employees are LEED Accredited Professionals.** These individuals have completed the USGBC's specialized training and are experienced in stimulating sustainability awareness, discussing how sustainability may benefit a project, and determining project-specific solutions.

Including our own LEED Platinum office building here in Richmond, our firm has completed 15 LEED certified facilities. These include the **world's first LEED certified**



## EXPERIENCE

**prison, the Federal Correctional Institution in Butner, NC** and the world's first LEED certified elementary school, Third Creek Elementary School in Iredell, NC. Our firm also completed the country's first LEED certified engineering facility, the Engineering & Computational Sciences Building at Old Dominion University as well as the Southeast's first LEED certified recreation center, the College of William and Mary's Student Recreation Center. According to *Engineering News-Record*, Moseley Architects ranks in the top 100 nationally among the "Top Green Design Firms." This ranking measures the market by ranking designers based on their revenue from projects that were registered and actively seeking certification from major third-party environmental standards or ratings organizations.

**In addition to 15 projects already LEED certified, Moseley Architects currently has 55 projects underway that are LEED registered.** LEED registration indicates that a project is incorporating sustainable design elements into the planning and design and will pursue LEED certification with the USGBC when construction is complete.

**Correctional facilities which are currently LEED Registered include the Amherst Adult Detention Center, the Loudoun County Juvenile Detention Center, the Federal Correctional Institution in Hazelton, West Virginia, and the Navy Joint Regional Correctional Facility in Chesapeake, Virginia.**

Through our direct experience with the LEED rating system, we have found that sustainable design does not necessarily cost more, as long as the sustainable design goals are set early in the design process.

**References**

We have provided a list of current or recent clients below and *encourage* you to call and inquire how they would rate our management skills, technical competence, commitment to service, and project delivery. Our clients consistently report that we deliver services that exceeds their expectations. We value our relationships with our clients, who like you, have the responsibility of delivering excellent facilities to those in their communities.

- Hensel Phelps Construction Company  
Marvin Moran, Project Manager  
4437 Brookfield Corporate Dr., Suite 207  
Chantilly, Virginia 20151  
(p) 703.828.3200 (f) 703.802.1580
  
- Balfour Beatty Construction  
Mark Konchar  
3924 Pender Drive  
Fairfax, Virginia 22030  
(p) 703.273.3311 (f) 703.934.5520
  
- Chesterfield County  
Robert Rivers, Capital Projects Division Manager  
P.O. Box 40  
Chesterfield County, Virginia 23832  
(p) 804.796.7098 (f) 804.717.6672
  
- Middle River Regional Jail  
John McGehee, Assistant County Administrator  
P.O. Box 590  
Verona, Virginia 24482  
(p) 540.245.5613 (f) 540.245.5621
  
- Blue Ridge Regional Jail  
Elton Blackstock, Administrator — Blue Ridge Regional Jail Authority  
510 Ninth Street  
Lynchburg, Virginia 23504  
(p) 434.847.3100 (f) 434.847.5134

Did we listen?

Did we respond to their questions?

Did we deliver what we promised?

Would they hire us again?

## STAFF AND RESOURCES

### Staff

Your success is important to us. As such, we believe it is important to engage professionals who specialize in the type of work you need so that you can benefit from their years of hands-on experience. The specialists we have assigned to your project have worked on many projects identical and similar to yours.

Moseley Architects requires that one of our principals remain actively involved in every project, no matter what the size or scope may be. Our management structure allows the principal's full participation, so that there is strict attention at the highest level to meeting our clients' expectations. *The management of the design team will remain consistent for the duration of your project.*

Moseley Architects will be the architect of record for the project and will hold the contract. Moseley Architects' staff will provide project management; architectural design; mechanical, electrical, and structural engineering; security systems design; interior design for finishes, furnishings, fixtures, and equipment; and all other services required. Alpha Associates, Inc. will provide civil engineering, structural engineering support and construction administration. CTL Engineering will provide geotechnical engineering and testing.

*We encourage you to review the following resumes detailing our proposed project team's extensive experience.*

# STAFF AND RESOURCES

## ***S. Cary Gill, AIA, LEED<sup>ap</sup>, Vice President, Managing Principal***

With 40 years of experience, Cary directs Moseley Architects' justice studio, which specializes in correctional, public safety, and judicial architecture. Cary combines national criminal justice experience with a knowledge of specific local requirements. For eight years, Cary served as Chief Architect, Manager, and Capital Outlay Director of the Virginia Department of Corrections. In that capacity, he was responsible for the design and construction of all prisons in Virginia, as well as the review and approval of all local jails. He has managed the design and construction of over 21,000 offender beds on federal, state, and local levels.

Cary was one of three private sector members that assisted the Virginia Department of Corrections in rewriting their standards, including the most current "Standards for Planning, Design, Construction, and Reimbursement of Local Correctional Facilities." He was recently appointed by the State Board of Corrections to amend and update those jail standards and began this process in December 2009. In addition, Cary is a certified auditor of the American Correctional Association, and a member of the ACA, the American Jail Association, the Virginia Association of Regional Jails, the Virginia Correctional Association, the National Juvenile Detention Association, and Virginia Sheriff's Association.

### Education:

Bachelor of Architecture/1969

### Affiliations:

American Institute of Architects  
AIA Committee on Architecture for  
Justice  
American Correctional Association  
American Jail Association  
VA Sheriff's Association  
VA Correctional Association  
National Juvenile Detention  
Association  
VA Association of Regional Jails

### Registrations:

LEED® Accredited Professional  
Architect/VA/1983  
Architect/TN/1986  
Architect/NC/1995  
Architect/WV/1999  
Architect/LA/2002  
NCARB Certified/1983

### Representative Projects

- Riverside Regional Jail 180-Bed Pre-Release Center Expansion, City of Hopewell, Virginia
- Riverside Regional Jail 480-Bed Expansion, City of Hopewell, Virginia
- Botetourt-Craig Counties Public Safety Building and Jail, Fincastle, Virginia
- Alleghany Regional Jail and Sheriff's Office, Covington, Virginia
- 154-Bed Replacement Jail, Chesterfield County, Virginia
- Chesterfield County Jail 100-Bed Annex, Chesterfield County, Virginia
- Richmond City Jail 100-Bed Addition, Richmond, Virginia
- Newport News City Jail Renovations, and Expansion, Newport News, Virginia
- Norfolk City Jail Renovations, Alterations, and Expansion, Norfolk, Virginia
- Norfolk City Jail 300-Bed Expansion, Norfolk, Virginia
- Henrico Regional Jail East, New Kent County, Virginia
- Northern Neck Regional Jail Addition, Warsaw, Virginia
- Piedmont Regional Jail, Farmville, Virginia
- Rockingham-Harrisonburg Regional Jail, Harrisonburg, Virginia

## STAFF AND RESOURCES

### ***S. Cary Gill, AIA, LEED<sup>ap</sup>, Vice President, Managing Principal***

#### Representative Projects (continued)

- Hampton Roads Regional Jail, Portsmouth, Virginia (Associate Architect)
- Green Rock Correctional Center, Pittsylvania County, Virginia
- Pocahontas Correctional Center, Tazewell County, Virginia
- Sussex Maximum Security Institutions Nos 1 & II, Sussex County, Virginia
- Deerfield Correctional Center Expansion & Renovations, Capron, Virginia
- Mt Rogers Correctional Center, Grayson County, Virginia
- Middle River Regional Jail, Verona, Virginia
- Riverside Regional Jail, City of Hopewell, Virginia (Associate Architect)
- Bland Correctional Center Segregation/Isolation Building, Bland County, Virginia
- Blue Ridge Regional Jail — Amherst Facility, Amherst County, Virginia
- Blue Ridge Regional Jail — Halifax Facility Renovations and Addition, Halifax County, Virginia
- Fluvanna Correctional Center for Women, Fluvanna County, Virginia
- Powhatan Correctional Center Pre-planning Study, Powhatan County, Virginia
- Chesterfield County Jail Planning Study, Chesterfield County, Virginia
- Northampton County Jail Planning Study, Eastville, Virginia
- Wythe County Jail Planning Study, Wythe County, Virginia
- Halifax County Jail Planning Study, Halifax County, Virginia
- Calvert County Detention Center Feasibility Study, Barstow, Maryland
- Charles County Jail Needs Assessment, Charles County, Maryland
- Blue Ridge, Appomattox, Amherst Regional Jail Planning Study, Amherst County, Virginia
- Rockbridge Regional Jail Community-Based Corrections Plan and Planning Study, Lexington, Virginia
- Federal Correctional Institution, Petersburg, Virginia
- Federal Correctional Institution, Butner, North Carolina
- Open-end Contract for A/E Services - Various Projects, Virginia Department of Corrections

# STAFF AND RESOURCES

## ***William G. Porter, PE, DBIA, Vice President, Co-Project Manager - Operations / Client Management***

Over the last 15 years, William Porter has served as a principal, project manager, project engineer, and mechanical engineer for renovations and new design of corrections facilities, courthouses, law enforcement, and other public safety buildings. With knowledge and experience in multi-disciplined architecture, engineering, master planning, and design at local, state, and federal levels, Bill applies thorough quality control and management to each project

Bill has a comprehensive background in design and implementation of security features in corporate, governmental, and institutional facilities. This experience includes electronic security (Tempest) red/black wiring, and sensitive compartmented information facilities (SCIF) for various clients.

His work includes the design of heating, ventilating, and air conditioning (HVAC) systems, with consulting and design work for energy conservation, as well as the use of alternative energy sources

Bill also has extensive experience in the design and engineering of buildings for computer and technical services; offices, laboratories, educational and cultural centers; as well as hospitals, industrial facilities, and museums.

### Education:

Bachelor of Science/Business Administration/1974

Bachelor of Science/Engineering Science/1978

### Affiliations:

American Society of Mechanical Engineers

American Society of Heating, Refrigeration and Air Conditioning Engineers

National Society of Professional Engineers

Virginia Society of Professional Engineers

### Registrations:

Professional Engineer in the following states: AL, AR, AZ, CA, DE, GA, IL, IN, KS, KY, MD, MI, MS, NH, OH, PA, SC, TN, UT, VA, WA, and WV

### Representative Projects

- New River Valley Regional Jail, Dublin, Virginia
- Loudoun County Adult Detention Center Phase II, Loudoun County, Virginia
- North Carolina Department of Corrections Infirmaries Study, North Carolina
- Northwest Regional Adult Detention Center Pod 3 Addition Planning Study & Design, Winchester, Virginia
- CFFW Community Corrections Center Planning Study & Design, Winchester, Virginia
- Deep Meadows Correctional Center, MSD 5 Guard Tower Design, Powhatan County, Virginia
- Kane County Adult Detention Center, Geneva, Illinois
- Macomb County Jail Addition, Mount Clemens, Michigan
- Western Virginia Regional Jail, Salem, Virginia
- Gwinnett County Detention Center Expansion Design, Lawrenceville, Georgia
- Southwest Virginia Regional Jail Facilities, Abingdon, Virginia; Duffield, Virginia; Haysi, Virginia

## STAFF AND RESOURCES

### ***William G. Porter, PE, DBIA, Vice President, Co-Project Manager - Operations / Client Management***

#### Representative Projects (continued)

- Roanoke County Regional Jail Planning Study, Roanoke, Virginia
- Southside Regional Jail Community Based Corrections Plan, Planning Study & Design, Greensville County, Virginia
- Pre-Release Addition Design Fairfax County Adult Detention Center, Fairfax, Virginia
- Norfolk Chilled Water Storage / Boiler Plant & Distribution Design Serves City Hall, Jail & Courts complex, Norfolk, Virginia
- Master Mechanical/Electrical Plan (Includes Jail Facilities), City of Norfolk, Virginia
- Northampton County Jail Addition Design, Jackson, North Carolina
- Bennettsville Federal Correctional Institution, Federal Prison Camp & Firing Range Design, Bennettsville, South Carolina
- Bland Correctional Center Visitation Center Design, Bland County, Virginia
- Boiler Replacement, Virginia Correctional Center for Women Design, Virginia Department of Corrections, Goochland, Virginia
- Cellhouse Design, US Penitentiary, Marion, Illinois
- Federal Correctional Institution, Federal Prison Camp & Firing Range Design, Williamsburg County, Salters, South Carolina
- Federal Correctional Institution UNICOR Fit-Out, Federal Bureau of Prisons, Herlong, California
- Hampton Jail Renovation Study, Hampton, Virginia
- Ft. Leavenworth Regional Correctional Facility Design, US Army Corps of Engineers, Kansas City District, Leavenworth, Kansas
- Rivers Correctional Institution Design, Federal Bureau of Prisons, Winston, North Carolina
- United States Penitentiary & Prison Camp, Federal Bureau of Prisons, Tucson, Arizona
- Western Virginia Regional Jail, Western Virginia Regional Jail Authority, Salem, Virginia

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## STAFF AND RESOURCES

### ***Taylor M. Muniz, AIA, LEED<sup>ap</sup>, Vice President, Project Manager - Production***

Taylor has almost 30 years of experience in architectural design and specializes in correctional facility design. Services he has provided include management, plan development, contract bidding and award, construction and post construction phase management, construction administration for multiple bid package contracts, supervision of construction management staff, and claims control. He has proven to be a highly effective Project Manager providing coordination of all A/E requirements, including integration of the design, engineering, and specialty consultant deliverables into the construction documents for large complex prison projects. Taylor is a U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED<sup>®</sup>) Accredited Professional.

#### Representative Projects

- Green Rock Correctional Center, Pittsylvania County, Virginia
- Pocahontas Correctional Center, Tazewell County, Virginia
- Sussex Maximum Security Institutions Nos. I & II, Sussex County, Virginia
- Deerfield Correctional Center Expansion & Renovations, Capron, Virginia
- Mt. Rogers Correctional Center, Grayson County, Virginia
- Middle River Regional Jail, Verona, Virginia
- Halifax County Jail Planning Study, Halifax County, Virginia
- James River Correctional Center, Powhatan County, Virginia
- Riverside Regional Jail, City of Hopewell, Virginia
- Riverside Regional Jail 480-Bed Expansion, City of Hopewell, Virginia
- Richmond City Jail Planning Study, Richmond, Virginia
- Fluvanna Correctional Center for Women, Fluvanna County, Virginia
- Federal Correctional Institution, Petersburg, Virginia
- Federal Correctional Institution, Butner, North Carolina
- Federal Correctional Institution, Hazelton, West Virginia
- Navy Joint Regional Correctional Facility, United States Navy
- Open-end Contract for A/E Services - Various Projects, Virginia Department of Corrections

#### Education:

B.A./Geology/1979  
M.A./Architecture/1983

#### Affiliations:

American Institute of Architects

#### Registrations:

LEED<sup>®</sup> Accredited Professional  
Architect/NC/2002  
Architect/WV/1999  
Architect/VA/1998  
Architect/UT/1985  
NCARB/1999



## STAFF AND RESOURCES

### ***Lewis E. Campbell, AIA, LEED<sup>ap</sup>, Senior Associate, Project Architect***

Lewis has over 30 years of experience with detention/correctional projects, as well as judicial and educational projects. He is experienced in the architectural development of projects, coordinating and maintaining direct lines of communication, developing and enforcing adherence to project criteria, and maintaining quality, schedule, and cost. Lewis has been responsible for programming, schematic design, design development, construction documents, bidding and negotiation, construction administration, and shop drawing review.

#### Representative Projects

- Sussex Maximum Security Institutions Nos. I & II, Sussex County, Virginia
- Deerfield Correctional Center Expansion & Renovations, Capron, Virginia
- Mt. Rogers Correctional Center, Grayson County, Virginia
- Fluvanna Correctional Center for Women, Fluvanna County, Virginia
- Middle River Regional Jail, Verona, Virginia
- Botetourt-Craig Counties Public Safety Building and Jail, Fincastle, Virginia
- Richmond City Jail Planning Study, Richmond, Virginia
- Federal Correctional Institution, Petersburg, Virginia
- Federal Correctional Institution, Butner, North Carolina
- Navy Joint Regional Correctional Facility, United States Navy

#### Education:

B.A./Architecture/1975

#### Affiliations:

American Institute of Architects

#### Registrations:

LEED® Accredited Professional

Architect/VA/1984

Architect/WV/1978

Architect/NC/1984

Architect/MD/1991

NCARB/1981

## STAFF AND RESOURCES

### ***Dale J. Horton, AIA, Senior Associate, Senior Security & Detention Design Specialist***

Dale is a specialist in the design, specification, selection, and operation of security hardware and electronics, and directs the design of security systems for our clients. His 27 years of experience in security, criminal justice, and detention/corrections architecture, includes over 75 completed criminal justice projects.

Throughout his career, Dale has single-handedly designed, selected, and specified components, managed shop drawings, and implemented the Integrated Security System Controls for various project types that include correctional/detention, judicial, public safety and educational facilities.

Dale has been a featured lecturer and panelist at various American Correctional Association (ACA) and American Jail Association (AJA) conferences, and is an active participant on the ASTM F33 Committee for Testing of Detention Equipment and Materials. Dale works closely with clients to select systems that are durable, maintenance-friendly, and that meet their specific security requirements.

#### Representative Projects

- Green Rock Correctional Center, Pittsylvania County, Virginia
- Pocahontas Correctional Center, Tazewell County, Virginia
- Botetourt-Craig Counties Public Safety Building and Jail, Fincastle, Virginia
- Alleghany Regional Jail and Sheriff's Office, Covington, Virginia
- 154-Bed Replacement Jail Needs Assessment and Design, Chesterfield County, Virginia
- Northern Neck Regional Jail Addition, Warsaw, Virginia
- Middle River Regional Jail, Verona, Virginia
- Wythe County Jail Planning Study, Wythe County, Virginia
- Southampton Correctional Center, 100-Bed Maximum Security Unit, Capron, Virginia
- Deep Meadow Correctional Center Special Housing Unit, Powhatan, Virginia
- Fluvanna Correctional Center for Women, Fluvanna County, Virginia
- Maximum Security Institutions, Nos 1 and 2, Sussex County, Virginia
- Medium Security Correctional Center, New Kent County, Virginia
- Richmond Juvenile Detention Center, Richmond, Virginia
- Numerous Security Upgrades, Virginia Department of Corrections

#### Education:

B.A./Architecture/1976  
Associate Civil Engineering/1974

#### Affiliations:

American Institute of Architects  
AIA Committee on Architecture for Justice  
VA Correctional Association  
American Correctional Association  
American Jail Association  
VA Sheriff's Association  
ASTM Member, Committee on F33  
- Testing for Detention Equipment and Materials

#### Registrations:

Architect/IL/1982

# STAFF AND RESOURCES

**Dale J. Horton, AIA, Senior Associate, Senior Security & Detention Design Specialist**

Representative Projects (continued)

- Substance Abuse Treatment Facility, Indian Creek Correctional Center Indian Creek, Chesapeake, Virginia
- Buncombe County Detention Center, Buncombe County, North Carolina
- Shenandoah Valley Juvenile Detention Center Needs Assessment and Design, Verona, Virginia
- Blue Ridge Juvenile Detention Center Planning Study and Design, Albemarle County, Virginia
- Newport News Juvenile Detention Center, Newport News, Virginia
- North Carolina State Legislative Campus Security Design, Raleigh, North Carolina
- Camille Griffin Graham Reception and Evaluation Housing Unit, Columbia, South Carolina
- Calvert County Detention Center Feasibility Study, Barstow, Maryland
- Public Safety Building Expansion, City of Colonial Heights, Virginia
- Western District Police Station, Prince William County, Virginia
- Downtown Police Precinct, City of Suffolk, Virginia
- Police Headquarters, City of Fairfax, Virginia
- Virginia State Police and Department of Emergency Management Combined Headquarters and Emergency Operations Center, Richmond, Virginia
- Richmond Police Headquarters, City of Richmond, Virginia

# STAFF AND RESOURCES

## *Jason P. Forsyth, P.E., LEED<sup>ap</sup>, Senior Associate, Mechanical Engineer*

Jason has almost ten years of experience as a mechanical engineer performing various tasks, including calculation of HVAC loads, design of mechanical systems, and production of construction documents and specifications for projects of varying scale and complexity. He also has experience surveying and assessing existing mechanical systems. As a U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Development (LEED<sup>®</sup>) Accredited Professional, Jason is committed to creating facilities that are energy efficient employing a number of strategies to reach this goal including eliminating unnecessary first cost and energy waste.

### Representative Projects

- Riverside Regional Jail 180-Bed Pre-Release Center Expansion, Hopewell, Virginia
- Riverside Regional Jail Maintenance Facility, Hopewell, Virginia
- Riverside Regional Jail Utilities Study, Hopewell, Virginia
- Blue Ridge Regional Jail — Amherst Facility, Amherst County, Virginia
- Blue Ridge Regional Jail — Halifax Facility Renovations and Addition, Halifax County, Virginia
- Botetourt-Craig Counties Public Safety Building and Jail, Fincastle, Virginia
- 154-Bed Replacement Jail, Chesterfield County, Virginia
- Deerfield Correctional Facility Expansion and Renovations, Emporia, Virginia
- Open-end Contract for A/E Services - Various Projects, Virginia Department of Corrections
- Western District Police Station Study/Design, Prince William County, Virginia
- Community Development Customer Service Building, Chesterfield County, Virginia
- New Administration Building, Isle of Wight County, Virginia
- City Hall Expansion and New Police Station, City of Fairfax, Virginia
- Caroline County Courthouse Renovation and Expansion, Caroline County, Virginia
- Smith-Wagner Building Expansion and Space Needs Analysis and Design, Social Services & Health Department, Chesterfield County, Virginia

### Education:

B.S./Mechanical Engineering/ 1999

### Registrations:

LEED<sup>®</sup> Accredited Professional  
Professional Engineer/VA/2004

# STAFF AND RESOURCES

**David K. Lockwood, P.E., LEED<sup>ap</sup>, Vice President, Director of Electrical Engineering**

David has over 20 years experience in the engineering field 16 of which have been dedicated to electrical engineering. His broad experience ranges from the development of drafting and CAD Standards Manuals to serving as electrical engineering project manager following his designs from conceptual stage through to completion.

In addition to project management, David's general qualifications include site investigation, power systems design, communication system design, interior and site lighting design, emergency power systems, fire alarm system design, and plumbing and HVAC duct design. He is experienced in shop drawing review and construction inspections and work-in-progress evaluations.

Representative Projects

- Blue Ridge Regional Jail — Amherst Facility, Amherst County, Virginia
- Blue Ridge Regional Jail — Halifax Facility Renovations and Addition, Halifax County, Virginia
- Botetourt-Craig Counties Public Safety Building and Jail, Fincastle, Virginia
- 154-Bed Replacement Jail, Chesterfield County, Virginia
- Green Rock Correctional Center, Pittsylvania County, Virginia
- Pocahontas Correctional Center, Tazewell County, Virginia
- Open-end Contract for A/E Services - Various Projects, Virginia Department of Corrections
- Western District Police Station, Prince William County, Virginia
- Police Headquarters, City of Fairfax, Virginia
- Police Headquarters, City of Fredericksburg, Virginia
- Municipal Facility, Farmville, Virginia
- Police Administration Building, City of Suffolk, Virginia
- Caroline County Courts Renovation and Expansion, Bowling Green, Virginia
- Bedford County Government Facility Master Plan, Bedford, Virginia
- Surry County Courts Complex, Surry County, Virginia
- Community Development Customer Service Building, Chesterfield County, Virginia

Education:

M.S./2001/Electrical Engineering  
B.S./2000/Electrical Engineering  
B.A./1989/Art History

Affiliations:

Virginia National Society of  
Professional Engineers  
Institute of Electrical and  
Electronics Engineers

Registrations:

LEED® Accredited Professional  
Professional Engineer/VA/2002

## STAFF AND RESOURCES

### **Stephen M. Jones, P.E., LEED<sup>ap</sup>, Vice President, Director of Structural Engineering**

Steve will be the Structural Engineer for your project. He is the Director of Structural Engineering for the firm and brings over 25 years of experience to your project. His experience includes a wide range of detention/corrections projects of varying cost and complexity. He is experienced with new construction as well as various rehabilitation and restoration projects, historic preservation, and investigations and condition surveys of existing structures. Steve will lead the structural engineering team in the implementation, production, timely coordination, and completion of all structural elements of your project.

Steve and his staff have a strong track record of producing successful projects in collaboration with our architects. Close coordination between the architect and the structural engineer from project conception through final design is a key to this success. Under Steve's direction, our structural engineering staff provides cost effective design solutions for a variety of structures and building types.

#### Representative Projects

- Riverside Regional Jail 180-Bed Pre-Release Center Expansion, City of Hopewell, Virginia
- Blue Ridge Regional Jail — Amherst Facility, Amherst County, Virginia
- 154-Bed Replacement Jail, Chesterfield County, Virginia
- Riverside Regional Jail 480-Bed Expansion, City of Hopewell, Virginia
- Crater Criminal Justice Training Academy, Disputanta, Virginia
- Mt. Rogers 1038-Bed Medium Security Facility, Grayson County, Virginia
- Shenandoah Valley Juvenile Detention Center, Staunton, Virginia
- Blue Ridge Juvenile Detention Center, Albemarle County, Virginia
- Maximum Security Juvenile Detention Center Special Inspections, Culpeper County, Virginia
- Chesterfield County Juvenile Detention Home Renovation and Expansion, Chesterfield, Virginia
- Open-End Contract Services, Virginia Department of Corrections — Statewide
- Western District Police Station, Prince William County, Virginia
- Police Headquarters, City of Fairfax, Virginia

#### Education:

M.S./2001/Electrical Engineering  
B.S./2000/Electrical Engineering  
B.A./1989/Art History

#### Affiliations:

Virginia National Society of  
Professional Engineers  
Institute of Electrical and  
Electronics Engineers

#### Registrations:

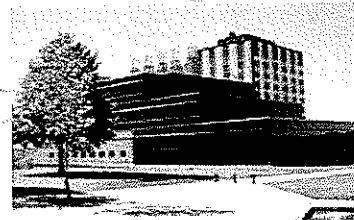
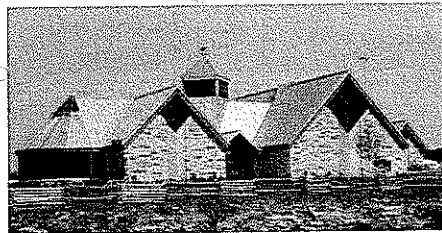
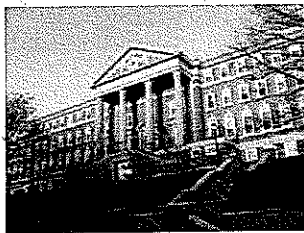
LEED® Accredited Professional  
Professional Engineer/VA/2002

**Firm Profile**ALPHA ASSOCIATES  
INCORPORATED  
2010**Firm Profile**

Alpha Associates, Incorporated

**Firm Name:** Alpha Associates, Incorporated**Corporate Office:** 209 Prairie Avenue  
Morgantown, West Virginia 26501**Eastern Regional Office:** 535 West King Street  
Martinsburg, West Virginia 25401**Incorporated:** 1969; Morgantown, West Virginia**Firm Principals:** Richard A. Colebank, PE, PS; President and COO  
Richard W. Klein, PE, PS; Chairman and CEO  
William A. Atwell, Jr., PE; Senior Vice President  
James A. Davison, AIA; Vice President  
Charles B. Luttrell, PE; Principal  
Steven V. Buchanan, PE, PS; Principal  
Matthew S. Breakey, AIA; Principal  
Charles B. Branch, PE; Principal

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**Number of Employees:** 34 Employees

Alpha Associates, Incorporated was established in 1969 and since that time has completed hundreds of projects throughout Morgantown and the state of West Virginia. Alpha's Corporate Office is located in Morgantown with our Eastern Regional Office located in Martinsburg.



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## Firm Profile

ALPHA ASSOCIATES  
INCORPORATED  
2010



## Firm Profile

Alpha Associates, Incorporated

Alpha Associates, Incorporated is an Architectural and Engineering firm that provides services in the areas of Architectural Design, Civil Engineering, Structural Engineering, Interior Design, Landscape Design, Construction Administration, Project Management, and Surveying.

Since 1969, Alpha has provided Architecture and Engineering services to clients such as West Virginia University, Monongalia County Commission, Federal Bureau of Prisons, West Virginia Department of Transportation, Public Service Districts throughout West Virginia, Development Authorities, West Virginia School Building Authority, the U.S. Postal Service and US Department of Energy National Technology Laboratory, and many others. Our work is diverse and includes clients in commercial, educational and governmental facilities, developers and private organizations. Alpha's architects and engineers have recent, relevant project experience that enables your projects to be completed on time and within budget.

Alpha employs a staff of 34 Architects, Engineers, Surveyors and Administrative personnel. Our staff is large enough to handle any size project, yet small enough to provide the personal detail and supervision to successfully complete your project. Our staff is committed to working with an established project time frame and budget. 41

Alpha Associates, Incorporated is a professional organization dedicated to providing superior service to our clients. During our 41 years of experience, we have consistently provided quality projects that exceed the needs of our clients.



ARCHITECTS • ENGINEERS • SURVEYORS





**RICHARD A. COLEBANK, PE, PS**  
PRESIDENT AND CHIEF  
OPERATING OFFICER  
rcolebank@alphaaec.com

## SUMMARY

Mr. Colebank is President and Chief Operating Officer of the firm. Mr. Colebank has been with Alpha Associates, Incorporated since 1985. He began his career with Alpha as a staff engineer and progressed through the ranks from Project Manager to his current position. Mr. Colebank has worked with diverse clients such as West Virginia University, City of Morgantown, The West Virginia Division of Highways, WVU Foundation and the Morgantown Municipal Airport, as well as numerous private clients. Since 1988, Mr. Colebank has been the Principal-in-Charge of many of the Civil Engineering projects developed at Alpha. In his current capacity, Mr. Colebank provides financial and administrative guidance for the day-to-day operations of the company while continuing to manage Civil Engineering Projects.

## PROFILE

Broad-based responsibilities in the following areas:

- Project Management
- Business Operations and Financial Management
- Quality Assurance/Quality Control
- Civil Engineering Project Management and Design
- New Business Development

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## PROFESSIONAL HIGHLIGHTS

### Transportation Projects:

- Morgantown Municipal Airport-IDIQ Contract; Morgantown, WV
- Route 10 Relocation; Wyoming County, WV
- South High Street Bridge Replacement; Morgantown, WV
- Blackshere Bridge Replacement; Mannington, WV
- Lewis County High School Access Road and Bridge; Weston, WV
- University Avenue/Stadium Loop; Morgantown, WV
- West Buckeye Bridge; Blacksville, WV

### Civil Engineering Projects:

- Monongalia General Hospital; Morgantown, WV
- WVU Research Park; Morgantown, WV
- West Virginia Medal of Honor Recipients Plaza; Hazelton, WV
- West Virginia Division of Highways I-77 Welcome Center; Williamstown, WV
- West Virginia High Technology Consortium Site Work; Fairmont, WV
- Greystone on the Cheat through Phase II; Morgantown, WV



**Indefinite Delivery/Indefinite Quantity Contracts:**

- Morgantown Municipal Airport Open End Contract; Morgantown, WV
- West Virginia Division of Highways Open End Contract; State of WV
- National Energy Technology Laboratories; Morgantown, WV
- West Virginia University Open End Contract; State of WV

**EMPLOYMENT HISTORY**

**PRIVATE INDUSTRY:** 1985 – Present Alpha Associates, Incorporated  
1983 – 1985 Charles Townes and Associates, P.C.

**CORPS OF ENGINEERS:** 1983 US Army Corps of Engineers

**EDUCATION**

**GRADUATE:** West Virginia University  
Masters – Business Administration; 1999

**UNDERGRADUATE:** West Virginia University  
BS – Civil Engineering; 1982

**QUALIFICATIONS**

**LICENSE:** Professional Engineer:  
West Virginia, Pennsylvania, Maryland, Virginia,  
Professional Surveyor:  
West Virginia  
Certified Private Pilot

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**AFFILIATIONS**

**PROFESSIONAL:** Former NSPE/PEPP Governor of WV  
ACEC/WV; Former President and Current National Director

**CIVIC:** University High School Foundation; Charter Member; Current  
President  
Morgantown Area Chamber of Commerce; Past Chairman  
Monongalia County MPO Technical Advisory Committee;  
Member  
Morgantown Area Economic Partnership; Member  
University High School Athletic Field Committee





**CHARLES B. LUTTRELL, PE, SECB**

PRINCIPAL  
PROFESSIONAL ENGINEER  
STRUCTURAL

cluttrell@alphaaec.com

## SUMMARY

Mr. Luttrell has worked with Alpha Associates, Inc. since 1996. He is the chief structural engineer for Alpha on all projects at Alpha. Before coming to Alpha, Mr. Luttrell's graduate work resulted in several contributions to the cold-formed steel deck industry. His new method of analysis for non-uniform loads on composite concrete and cold-formed steel decks has been made a permanent part of the *Steel Deck Institute's* design manual. Mr. Luttrell also worked on projects that involved pre-stressed timber bridge research with the West Virginia University Constructed Facilities Center. Since coming to Alpha, Mr. Luttrell has had a significant involvement in the effort to begin utilizing modern composite materials in practical bridge applications. Two recent Alpha bridge projects have been designed using these innovative materials.

## PROFILE

Broad-based responsibilities in the following areas:

- Bridge Structural Design and Analysis
- Innovative Bridge Materials Applications
- Building Structural Design and Analysis
- Historical Restoration and Evaluations

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## PROFESSIONAL HIGHLIGHTS

### STRUCTURAL ENGINEER:

- Hazel Ruby McQuain Amphitheater Roof, Morgantown, WV
- West Buckeye Bridge, Core, WV
- South Jefferson High School, Charles Town, WV
- WVU Coliseum Asbestos Abatement Project (Scaffolding Design and Dome Structural Inspection); Morgantown, WV
- Morgantown Airport Air Rescue and Firefighting Building; Morgantown, WV
- WVU Coliseum Scoreboard Hoist Project; Morgantown, WV

### PROJECT MANAGER:

Bridge Design:

- Blackshere Bridge; Mannington, WV
- South High Street Bridge; Morgantown, WV
- Market Street Bridge; Wheeling, WV
- West Buckeye Bridge; Core, WV
- Simpson Creek Covered Bridge; Marion County, WV
- Fletcher Covered Bridge; Marion County, WV
- Elkins Bypass, Spur A Bridge; Elkins, WV



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**CHARLES B. LUTTRELL, PE, SECB**

PRINCIPAL  
PROFESSIONAL ENGINEER  
STRUCTURAL

cluttrell@alphaaec.com

## EMPLOYMENT HISTORY

**PRIVATE INDUSTRY:** 1996 – Current Alpha Associates, Incorporated  
1995 – 1996 Larry D. Luttrell, PE, Ph D  
1991 – 1994 West Virginia University  
1990 – 1991 WVU Constructed Facilities Center

## EDUCATION

**GRADUATE:** West Virginia University  
MS – Structural Engineering; 1995

**UNDERGRADUATE:** West Virginia University  
BS – Civil Engineering; 1993

## QUALIFICATIONS

**LICENSE:** Professional Engineer:  
West Virginia, Maryland, Pennsylvania

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## AFFILIATIONS

**PROFESSIONAL:** West Virginia Society of Professional Engineers  
National Society of Professional Engineers  
Chi Epsilon; Member  
American Concrete Institute; Member  
Structural Engineering Certification Board

## RESEARCH EXPERIENCE

**STRUCTURAL:** Cold Formed Steel Deck Research

- Fastener failures
- Edge conditions/failures
- Buttoned overlap shear failures

Composite Cold Formed Steel and Concrete Deck Research

- Line load behavior/failures
- Concentrated load behavior/failures
- Web crippling
- Punch failures





**MATTHEW S. BREAKEY, AIA,  
LEED-AP**  
PRINCIPAL  
ARCHITECT  
mbreakey@alphaaec.com

## SUMMARY

Mr. Breakey began working at Alpha in 1998, and became a principal of the firm in 2004. Mr. Breakey has gained experience through working as a Project Manager on major capital construction projects throughout West Virginia. He deals with projects from schematic design to project close out.

## PROFILE

Broad-based responsibilities in the following areas:

- Architectural Design
- Construction Administration
- Contract Negotiations
- New Business Development

## PROFESSIONAL HIGHLIGHTS

### Higher Education Projects:

- Potomac State College, ADA Connector Link; Keyser, WV
- WVU Engineering Sciences Building East Wing Renovation/Addition; Morgantown, WV
- WVU Engineering Sciences Building 10<sup>th</sup> Floor Renovation; Morgantown, WV
- WVU Engineering Science Building Nano/Microtechnology Lab; Morgantown, WV
- WVU Alfred F. Galli Laboratory Renovations; Morgantown, WV

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### K-12 Education Projects:

- Washington High School, Charles Town, WV
- Pocahontas County High School Science Wing Renovation/Addition; Marlinton, WV
- Buckhannon Upshur Middle School Roof Replacement; Buckhannon, WV
- Buckhannon Upshur Middle School HVAC Upgrades; Buckhannon, WV
- Slanesville Elementary School Addition; Hampshire County, WV
- Petersburg High School Science Lab Renovation; Petersburg, WV

### Miscellaneous:

- Clear Mountain Bank, Reedsville Branch; Reedsville, WV
- BC Bank Renovation/Addition, Philippi Branch; Philippi, WV
- Clear Mountain Bank, Oakland Branch; Oakland, MD
- Fairmont Federal Credit Union, Charles Pointe Branch; Bridgeport, WV
- Robert C. Byrd Health Sciences Center SRP Lab Renovation; Morgantown, WV



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- Upshur County Senior Opportunity Center Renovation and Addition; Buckhannon, WV
- Summersville Municipal Building; Summersville, WV
- Hart Field Air Rescue Fire Fighting Building; Morgantown, WV
- Brucefon Bank, Sabraton Branch; Morgantown, WV
- Camp Dawson Billeting Facilities; Kingwood, WV

**EMPLOYMENT HISTORY**

<b>PRIVATE INDUSTRY:</b>	1998 – Current	Alpha Associates, Incorporated
	1994 – 1998	West Virginia University Physical Plant Engineering and Construction
	1992 – 1994	West Virginia University Facilities Planning Management

**EDUCATION**

<b>UNDERGRADUATE:</b>	Pennsylvania State University
	Bachelor of Architecture; 1992
	Bachelor of Science in Architecture; 1991

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**QUALIFICATIONS**

<b>LICENSE:</b>	Registered Architect; West Virginia; Maryland
	NCARB Certified
	Leadership in Energy and Environmental Design Accredited Professional

**AFFILIATIONS**

<b>PROFESSIONAL:</b>	American Institute of Architects
	West Virginia Society of Architects
	The Council of Educational Facility Planner International
	U.S. Green Building Council

<b>CIVIC:</b>	Main Street Morgantown Board of Directors; Past President
	Main Street Morgantown Design Committee; Member
	Chestnut Ridge Park Board; Past President



## Architectural Case Studies

### Project Description

#### Federal Bureau of Prisons Hazelton, WV

Alpha Associates, Incorporated is the Architect of Record for a new medium security men's prison to be located in Hazelton, West Virginia. Alpha is part of the Design-Build team with Hensel-Phelps Construction and Mosley Architects. The prison is being constructed for the Federal Bureau of Prisons.

Alpha is providing architectural design and structural engineering services for the three buildings "outside of the fence": 19,285 sq. ft. Administration Building, 13,805 sq. ft. Utility Plant and 603 sq. ft. Wastewater Plant as well as Architect of Record for the entire project.

Alpha's services also include surveying the site and construction administration for "outside the site" buildings. Alpha will also be providing full time representation on-site during the construction period. The size and schedule of this project require multiple design and construction packages and significant coordination and review not only internally with the team but also with the Federal Bureau of Prisons and the technical design guidelines that govern the design and construction of the facility.

#### At A Glance...

- 1 Client:  
Hensel-Phelps  
Construction
- 2 Location:  
Hazelton WV
- 3 Completion Date:  
Est. 2011
- 4 Size:  
Multiple Buildings
- 5 Total Contract:  
Estimate \$160 Million



## Architectural Case Studies

### Project Description

#### **Parkersburg Armory Parkersburg, West Virginia**

Alpha continues their relationship with the West Virginia Army National Guard with the renovation of a space currently designated as a rifle range at the Parkersburg Armory.

New offices, conference room, and break room provides new work space for officers. A secondary entrance is included in the design to serve the department that will occupy this space.

A fire alarm upgrade for the entire building is also included in the project scope as well as an alternate for an access control system and mass notification system.

#### **At A Glance...**

- 1 Client:  
WV Army National Guard
- 2 Location:  
Parkersburg WV
- 3 Completion Date:  
2009
- 4 Size:  
2400 sq. ft. renovation  
200 sq. ft. addition
- 5 Construction Cost:  
\$400,000





## Architectural Case Studies

### Project Description

#### Monongalia Family Court Morgantown, WV

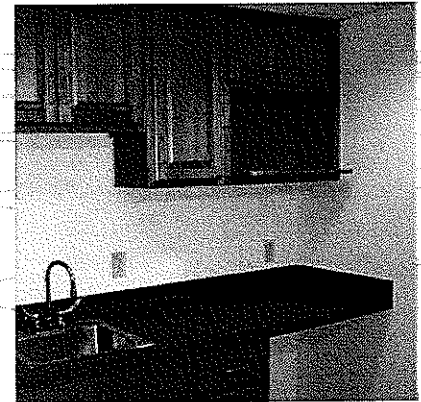
The new facility for the Monongalia Family Court was created from a space that had previously been home to the County's Senior Center and provided storage for the County's voting machines. The challenges of creating a Family Court in a windowless mezzanine, while providing a design that would respect the dignity of the Court was successfully executed by Alpha Associates.

The layout of the space provided separate areas for the judiciary staff and the litigants before the court. The finish materials had to be durable and attractive, while at the same time easy to maintain. Low ceilings and an inadequate and outdated heating and air-conditioning system was another challenge. One that was overcome by incorporating the ductwork layout into the design of the lighted bulkheads in the courtroom, thereby creating the illusion of higher ceilings, and allowing the Judge to preside over the hearings from a position of height and dignity.

The transformation occurred in 60 days of construction time.

#### At A Glance...

- 1 Client:  
Monongalia County  
Commission
- 2 Location:  
Morgantown, WV
- 3 Completion Date:  
2009
- 4 Size:  
5000 square feet
- 5 Construction Cost:  
\$550,000



**Architectural Case Studies**

Project Description

**Monongalia County Operations Center  
Morgantown, WV**

Alpha Associates, Incorporated provided architectural design, civil and structural engineering, and surveying services for this new building that will house the Monongalia County Sheriff's Department.

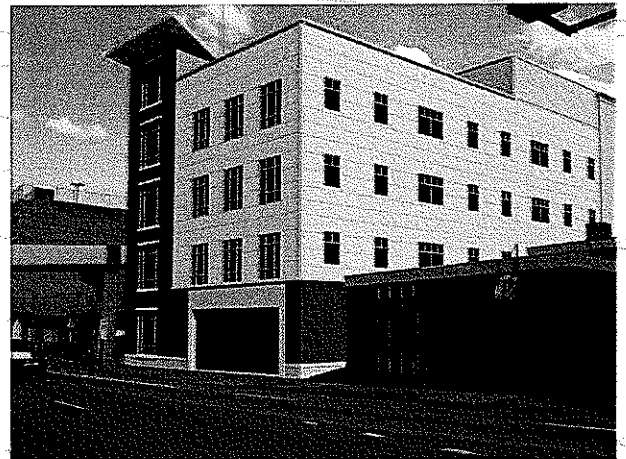
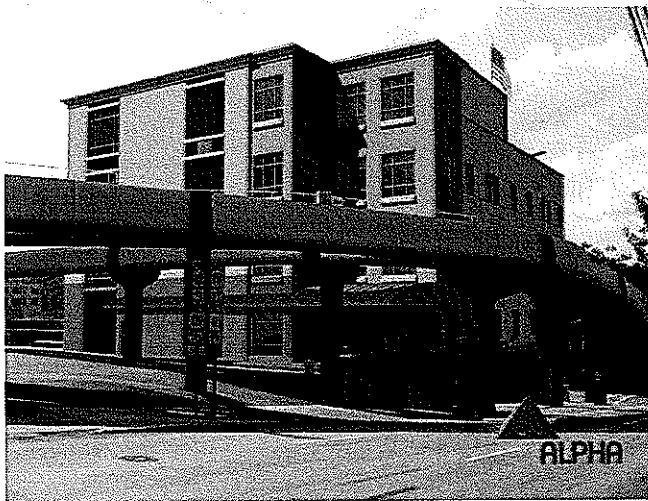
Site constraints and adjacent overhead structures made the development and construction of the project very challenging.

The building was designed as a 4-story building with the option to add two additional stories

The ground floor will include the sheriff's department, evidence room, and several bailiff rooms. The remaining floors are designed to house flexible office space.

**At A Glance...**

- 1 Client:  
Monongalia County Commission
- 2 Location:  
Morgantown, WV
- 3 Completion Date:  
Est. 2011
- 4 Size:  
60,078 sq. ft.
- 5 Construction Cost:  
Estimate \$9 Million





**CTL Engineering Inc.**

# Professional Services

*Established 1927*

## Analytical Chemistry

- ◆ Soil
- ◆ Water
- ◆ Oils
- ◆ Sludges
- ◆ Solid and Hazardous Wastes
- ◆ Liquid and Solid Fuels
- ◆ Metals
- ◆ Organics
- ◆ Construction Materials

## Construction Inspection

- ◆ Soils, Concrete, Asphalt, Masonry, Fireproofing, and Steel
- ◆ Single and Multi-Story Structures
- ◆ Pavement for Streets, Airports, Etc.
- ◆ Embankments, Fill, Cut, Etc.
- ◆ Earth and Concrete Dams
- ◆ Pre and Post Construction Inspection
- ◆ Floor Flatness

## Drafting Services

- ◆ AutoCad
- ◆ Microstation
- ◆ Digitizing

## Environmental

- ◆ Site/Facility Assessment
- ◆ Hydrogeologic Studies and Aquifer Characterization
- ◆ Site Remediation
- ◆ Site Abandonment and Closure Planning
- ◆ Permit Preparation
- ◆ Underground Storage Tank Management
- ◆ Wellhead Protection
- ◆ Asbestos Survey
- ◆ Abatement Monitoring
- ◆ Wetlands Delineation
- ◆ Wetlands Mitigation
- ◆ Wetlands Permitting

## Existing Structure Evaluation

- ◆ Bridges/Buildings
- ◆ Sonic Velocity Testing
- ◆ Delamination Determination
- ◆ Half Cell Potential Tests

## Facilities Management

### -Pavement

- ◆ Condition Assessment
- ◆ Maintenance & Rehabilitation Strategies
- ◆ Prioritization
- ◆ Deterioration Rates
- ◆ Network Needs & Long Range Goals
- ◆ Budgeting

## Forensic Science

- ◆ Landslide, Soils and Foundation Failures
- ◆ Building Failures
- ◆ Product Liability Investigations
- ◆ Accident Reconstruction
- ◆ Roofing Failures
- ◆ Product Failures
- ◆ Legal Testimony

## Geotechnical

- ◆ Site Selection
- ◆ Subsurface Exploration – Drilling Services
- ◆ Foundation Analysis & Design
- ◆ Embankment & Earth Dam Analysis
- ◆ Slope Stability Analysis
- ◆ Hydrogeologic Studies
- ◆ Bridges
- ◆ Pavement Design

## Materials Testing

- ◆ Concrete
- ◆ Soils and Rock
- ◆ Aggregates
- ◆ Concrete and Asphalt Mix Designs
- ◆ Bituminous Materials
- ◆ Clay and Masonry Products
- ◆ Petrographic Studies

## Metallurgy

- ◆ Fracture Analysis
- ◆ Metallography
- ◆ Application Recommendations
- ◆ Failure Analysis
- ◆ Corrosion studies
- ◆ Tensile and Hardness

## Mining Engineering

- ◆ Mine Reclamation Design
- ◆ Permit Preparation
- ◆ Mine Plan Design
- ◆ Refuse Disposal Design
- ◆ Drainage Control Structures
- ◆ Environmental Monitoring
- ◆ Subsidence Investigations

## Nondestructive Testing & Inspection

- ◆ X-ray Radiology
- ◆ Ultrasonic Inspections
- ◆ Magnetic Particle Inspection
- ◆ Liquid Penetrant Inspection
- ◆ Specialized Inspection / Test Programs
- ◆ Level III Services

## Product Testing

- ◆ Consumer Product Testing
- ◆ Mechanical and Physical Property Testing
- ◆ Hydrostatic Testing
- ◆ Load and Strength Testing
- ◆ Mechanical Engineering Design and Analysis
- ◆ Pressure Gauge Calibration

## Roofing Engineering Services

- ◆ Design & Construction Administration (Plans and Specifications)
- ◆ Quality Control/ Roof Inspection
- ◆ Roof Surveys Evaluation
- ◆ Moisture – Infrared & Nuclear
- ◆ Seminars Design Maintenance
- ◆ Management Programs
- ◆ Laboratory Testing

## Site/Civil Engineering

- ◆ Commercial Land Development
- ◆ Residential/Community Planning
- ◆ Infrastructure Planning

## Software Development

- ◆ Application Software
- ◆ Internet & Intranet

## Surveying & Mapping

- ◆ Property surveying & boundary determination
- ◆ Topographic mapping development
- ◆ Global Positioning System

## Welding & Quality Control

- ◆ Shop & Field Certified Welding Inspection
- ◆ Welding and Brazing Qualification
- ◆ Procedure Development
- ◆ QA/QC Programs

**Corporate Headquarters**  
 2860 Fisher Road **Columbus, Ohio 43204**  
 Phone: (614) 276-8123, Fax: (614) 276-6377  
 ctl@ctleng.com  
[www.ctleng.com](http://www.ctleng.com)

## OFFICES:

CTL of West Virginia  
 733 Fairmont Road  
 Morgantown, WV 26501  
 Phone: (304) 292-1135  
 Fax: (304) 296-9302  
 ctlwv@ctleng.com

510 C Street  
 South Charleston, WV  
 25303

422 E Wards Corner  
 Road  
 Cincinnati, OH 45140  
 Phone: (513) 722-8665  
 Fax: (513) 722-8669  
 ctlcinci@ctleng.com

633 High Street  
 Minford, OH 45653  
 Phone: (740) 820-8355

3085 Interstate Parkway  
 Brunswick, OH 44212  
 Phone: (330) 220-8900  
 Fax: (330) 220-8944  
 ctcleve@ctleng.com

102 Commerce Dr  
 Wapakoneta, OH 45895  
 Phone: (419) 738-1447  
 Fax: (419) 738-7670  
 ctlwapak@bright.net

4343 Saguaro Trail  
 Indianapolis, IN 46268  
 Phone: (317) 295-8650  
 Fax: (317) 295-8395  
 ctlin@ctleng.com



# Geotechnical Engineering

The Geotechnical Engineering Department at CTL Engineering routinely performs subsurface investigations, and soil and rock testing. We prepare engineering reports, make recommendations regarding foundation and construction techniques, and perform other pertinent geotechnical services, as dictated by a given project.

## Drilling Services

CTL Engineering owns and operates its own fleet of drill rigs, the largest of which has a capacity to drill and take samples up to 300 feet deep. Our rigs are equipped with large diameter soil and rock core samplers, *in-situ* pressure meters and cone penetrometers. These rotary drilling rigs conduct standard split spoon sampling. Our drill rigs have pumps, wireline and standard coring equipment for proper and efficient execution of subsurface investigations. We can perform pressure meter tests and vane shear tests in the field, in addition to conducting and/or monitoring of well pumps tests.

## Analytical Laboratory

Our Soils Laboratory has consolidometers, triaxial and direct shear apparatus, state-of-the-art permeability devices and normal soils classification equipment.

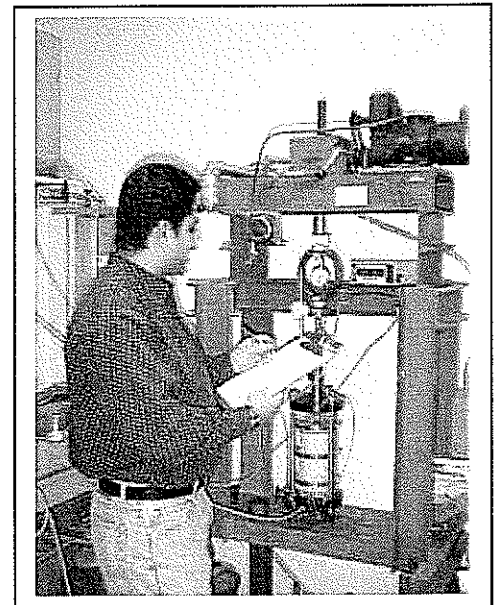
CTL Engineering provides a detailed analysis of the surface and subsurface composition and chemistry of the soils at the proposed site. For existing structures, we provide a foundation analysis. We also provide services for foundations under construction.



*CTL owns and operates a fleet of ten (10) drill rigs*

## Service Listing

- ◆ Complete Subsurface Exploration Study
- ◆ Foundation Analysis
- ◆ Pile, Pier and Caisson Analysis & Inspection
- ◆ Embankment & Earth Dam Analysis
- ◆ Slope Stability Analysis
- ◆ Settlement Analysis
- ◆ Pavement Design
- ◆ Rock & Mineral Testing
- ◆ Hydrogeologic Studies
- ◆ Field and Laboratory Testing of Soils
- ◆ Legal Testimony



*Soils engineers conduct soils tests in CTL's analytical laboratory*

**[www.ctleng.com](http://www.ctleng.com)**

**Expertise**

Mr. Gallagher serves as President of CTL Engineering of West Virginia, Inc. Projects successfully completed under Mr. Gallagher's direction include: Civil Site Design, Foundation Design, Storm Water Management, Waste Water Design, Roadway design, Parking Lot Design, Geotechnical Investigations & Design, Site Stability Analyses, Mine Subsidence Evaluations, Failure Investigations and Environmental Investigations and Permitting

Prior to joining CTL Engineering, Mr. Gallagher was the chief of the Abandoned Mine Reclamation Program for the State of Maryland, Department of Natural Resources, and Bureau of Mines. In addition, he was also responsible for overall engineering/geologic support to the Maryland Bureau of Mines Program

**Education**

B.S., Civil Engineering

Virginia Polytechnic Institute and State University, Blacksburg, Virginia, 1975

B.S., Equivalent, Geology

Virginia Polytechnic Institute and State University, Blacksburg, Virginia, 1975

**Professional Registration / Certifications**

Registered Professional Engineer

Ohio, # 48459; Maryland, # 13256; West Virginia, # 9297; Pennsylvania, # PG-044930-  
R; Wyoming, # 11033; North Carolina, # 0 32503; Kentucky, # 24988

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Certified Professional Geological Scientist, # 6575

Professional Surveyor, WV

Adjunct Professor – Civil Engineering – Fairmont State College 2001 – 2002

***27 Years Experience with CTL Engineering, Inc.***

**Experience**

*A partial listing of Mr. Gallagher's relevant geotechnical project management experience includes*

***WVU Wise Library***

Project Manager/Engineer provided geotechnical oversight of investigations for the building foundation systems on the construction of a new six (6) story library, which included the design of an extensive tie-back/soldier pile wall system.

***Suncrest Executive Plaza***

Under Phase 1 of this five-story office complex project, CTL provided the following services: surveying, geotechnical and civil site design. The civil site design included sedimentation and erosion control plans and permits, storm water management design utilizing 1,600 feet of 48" GCMP for storage, grading plans, utility coordination and WV DOH entrance permits for turning lane access to the site. CTL also provided construction drawings for the project.

***WVU Hospitals, Morgantown, WV***

CTL provided geotechnical, surveying and civil site design support services in conjunction with WVDOH and WVU for a new access road and parking area design for surrounding hospital area.

***Allegheny Power Systems (open-ended contract for transmission distribution and power station projects)***

CTL performs construction testing and observation, material testing, structural steel and surveying for various projects under this contract.

***Fayette Energy Facility, Masontown, PA***

Project Manager responsible for overseeing the concrete, soils, aggregates, asphalt and bolted connections for the project site. CTL has provided specialty-testing including: soil resistivity testing, and Windsor Pin testing.

***Chaplin Hill Business Park, Morgantown, West Virginia***

Responsible for site conceptual design, hydrology, stormwater management, grant preparation, supervision during bidding phase, construction management, and final grant approval.

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***Blanchette Rockefeller Neuroscience Building, WVUHospitals, Morgantown, WV***

Project included Site Plan, Site Grading, Utility Coordination, Sedimentation & Erosion Control, Bid Documents & Pre-Bid Conference. Design required close tie to existing facilities and utilities. Coordination between WVU Hospitals and architect to meet site needs and limit day to day disruptions from construction and traffic.

***Glenmark Center, Shopping Plaza, Morgantown, West Virginia***

CTL provided geotechnical engineering, Phase 1 environmental assessment, civil site design, "site specific" storm water management, surveying, sanitary treatment facilities for this ten plus acre plaza.

***E A Development, The District, Student Housing, Morgantown, WV***

This is a 30 acre development including 20 apartment buildings, clubhouse. CTL provided geotechnical investigations, conceptual and final plans, road layout, bridge location, DOH permit and design for access, grading plans, retaining wall design, storm water systems and detention. CTL was responsible for permitting, including: Sediment & Erosion Control, DOH Highway Access, Stream Crossing Permit, Right of Access and License Agreement for temporary and permanent culverts and stream crossing, 100 year Flood Study for Monongalia County Development Permit, 401 Water Quality Certification and the Section 404 Permit.

***Cheat Lake Waste Water Treatment Plant Expansion, Morgantown, WV***

Project Manager responsible for providing oversight and recommendations for this project. The project included increasing the capacity from 250,000 gallons/day to 750,000 gallons/day.

***Chaplin Hill Sewer and Water System Expansion, Morgantown, WV***

Project Manager responsible for overseeing quality assurance for corrosion protection, utility trenching, line expansion and construction methods for this project.

***WVU Life Sciences Building***

Project Manager/Engineer providing geotechnical oversight of the drilling and investigations and recommendations needed for the construction of the Life Sciences Building

***WVU Eye Institute***

Project Manager/Engineer providing geotechnical oversight for the geotechnical investigations and foundation recommendations performed for this \$5 M dollar patient care facility.

***Physicians Office Center, WVU Hospital***

Project Engineer responsible for the oversight of the geotechnical drilling and site investigations for this project.

**Professional Affiliations**

American Society of Civil Engineers  
Society of Mining Engineers, of A.I.M.E.  
Triangle Fraternity of Engineers, Architects, and Scientists  
International Society for Soil Mechanics and Foundation Engineers  
American Institute of Professional Geologists

**Publications**

**“Dynamic Compaction of Surface Mine Spoils to Limit Settlements Within Commercial Developments”, Presented Patrick E. Gallagher and C.K. Satyapriya, Constructing and Controlling Compaction of Earth Fills, ASTM Seattle, Washington July 1-3 1999**

**“Mine Subsidence Stabilization In Steeply Dipping Seams In The Canadian Rockies. A Project Overview” Presented by Patrick E. Gallagher at the 19<sup>th</sup> Annual Conference of the Association of Abandoned Mine Land Programs Canaan Valley, WV August 17-20 1997**

**EDUCATION:**

Rensselaer Polytechnic Institute; Troy, NY

- **Graduate Studies, Civil Engineering** (Geotechnical), 1996-1999
- **B.S., Civil Engineering** (Geotechnical & Structural), 1996

Adirondack Community College; Queensbury, NY

- **A.S., Engineering Science**, 1994
- **A.A.S., Mechanical Technology - Design & Drafting**, 1991

**REGISTRATIONS:**

Engineer Intern (EI): New York, 1996

**CERTIFICATIONS & TRAINING:**

Pennsylvania Dept of Transportation Level II Drilling Inspector, 1999

ARC Adult CPR Trained, Expires: 08/30/2006

ARC First Aid Trained, Expires: 08/30/2008

CSX Transportation Contractor Safety Trained, Expired: 2004

Mine Safety Trained (Construction), Expired: 2003

AMTRAK Contractor Safety Trained, Expired: 2001

**EXPERIENCE**

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**CTL Engineering of WV, Inc.**, Morgantown, WV (2007)

**Responsibilities:**

Mr. Selfridge has been employed by CTL Engineering for nearly one (1) year. Annually manages 100+ various geotechnical projects; including transportation, commercial development, public schools, and a variety of public and private clients. Directs all aspects of the geotechnical engineering for CTL WV. This includes the management of field drilling activities, field classification of soil, rock, field and laboratory safety procedures, the assignment of a laboratory testing program, and performing geotechnical evaluations. Engineering evaluations include foundation recommendations, settlement analysis, slope stability analysis, earth pressure coefficients and report preparation.

**Gannett Fleming, Inc.**, Morgantown, WV (2000-2006)

Valley Forge, PA (1999-2000)

**Responsibilities:**

Responsible preparing technical scope of services, cost estimates, prepare and administer core boring contract bid documents, coordinated with PLT section leader and office manager on office geotechnical work load and manpower needs. Responsible for conducting geotechnical studies, site reconnaissance, the development and



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inspection of geotechnical subsurface investigation programs, the preparation of laboratory testing programs. Performed engineering analyses and design, developed geotechnical and foundation recommendations, and prepared geotechnical and foundations reports. These responsibilities also entail the evaluation of geologic site conditions, mining conditions, groundwater conditions, soil and rock classifications, foundation stability and capacity, settlement, slope stability and retaining wall stability, scour potential, and other geotechnical design considerations.

### Projects:

**US Route 35 Little Fivemile Creek to Coast Guard Station, Mason County, WV, R D. Zande / West Virginia Department of Transportation, Division of Highways** Geotechnical Engineer responsible for the site reconnaissance, core boring program bid documents, geotechnical site investigation program, laboratory testing program. The project consists of the placement and relocation of the current two lanes of Route 35 with a new four lane alignment. The new proposed alignment will require proposed two parallel single span bridges and two parallel three span bridges

**Dolls Run Bridge Replacement, Monongalia County, WV, West Virginia Department of Transportation, Division of Highways.** Geotechnical Engineer responsible for the site reconnaissance, geotechnical site investigation program, core boring bid documents, laboratory testing program, geotechnical analysis and prepared recommendations, prepared Geotechnical Engineering Report. The project consists of replacing the existing two span bridge with a new single span integral abutment bridge at its existing location. The project required the use of a temporary bridge and detour alignment partly over a wetland area.

**King's Covered Bridge Rehabilitation, Somerset County, PA, Simone Jaffe Collins (SJC) / Pennsylvania Department of Transportation, District 9-0** Engineer responsible for the inspection and documentation of the current conditions and details of historic wood timber covered bridge. Evaluated and modified the existing stone and mortar abutments and wingwalls. Performed literature and document review to better understand covered bridge and period design and construction. Assisted with the evaluation and rehabilitation design and details of the covered bridge's trusses, siding, flooring and roofing systems. The bridge was analyzed to verify that the bridge carry current AASHTO pedestrian loads requirements. This project consisted of the evaluation, documentation, preservation and rehabilitation of a historic covered bridge. The bridge consisted of a single span 120 feet Multiple King Post and Modified Burr Ache Truss System. The bridge was built in the ca 1845 with an originally rehabilitation occurring in ca. 1906. The King's bridge is historically significant because it still retains most of its original features from its 1906 rebuild. This bridge was in use until it was bypassed in the 1930s by the construction of an adjacent steel grate highway bridge for vehicular traffic. The preservation and rehabilitation strategy for the King's covered bridge is to minimize interventions, repair in-place, and to use traditional timber framing techniques in conjunction with modern repair techniques such as juggle joints, epoxies, and the use of glass fiber reinforced polymer (GFRP) materials where possible to improve the strength and stiffness of the wooden members.

**WV 705 Connector Alternative Study, Monongalia County, WV, West Virginia Department of Transportation, Division of Highways.** Geotechnical Engineer responsible for performing site reconnaissance of the project area and evaluated the existing site conditions as they may pertain to the design of different proposed alternatives.

**King Coal Highway (US Route 52) with WV Route 65 Relocation, Mingo County, WV, Nicewonder Contracting, Inc. / West Virginia Department of Transportation, Division of Highways.** Geotechnical Engineer responsible for geologic reconnaissance, geotechnical site investigation program, site mining issues, cut slope analysis and design, very large embankment fills analysis and design, and other geotechnical design and analysis. The King Coal Highway Project is a proposed 96-mile, four-lane divided highway running from Williamson to Bluefield. This section consists of 9.0 miles of the proposed highway is located in the vicinity

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## *Geotechnical Engineer*

between Red Jacket and Hampden. This section of the project will also consist of the proposed relocation of the existing two-lane roadway of WV Route 65 that runs between Taylorville and Red Jacket and will tie into the proposed King Coal Highway with an at grade intersection. These sections of roadway will be developed over an area of rugged topography with an extensive history of surface and deep mining activities. The King Coal Highway section is proposed to encompass large areas with mine overburden mountaintop back stacks and existing mine valley fills and a very large engineered valley fill, and to pass under very high highwalls. This section of road is being constructed in conjunction with the current mining activities. Gannett Fleming is assisting with preliminary engineering and final design for the Sates first public/private highway project involving Nicewonder Contracting, WVDOH, and Mingo County.

Special issues:

- Performed onsite inspection and monitoring and control of Dynamic Compaction Test Program to compare the reaction of different valley fill types. Prepared the Geotechnical Engineers Recommendation Report.
- Mine spoil fire site analysis and recommendations

**S.R. 0040, Section 06M, Youghiogeny Bridge Replacement over the Youghiogeny Reservoir, Fayette and Somerset Counties, PA, WAGMAN, Inc / Pennsylvania Department of Transportation, District 12-0** Geotechnical Engineer responsible for conducting on-site geotechnical investigation and analyses of subsurface information for a proposed alternate replacement bridge structure over the Youghiogeny Reservoir. The alternate consisted of an eight (8) span continuous composite steel multi-girder bridge structure. The drilling program took place on a floating work platform (barge) during the fall lowering of the Youghiogeny Reservoir to its winter storage level.

**S.R. 885, Section A03, Boulevard of the Allies Bridge Replacement over Forbes Avenue, Pittsburgh, PA, Pennsylvania Department of Transportation, District 11-0** Geotechnical Engineer responsible for conducting on-site geotechnical investigation and performed analyses of the subsurface investigation information for use in the design and analysis of two replacement bridge structures, new roadways and six retaining walls.

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**Osage Mine Complex Reclamation, Monongalia County, WV, West Virginia Department of Environmental Protection** Geotechnical Engineer responsible for assisting with preliminary field and office site reconnaissance for the preparation of construction plans and specifications for the reclamation of five abandoned mining sites under the Abandoned Mine Lands and Reclamation Program. The projects reclamation measures included closure of mine portals, re-grading and re-vegetation of refuse piles, landslide stabilization, closure of a ventilation shaft, building demolition, and drainage improvements

**Lick Run Bridge (LC09), and Scotia Hollow Bridge (XC01), Allegheny County, PA, County of Allegheny.** Geotechnical Engineer responsible for assisting with the preparation of the Problem Statement and Draft Exploration Plan for preliminary and final design activities for the rehabilitation or replacement of the two bridges in the Allegheny County Bridge Design Group B. These projects include developing and implementing subsurface investigations and laboratory testing programs to determine rehabilitation and replacement alternatives meeting current PENNDOT design (LRFD) standards. Geotechnical analyses include determining bearing capacity, settlement, scour potential, and underground mining conditions based upon the subsurface data collected. Preliminary geotechnical reconnaissance reports and final foundation recommendations were prepared and submitted to the County and the Pennsylvania Department of Transportation for acceptance

**Martins Ferry Water System Improvement Project, Belmont County, OH, City of Martins Ferry.** Geotechnical Engineer responsible for the geotechnical site investigation, subsurface investigation program,

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mine subsidence investigation, cut-and-fill slope stability review and analysis, embankment settlement analysis, and geotechnical design and analysis. This proposed water tank is part of the City of Martins Ferry water system improvement project.

**Thompson Run Road Bridge No. 2, Allegheny County, PA, *Allegheny County*** Geotechnical Engineer responsible for conducting the inspection of the subsurface investigation program. This structure is part of the evaluation of Allegheny County Group H Bridges for replacement. The Existing Thompson Run Bridge No. 2 along with Bridge No. 3 were being replaced due to the structural deterioration and weight restrictions at both structures. The reconfiguration of the existing stream channel eliminated the need to replace both structures.

**S.R. 0028, Galleria Mall Interchange, Allegheny County, PA, *Mills Corporation*** Geotechnical Engineer responsible for conducting on-site inspection and analyses of a subsurface investigation for a new interchange on S.R. 0028. Reviewed and prepared quantities for the drainage structures and E&S control. The interchange will service a newly developed regional mall along a rural portion of highway 1.1 miles northeast of the Harwick Interchange. The project also involves the relocation of Tawney Run Road, which could impact several properties containing potentially contaminated materials.

**Ambridge-Aliquippa Bridge Replacement, Beaver County, PA, *Pennsylvania Department of Transportation, District 11-0*** Geotechnical Engineer responsible for performing site reconnaissance and assessments of five alternative locations for a proposed new bridge to replace the existing Ambridge-Aliquippa Bridge that connects State Routes 65 and 51 over the Ohio River. Performed the following tasks for each alternative for their use in the completion of the Phase I geotechnical engineering report (GER)

- Inspected and noted the conditions of existing structures, utilities, roads, drainage structures, and general site conditions.
- Reviewed and compared historical drawings and photographs with existing site conditions.
- Reviewed and noted signs of wetlands, previous geotechnical drilling, geologic hazards, erosion, flooding, slope movements, and possible hazardous waste contamination.
- Assessed existing cut slopes along S.R. 51 for rockfall hazards by the Rockfall Hazard Rating System (RHRS) method and prepared cut slope inventories. Evaluated other slopes for signs of movement.

**Midway Sewerage Treatment Plant, Washington County, PA, *Midway Sewerage Authority*** Geotechnical Engineer responsible for drilling inspection, subsurface analyses, and foundation analyses for the design and construction of a proposed sewerage treatment plant at an alternate site. The proposed facility included six new structures: a pump station, a headworks building, two sequencing batch reactor basins, an ultraviolet disinfection building, a control building, and a garage/maintenance building. Remote pump station construction consisted of the installation of four remote pump station wet wells, access roads, and storage sheds. The project included developing and executing a subsurface investigation and associated laboratory analyses of soil samples, calculating ultimate and allowable bearing pressures, analyzing potential settlement, estimating lateral earth pressures, evaluating hydrostatic uplift, and presenting the findings and recommendations in a geotechnical engineering report.

**King Coal Highway, Mingo County, WV, *West Virginia Department of Transportation, Division of Highways*** Geotechnical Engineer responsible for geotechnical site investigation, boring layout, drilling program, mine subsidence investigation, cut-and-fill slope stability review and analysis, embankment settlement analysis, and geotechnical design and analysis. The King Coal Highway Project is a proposed 96-

## **CARL G. SELFRIDGE**

## ***Geotechnical Engineer***

mile, four-lane divided highway running from Williamson to Bluefield. This section consists of 3.3 miles of the proposed highway located in the vicinity of Sharon Heights, and will be developed over an area of rugged topography with an extensive history of surface and deep mining activities. The section is proposed to encompass large areas of mine spoil valley fills and a very large engineered valley fill, and to pass under very high highwalls. This section of road is being constructed in conjunction with the current mining activities.

**Sharon Heights Connector, Mingo County, WV, *West Virginia Department of Transportation, Division of Highways.*** Geotechnical Engineer responsible for geotechnical site investigation, boring layout, drilling program, mine subsidence investigation, slope stability. The Sharon Heights Connector is a 2.9-mile, two-lane roadway with truck climbing lanes and will connect U.S. Route 52 (intersecting at U.S. Route 52 and County Route 52/2, near Sharon Heights) to the King Coal Highway. The project will also consist of the addition of a bridge structure carrying the Connector over Horsepen Creek and the widening of the existing bridge structure carrying U.S. Route 52 over the Browning Fork. It is being developed in an area with an extensive mining history.

**Southern Beltway, Findlay Connector, PA Route 60 to U.S. Route 22, Allegheny and Washington Counties, PA, *Pennsylvania Turnpike Commission.*** Geotechnical Engineer responsible for reviewing boring logs and profiles, along with the proposed designed alignment geotechnical cross sections, plan views, and profiles for correctness and completeness. The project is a preliminary design of approximately seven miles of proposed toll highway between S.R. 0022 and the Southern Expressway (PA Route 60) at the Pittsburgh International Airport. The proposed alignment passes through rugged topography that has been heavily mined by both underground and surface methods, and contains several areas of potentially contaminated municipal landfills. One portion of the highway passes over a burning underground mine.

**Stage II Light Rail Transit System, Pittsburgh, PA, *Port Authority of Allegheny County.*** Geotechnical Quality Control Inspector on the Construction Management Team assisting in monitoring geotechnical field activities of tieback anchor installations and load testing in soldier pile and lagging walls. The entire tieback anchor installation project included drilling and testing more than 2,200 rock anchors within varied geology, which posed logistical problems for the acceptance of bond zone, due to high-fracture rock, and for testing acceptance, due to the large number of concurrent testing activities.

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**Source Water Assessment and Protection (SWAP) Program, Beckley District, WV, *West Virginia Department of Health & Human Resources, Bureau for Public Health.*** Engineer responsible for performing wellhead delineation and assisting in preparing reports for 44 public water systems.

**S.R. 2040, Curry Hollow Road Realignment, Allegheny County, PA, *Pennsylvania Department of Transportation, District 11-0.*** Geotechnical Engineer responsible for conducting on-site inspection and analyses of the subsurface investigation for the proposed widening and realignment of approximately one mile of a four-lane roadway, including the replacement of a deteriorated bridge. Performed a stability analysis on the alternatives of proposed modifications (cut and widening) of the adjacent slopes, and analyzed the stability of alternative retaining wall designs.

**S.R. 3016, Section B02, Green Garden Road Bridge Replacement and Green Garden Road Realignment, Beaver County, PA, *Pennsylvania Department of Transportation, District 11-0.*** Geotechnical Engineer responsible for slope stability analyses of embankment fill slopes and retaining walls, and for a settlement analysis of embankment fill into wetlands, as part of a roadway alignment and bridge replacement project.

**S.R. 3088, Section A01, Hookstown Grade Road Bridge, Allegheny County, PA, *Pennsylvania Department of Transportation, District 11-0.*** Geotechnical Engineer assisting with the technical preparation of a final geotechnical engineering report (GER) of a ten-meter-long single-span adjacent box beam bridge to replace a

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deteriorated single-span bridge. The project involved subsurface investigation, laboratory testing, bearing capacity and settlement evaluation, footing elevation determination, approach slope configuration, and rock-lined channel design for stream relocations.

**Structural Stabilization and Rehabilitation Grouting Program, United States Postal Service Eastpointe Facility, Clarksburg, WV, United States Postal Service (USPS)/Advanced Construction Techniques, Ltd. (ACT).** Resident Quality Control Engineer responsible for inspecting and monitoring on-site construction activities for a single-story structure used as a mail transfer facility and post office. The structure had experienced distress and damage due to the differential settlement of the foundation material (strip mine spoil material). The stabilization program consisted of the construction of four shotcrete vertical access shafts (20 feet in diameter by 25 feet deep) along the outside of the structure, the horizontal installation of sleeve pipes from the vertical access shafts at various depths under the structure by means of a hydraulic jacking/drilling unit, and compensation pressure grouting (soil-fracture grouting) through an inflatable double-packer unit. Attended construction progress meetings with the contractor (ACT), the USPS, and the project design engineering firm. Monitored and inspected the following activities:

- Construction of the vertical access shafts.
- Horizontal jacking of the sleeve pipes, the jacking pressures, times and sounds for each section of pipe, shoe elevation at prescribed points using a Geokon torpedo liquid-filled settlement profiler, and final length and the horizontal and vertical deviations of the sleeve pipe location using a Maxibor
- Compensation grouting operation, grout mixes, real-time computer monitoring and tracking of grouting pressures, volumes, grouting rate.
- Real-time computer monitoring and tracking of building movements (settlement and heave) during the jacking and grouting operations, with the use of column-mounted units or portable floor units, including Geokon fluid-filled settlement sensors

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**Sinkhole Remediation, Bridgeport Wastewater Treatment Plant, Bridgeport, PA, Borough of Bridgeport.** Geotechnical Engineer responsible for inspecting the drilling and installation of four new groundwater monitoring wells, and for assisting with the investigation of the causes of sinkhole formation at a wastewater treatment plant.

**S.R. 0202 Improvement Project, Section 404, Chester and Montgomery Counties, PA, Pennsylvania Department of Transportation, District 5-0** Geotechnical Engineer responsible for the analysis of bridge foundation piles for down-drag and alternative design options for bitumen coating. Also designed a cased-bentonite mix around the pile in the zone of negative skin friction.

**PI 125, Orms Street Bridge, Providence, RI, Amtrak.** Geotechnical Engineer responsible for the 90 percent design and analysis of a jet grouting underpinning specification for the temporary support of a stone masonry retaining wall while lowering the tracks along the face of the wall.

**S.R. 0309, Section 100, Montgomery County, PA, Pennsylvania Department of Transportation, District 6-0.** Geotechnical Engineer for the widening and realignment of five miles of a four-lane expressway. New and replacement structures within the corridor included 18 bridges, 20 retaining walls, 4 noise walls, and 2 culverts located in five geological formations. These structures were analyzed using load and resistance factor design (LRFD) methodology. Specific project tasks included:

- Serving as Lead Inspector on multiple contracts, including roadway and structural borings. Oversaw multiple inspectors/multi-rig operations, performed field tracking of the progress of the contracts, and

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- acted as liaison between crews and the project manager. Also responsible for making general field decisions of hole location, movement, hole termination, and other field problems for the other inspectors. Performed structural reconnaissance and investigated accessibility of the drilling equipment to the sites.
- Inspecting Geoprobe sampling and supervising the installation of monitoring wells for proposed constructed wetland sites. Characterized the soils by horizons, using the U.S. Department of Agriculture Soils Textural Classification, and the Munsell Soil Color Charts. Performed weekly monitoring of the wells and organized the data.
- Designing and analyzing an arch culvert foundation over Sandy Run and its adjoining roller-compacted concrete (RCC) wingwalls, based on the Load Resistance Factor Design (LRFD) method. Prepared an outline of the design for use on future foundation designs using the LRFD method.

**S.R. 0222, Warren Street Bypass, Section 002, Berks County, PA, Pennsylvania Department of Transportation, District 5-0.** Geotechnical Engineer responsible for conducting technical reviews and preparing comments for District 5-0 on geotechnical reports submitted by the design consultants.

**PI 125, Crib Wall at Mineral Springs Avenue, Pawtucket, RI, Amtrak.** Geotechnical Engineer responsible for assisting in the evaluation of alternatives for supporting a crib wall structure during the lowering of the tracks along its face.

**PI 126, Track 4 Extension, Attleboro, MA, Amtrak.** Geotechnical Engineer responsible for the evaluation and analysis of consolidation settlement of a peat layer in the evaluation of the peat to support the proposed new track. Performed global stability analysis of the tracks over the peat layer.

**Instrumentation Monitoring, Northern Solid Waste Management Center B 2 at Cherry Island, Wilmington, DE, Delaware Solid Waste Authority.** Geotechnical Engineer assisting in the quarterly and monthly monitoring and maintenance of 300 geotechnical instruments at this landfill which is constructed on 70 feet of soft dredge spoils. Instrumentation includes settlement plates and the use of an inclinometer probe.

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**Longwood Gardens Service Road Underpass, Kennett Square, Chester County, PA, Longwood Gardens, Inc.** Geotechnical Engineer responsible for performing site reconnaissance and the preparation of the reconnaissance soils and geological engineering report (RSGER) for a simple-span, prestressed concrete box beam bridge for S.R. 0926 over a proposed maintenance driveway.

**S.R. 0202 Improvement Project, Section 400, Chester and Montgomery Counties, PA, Pennsylvania Department of Transportation (PennDOT), District 6-0.** Geotechnical Engineer responsible for assisting with the evaluation and organization of hydrologic information used to evaluate stormwater runoff and its influence on groundwater infiltration at drainage structures and wetland areas. This information was part of an expert report used in litigation proceedings for PennDOT against a conservation group.

**Liberty Street, Clinton, CT, Amtrak.** Geotechnical Engineer responsible for drilling inspection and stability analysis of an existing road bridge abutment for the Amtrak Northeast Corridor High-Speed Rail Improvement Project. The exploration included using borings, probes, and test pits to obtain the properties and profiles of the abutment and its surrounding geology. Analyzed the effects that undercutting the adjacent track would have on the abutment's stability; prepared a report.

**Buttonball Road, Old Lyme, CT, Amtrak.** Geotechnical Engineer responsible for drilling inspection and stability analysis of an existing bridge abutment for the Amtrak Northeast Corridor High-Speed Rail Improvement Project. Exploration techniques included borings, probes, and test pits to obtain the properties and profiles of the abutment and its surrounding geology.

**Lake Road, East Haven, CT, Amtrak.** Geotechnical Engineer responsible for drilling inspection and stability analysis of the existing road bridge abutment for the Amtrak Northeast Corridor High-Speed Rail Improvement Project. Employed exploration methods including borings, probes, rock coring, and test pits to obtain the properties and profiles of the abutment and its surrounding geology. Analyzed what effects undercutting the adjacent track would have on the abutment's stability; prepared a report.

**Ferry Street, New Haven, CT, Amtrak.** Geotechnical Engineer responsible for drilling inspection and stability analysis of an existing road bridge abutment for the Amtrak Northeast Corridor High-Speed Rail Improvement Project. Obtained the properties and profiles of the abutment and its surrounding geology through the use of borings, probes, and test pits. Analyzed effects of undercutting the adjacent track on the abutment's stability; prepared report.

**I-95, East Haven, CT, Amtrak.** Geotechnical Engineer responsible for the geotechnical exploration of a bridge pier for the Amtrak Northeast Corridor High-Speed Rail Improvement Project. Performed exploration using a test pit to obtain the profile of the pier in order to assess the effect of undercutting on the structure.

**Rensselaer Polytechnic Institute, Troy, NY (1997-1998)**

Prepared and demonstrated common geotechnical tests. Graded assignments, assisted students, and managed the grades.

**Smith Dairy Farm, Gansevoort, NY (1986-1997)**

Maintained and operated farm machinery and equipment. Assisted with the daily operations of the dairy farm.

**Finch, Pruyn and Co., Inc., Glens Falls, NY (1989-1996)**

Safety-inspection during paper machine rebuilds and maintenance work, bleach plant lab technician and performed various other technical and non-technical duties in various department in the mill.

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**PUBLICATIONS**

*Evaluation of Frost Penetration Using a Two Parameter Measurement System.*, J D Quiroz, I.F. Zimmie, C.G. Selfridge. Presented at the International Symposium on High Altitude and Sensitive Ecological Environmental Geotechnology, China. August 1999.

*King's Covered Bridge Restoration*, S H Petro, E.L. Kemp, C G Selfridge, C E Stonebraker, Gannett Fleming, Inc., Morgantown, WV, and W. Collins, Simone Collins, Berwyn, PA, International Bridge Conference 2006 (IBC-06-65)

**COMPUTER SOFTWARE:**

HEC-1, HEC-RAS, Haestad's FlowMaster and CulvertMaster, MathCad, MS Word, Excel, AutoCAD, Microstation, Slope/W, SEEP/W, GRLWEAP, L-PILE, COM624P, Logdraft, STABLE, PA-STABLE, Maple, FORTRAN, C

**PROFESSIONAL AFFILIATIONS**

American Society of Civil Engineers, The GEO-Institute, Timber Framers Guild, Construction Institute (ASCE)

## Resources

### Communication

Effective communication is a key ingredient of successful project management, and will be a focal point of our management plan for your project. The following procedures and techniques will be employed to keep project stakeholders up to date on project issues and information.

Written Documentation of Discussion and Decisions — Project meetings and substantive telephone conversations will be summarized in writing, with copies distributed to all participants. Decisions made will be documented to confirm understanding. Parties responsible for resolving issues will be identified.

- Newforma Project Center — Moseley Architects routinely utilizes Newforma software specifically designed for architects and engineers to remove time- and money-draining inefficiencies from project execution. One feature of this software is the Newforma Info Exchange, an automated and secure means of transferring project information to both internal and external team members. Info Exchange alleviates the file size limitations encountered when transferring files via e-mail. It also takes care of packaging selected files and their external reference files and posting those files to the Info Exchange Web site hosted on the Newforma Info Exchange server within our company's IT infrastructure. The software then sends an e-mail to team members that includes a link to the Info Exchange Website through which they can securely download the file.

Newforma Info Exchange also automates the administrative functions related to file transfers. For example, it tracks download activity and sends reminders to people who have yet to download files. It also removes files from the server on designated expiration dates and maintains a backup copy of each file transfer, allowing the contents of expired transfers to be resent, reviewed, or compared to updated versions.

- Project Web Site — We will establish and maintain a project web site specifically for your project, which will allow all team members (and the public, if you wish) to access information related to the project, including schedules, meeting minutes, photographs, reports, and other documents, such as correspondence, etc. Together the project web site and FTP site will facilitate fast and accurate communication. Access to information on the project web site can be selectively password controlled in accordance with guidelines established by the Client and Moseley Architects. Information developed and provided by the Client can be posted in addition to information developed by the A/E Team. Typically the project web site has a publicly accessible main page with a project description and links to drawings, photographs, and other



## STAFF AND RESOURCES

descriptive information. Links to related Client or other web sites can also be included.

Moseley Architects has a full time Information Technology staff that will support the project team in setting up the web site and keeping it up to date. We will utilize our own in-house web server.

- Customized Construction Administration Software — Moseley Architects will utilize a customized version of Meridian Prolog software to facilitate the construction administration process for the project. The web-based application is essentially a construction-oriented database, which will allow for password controlled access to important information related to the construction process. The design team, the Client, and the Contractor can access this information to maximize effective communication. Reports on the status of all critical aspects of the construction process (e.g., project contacts, status of contractor submittals, “hot lists” of urgent issues) can be readily created and accessed to provide information necessary to deal with issues quickly and effectively as they occur, or simply to check on the status of a particular issue.

### Quality Control

Maintaining a high level of quality in design and project documentation is critical to project success. Attaining and maintaining high quality is one of the firm's overriding goals. In 2000, we initiated our involvement with the Senate Productivity and Quality Award (SPQA) for Virginia. This United States Senate-sponsored process involves a self-assessment whereby individual organizations systematically evaluate and continuously improve key business processes. It provides valuable insight regarding our quality improvement efforts, and how we can further improve our service delivery. The firm's involvement in this process helped us to align our key business practices with recognized quality standards.

Moseley Architects is pleased to have been awarded the SPQA Certificate for Commitment to Performance Excellence. Participation in this highly competitive process is one way that we maintain a continuing focus on improving quality. As part of this effort, we also conduct regular quality improvement seminars, often prepared and presented by our own staff, which are attended by all staff members. These sessions focus on a wide spectrum of issues, ranging from technical processes (e.g., building codes) to providing responsive client service.

Other quality control procedures that will be utilized for this project include:

- On-line Operations and Procedures Manual — Over the years we have created detailed guidelines for the tasks that are necessary in each phase to

## STAFF AND RESOURCES

successfully execute projects. These guidelines are documented in our On-line Operations and Procedures Manual, accessible to all of our staff via our firm's intranet site. This information is available 24-hours a day and can be easily updated whenever required, so that no reprinting and distribution of hard-copies is required.

- On-line CAD Manual — Like the Operations and Procedures Manual, this reference document developed by our staff provides extensive, detailed guidelines for use of our computer assisted drafting and design system, so that project drawings can be prepared consistently and effectively. It is also accessible 24-hours per day and can be easily utilized by all staff and consultants.
- Interdisciplinary document review and coordination — In addition to ongoing quality review by the project team, a “Redi-check” review will be performed on working drawings prior to finalizing them. The purpose of this review is to reduce or eliminate inconsistencies among the various disciplines (architectural, HVAC, electrical, etc.) that could potentially lead to change orders. It is a structured process focused on proper document coordination. It will be performed by an experienced, senior staff member who has not been directly involved in production of the documents. This independent review will provide a fresh perspective that experience has shown will improve the effectiveness of the review.

### Cost Control

No aspect of managing the project is more important than cost control. Understanding and complying with the project budget is essential. Moseley Architects will employ the following tools and procedures to monitor and control project cost.

- Initial Budget Review — Team leaders will meet with Client staff to review and gain a detailed understanding of the project's budget, and can assist in developing total project budget components as requested. Appropriate members of the A/E team will be advised and kept up to date on budget parameters by the team leaders.
- Monitoring of Project Scope — In order to avoid “scope creep”, team leaders will monitor the scope of the project and advise the Client as to issues that may adversely affect budget compliance, including site conditions, regulatory requirements, construction market factors, building user requests, etc.
- Milestone Cost Estimates — Milestone estimates serve as a primary means of monitoring estimated construction costs. The A/E team will utilize estimates as a basis to develop recommendations for revisions in design to maintain

## STAFF AND RESOURCES

budget compliance. Any such revisions will be implemented only after consultation with the Client.

### **Schedule Control**

An overall project schedule will be finalized at the outset of the project in consultation with the Client. The schedule will address not only design and document production time, but will also include appropriate intervals for preparation of milestone estimates, Client review and approvals, and regulatory review. All stakeholders will have access to the schedule via the project web site. Moseley Architects' team leaders will monitor the schedule and keep the Client apprised of issues which may impact it, and it will be updated as necessary.

In order to maintain the schedule for each project phase, a "micro-deadline" approach will be utilized. This will facilitate schedule monitoring and compliance by the A/E team. The "micro-deadline" approach will break down each phase into individual tasks that are coordinated with the Client's requirements as well as Moseley Architects' Operations and Procedures Manual. A required completion date will be established for each task, rather than simply establishing an overall completion date for the phase. Typically, task durations will be only a few days in length, as opposed to overall phase durations of weeks or months. Team leaders and members can more easily monitor and control these shorter duration micro-deadlines. Compliance with micro-deadlines results in timely completion of the overall phase, and thus the overall project. This system is particularly useful in focusing team members on the proper task sequence required to achieve critical interdisciplinary coordination in a timely manner.

The micro-deadline schedule for the current project phase will be posted on the firm's intranet web site, where all team members will have access to it at all times. The Project Manager will indicate completion of each task as it occurs by simply clicking on a check box on his computer screen. This will instantly update the schedule so that all team members can understand exactly which tasks have and have not been completed at any point in time.

# PROJECT APPROACH

## New Project — Fairmont Site

Based on our team's experience with projects similar to yours, we have outlined a comprehensive approach and work plan for your new project. The scope of this plan can be refined upon further discussion with you in order to tailor the plan to your specific needs and concerns for your project. These tasks will be performed in a series of steps as outlined on the following pages.

### Project Orientation and Program

- Confirm project schedule
- Confirm project budget
- Review project approach and establish Client/Architect communication procedures
- Identify decision makers
- Establish project criteria (implementation priorities, etc) and goals (e.g. planning horizons)
- Determine sources of required data and information
- Determine topo/boundary survey requirements and initiate survey
- Determine need/availability of geotechnical/environmental evaluations
- Analyze and evaluate proposed site

### Schematic Design

- Prepare Schematic Design floor plan based on identified needs and existing conceptual design
- Review/refine design with the Client
- Refine Schematic Design drawings based on Client input
- Prepare preliminary estimate of cost
- Evaluate and review drawings and estimate with Client
- Finalize Schematic Design
- Phase approval by the Client

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### Design Development

- Prepare Design Development documents
- Refine building systems options (mechanical/electrical, etc)
- Update cost and schedule
- Review documents with the Client
- Assist with submission and approval process to applicable Client departments
- Phase approval by the Client

### Construction Documents

- Prepare and coordinate regulatory submissions and approvals
- Prepare Construction Documents (working drawings, specifications)
- Update total project cost estimate
- Review documents with Client
- Phase approval by Client

# PROJECT APPROACH

## Furnishings Design

- Analyze furnishings requirements
- Inventory existing furnishings as needed
- Develop furnishings plan
- Identify proposed specific products
- Prepare specifications for bidding
- Review and approval by Client

## Bidding and Contract Award

- Prepare and distribute bid packages
- Assist the Client in receiving bids
- Assist the Client in analyzing bids and awarding construction contract

## Construction Administration

- Conduct pre-construction conference
- Conduct construction progress meetings
- Monitor contractor's construction progress
- Monitor quality of work
- Review contractor's requests for payment
- Assist the Client in changes
- Review punchlist
- Verify substantial completion
- Assemble close-out documents/warranties
- Recommend final payment to contractor

## Building Outfitting/Furnishings Installation

- Assist the Client in coordination of schedules for furniture delivery
- Verify placement of furnishings
- Inspect for damage, quality, assembly, and function
- Recommend approval of payments to vendors

# PROJECT APPROACH

## Renovation Project — Parkersburg Site; Charleston Site; Beckley Site

Based on our team's experience with projects similar to yours, we have outlined a comprehensive approach and work plan for your renovation project. The scope of this plan can be refined upon further discussion with you in order to tailor the plan to your specific needs and concerns for your project. These tasks will be performed in a series of steps as outlined on the following pages.

### Phase I

#### Task 1 - Project Orientation and Program

- Confirm project schedule
- Confirm project budget
- Review project approach and establish Client/Architect communication procedures
- Identify Client decision makers
- Establish project criteria (implementation priorities, etc.) and goals (e.g. planning horizons)
- Assemble available documentation of existing building and site; identify any additional information required
  - Site topo and boundary survey (initiate new survey if needed)
  - Existing building drawings
  - Maintenance, repair, and renovation history
  - Previous studies/conceptual design
  - Data: annual reports, current staffing lists, vehicle lists, calls for service history, strategic plan, etc
  - Demographic information
  - Site utilities
- Conduct field investigation of existing building
- Interview facility maintenance staff to understand building maintenance and operation issues
- Determine existing space allocation for all functions
- Verify current floor plan layout
- Interview key project stakeholders, including police staff, to review existing program information
- Update program as needed and present to Client
- Finalize program based on Client review and submit to Client

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#### Task 2 – Site Design -- In Coordination with Civil Engineer

- Evaluate site for:
  - Adequacy of parking
  - Vehicular access and circulation
  - Pedestrian access and circulation

# PROJECT APPROACH

- Security concerns
- Drainage and utilities
- Develop proposed scope of site improvements and schematic site plan
- Develop preliminary estimate of cost of site improvements
- Review site plan and estimate with Client
- Finalize schematic site plan

## **Phase II**

### Schematic Design

- Prepare Schematic Design floor plan based on identified needs and existing conceptual design
- Review/refine design with the Client
- Refine Schematic Design drawings based on Client input
- Prepare preliminary estimate of cost
- Evaluate and review drawings and estimate with Client
- Finalize Schematic Design
- Phase approval by the Client

### Design Development

- Prepare Design Development documents
- Refine building systems options (mechanical/electrical, etc )
- Update cost and schedule
- Review documents with the Client
- Assist with submission and approval process to applicable Client departments
- Phase approval by the Client

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### Construction Documents

- Prepare and coordinate regulatory submissions and approvals
- Prepare Construction Documents (working drawings, specifications)
- Update total project cost estimate
- Review documents with Client
- Phase approval by Client

### Furnishings Design

- Analyze furnishings requirements
- Inventory existing furnishings as needed
- Develop furnishings plan
- Identify proposed specific products
- Prepare specifications for bidding
- Review and approval by Client

# PROJECT APPROACH

## Phase III

### Bidding and Contract Award

- Prepare and distribute bid packages
- Assist the Client in receiving bids
- Assist the Client in analyzing bids and awarding construction contract

### Construction Administration

- Conduct pre-construction conference
- Conduct construction progress meetings
- Monitor contractor's construction progress
- Monitor quality of work
- Review contractor's requests for payment
- Assist the Client in changes
- Review punchlist
- Verify substantial completion
- Assemble close-out documents/warranties
- Recommend final payment to contractor

### Building Outfitting/Furnishings Installation

- Assist the Client in coordination of schedules for furniture delivery
- Verify placement of furnishings
- Inspect for damage, quality, assembly, and function
- Recommend approval of payments to vendors

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## CONSTRUCTION MANAGEMENT

Alpha Associates, Incorporated will provide a complete range of construction phase services including periodic inspections, review and approval of Contractor pay applications, conducting progress meetings and providing technical assistance throughout the construction phase. During construction they will review the Contractors various project material submittals, develop color selections for your consideration and approval and perform a final "Punch List" inspection to assure satisfactory completion of the work. This is the phase of the project that is crucial to the ultimate success of your project. Their experienced team can successfully interface with the contractor and provide the direction needed for a successful project.

Alpha has an excellent track record of meeting project design deadlines. Alpha recently completed construction on a project in Morgantown that went from design to completion in just over 12 months. This project was completed for a private developer and had a construction cost in excess of \$20 million.

Another recent project success was a multi million construction project for West Virginia University. This project, an addition to the Agricultural Sciences Building, also had an accelerated project schedule and was completed on time and within the budget.