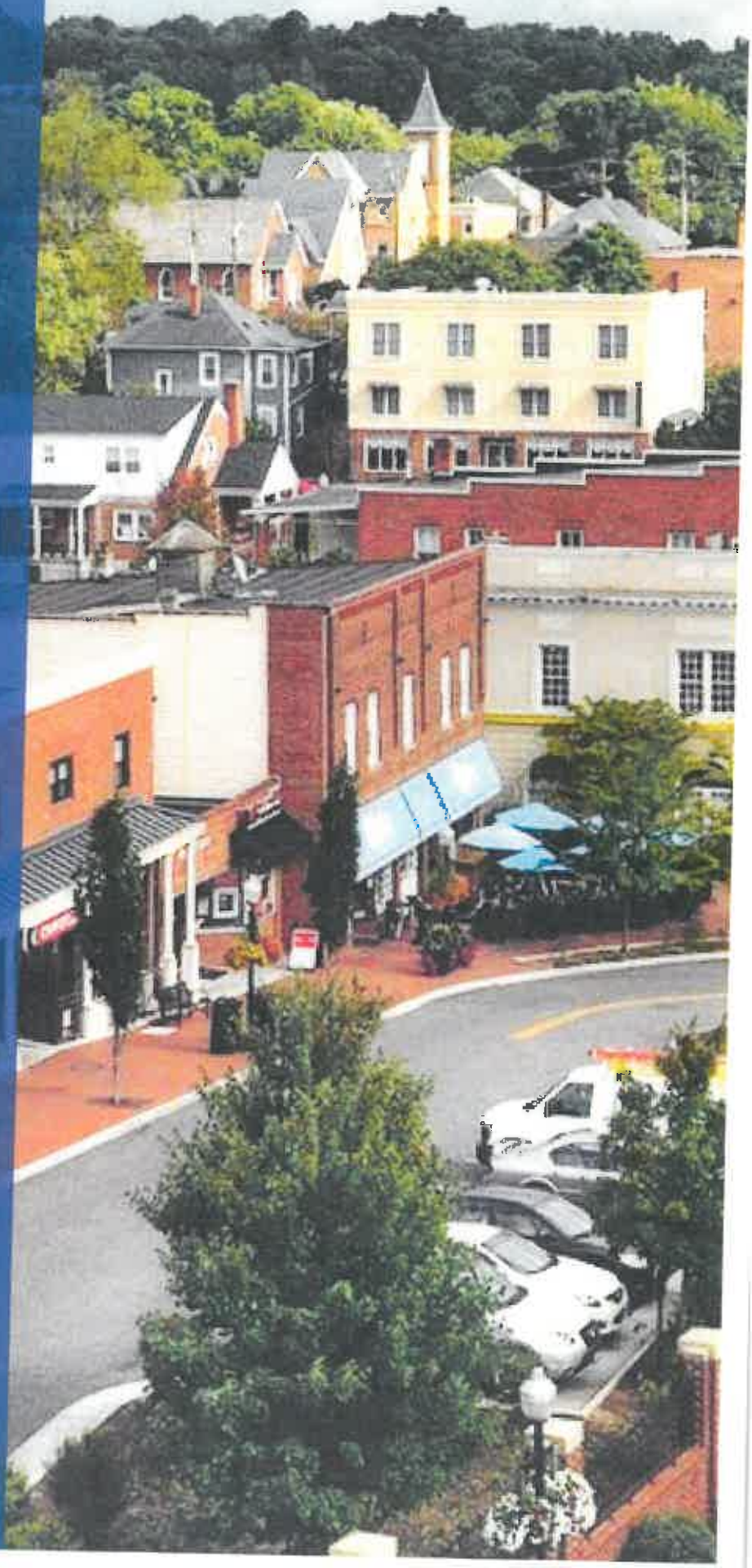
Blacksburg Public Safety Facility

CONCEPTUAL PHASE PPEA PROPOSAL



English Construction Company
Lynchburg, VA
in association with
Architects Design Group
Winter Park, FL

ENGLISH | Architects Design Group

July 27, 2018

Angie Frazier, CPPO, VCO
Purchasing Manager
Town of Blacksburg Municipal Building
300 South Main Street, First Floor
Blacksburg, VA 24060

RE: PPEA Conceptual Phase Proposal | Blacksburg Police Headquarters

Dear Ms. Frazier:

The English Construction / Architects Design Group team is pleased to submit our response to your advertisement for competing proposals under the PPEA guidelines to provide full planning, architectural, engineering, and construction services for a new police headquarters for the Town of Blacksburg. English Construction is a 109-year-old full-service, Lynchburg-based construction company with an extensive and diverse portfolio including numerous civic and government facilities.

We have put together the most experienced team of consultants to deliver a state-of-the-art police headquarters to the town, on time and on budget. Our team includes Architects Design Group (ADG), whose sole focus is designing public safety facilities across the United States, and local engineering firm T&L Engineering. Additionally, our entire team of consultants has vast experience in designing public safety facilities. We provide the town with a team who can hit the ground running to accomplish an expedited timeline for the delivery of services. The project management team is further strengthened by the addition of Mr. Beverly Cameron, former city manager of Fredericksburg, VA, and William Hefty, an attorney and principal with the firm Hefty, Wiley, and Gore, PC. These individuals bring years of experience in the management of PPEA projects in Virginia. Our team offers:

- **Thorough understanding of your specific project needs**
- **Local Lynchburg-based general contractor**
- **Qualified local engineers**
- **Strong project management**
- **Available resources to fast-track this project**
- **Team experience on 300+ public safety facilities nationwide**
- **Previous experience with PPEA public safety projects**

The entire English / ADG team is excited about this opportunity to build a strong relationship with the Town of Blacksburg. We believe the combination of our team's experience within Virginia and public safety entities throughout the United States makes us uniquely qualified to work with you on this important project. Thank you for reviewing this proposal and we look forward to meeting in person to discuss this opportunity in greater detail.

Sincerely,

ALLEN M. HAMBLEN, LEED AP
English Construction / Project Executive
Virginia Contractor Registration No. 270100873 Class A
ahamblen@englishconst.com

IAN REEVES, AIA, ICA, IALEP
Architects Design Group / President
Virginia Architectural Registration No. 0401017800
ianr@adgusa.org

TABLE OF CONTENTS

QUALIFICATIONS & EXPERIENCE

STRUCTURE

1A. Identify the legal structure of the firm or consortium of firms making the proposal. Identify the organizational structure for the project, the management approach and how each entity and major subcontractor in the structure fits into the overall team.

Our proposal represents a teaming agreement between English Construction Company and Architects Design Group, which are Virginia and Florida corporations, respectively. We propose delivery of a completed project utilizing a PPEA design-build under the PPEA methodology. PPEA design-build is a method of project delivery in which one entity, the design-build team, works under a single contract with the project owner to provide design and construction services. The project includes one entity, one contract, one unified flow of work from initial concept through completion, thereby integrating the roles of designer and constructor.

Design-build under the PPEA is an alternative to the traditional design-bid-build project delivery method. Under the latter approach, design and construction services are split into separate entities, separate contracts, separate work. Across Virginia and the country, design-build under the PPEA successfully delivers both horizontal and vertical construction projects with superior results, no matter what the project type. English Construction Company and Architects Design Group both have extensive experience with design-build.

English Construction Company will be the prime contractor in the PPEA design-build relationship and Architects Design Group will be a subcontractor. In its capacity as the PPEA design-builder, English Construction Company will provide insurance, bonds, and warranties for the project.

The English / ADG team will utilize a collaborative management approach that includes the Town of Blacksburg as an integral part of the team. This approach facilitates design and construction to meet the owner's specific program needs on time, within budget, and with no surprises. All of our previous public-private relationships have been structured to the specific and unique requirements of each client. This process is flexible and will allow opportunities to craft a contract and a relationship that best fits the Town of Blacksburg.

Architects Design Group, under contract with English Construction Company, will be the architect-of-record and will manage the design process and design team. Thompson & Litton will provide civil, structural, mechanical, electrical, and plumbing engineering for the project as a subconsultant to English Construction. TLC Engineering will provide security and technology consulting services for the project as part of the design team. TLC and ADG have worked together on over 55 public safety projects.

English Construction Company will be the primary point of contact for the PPEA design-build project and will lead the team throughout the project. English will be responsible for the overall performance and quality of the work. English's experienced staff will work with the design team of ADG to ensure the completed project meets all design and operational parameters.

EXPERIENCE

1B. Describe the experience of the firm or consortium of firms making the proposal and the key principals involved in the proposed project including the length of time in business experience, public sector experience, other engagements of the firm or consortium of firms and experience with projects of comparable size and complexity. Include the identity of any firms that will provide performance guarantees and warranties and a description of such guarantees and warranties. Provide resumes of key individuals involved in the project.

English Construction Company | Contractor
Architects Design Group | Architect
Thompson & Litton | Engineer
TLC Engineering | Security and Technology

English Construction Company

English Construction Company is a fourth-generation family-owned business that was established in 1909. English has advanced through steady growth, adding new skills, resources, and technologies. As the company has kept pace with changes in the construction industry, areas of expertise have expanded and include a full range of facilities including public safety facilities.

English is a recognized leader in project delivery using Virginia's Public-Private Educational Facilities and Infrastructure Act of 2002 (PPEA). English has completed more projects using PPEA than any other contractor in Virginia. Several of our projects noted within this submittal are comparable in size and scope to the proposed Blacksburg Public Safety Complex.

English Construction Company is a multi-disciplined construction firm licensed in eight states in the mid-Atlantic and southeast, primarily working in Virginia, North Carolina, and South Carolina. English maintains a staff of over 600 employees forming construction and support teams that, under the leadership of 120 tenured personnel, have supported as many as 40 concurrent projects. English focuses on green building technologies, renewable energy, and environmental protection. The company employs nine key managers who have attained certification as LEED-accredited professionals. The company's core values insist that projects are delivered in a manner which emphasizes environmental sustainability, safety, quality, budget, and schedule.

English Construction Company, as design-builder, will provide a master performance guarantee for the project. An example of a performance guarantee used on a similar project can be provided. Equipment warranties are typically provided by equipment suppliers and subcontractors. Our project performance guarantee serves as an umbrella to ensure performance by all project participants.

English Construction Company has completed the following PPEA projects:

- **Fredericksburg Police Headquarters**
  Fredericksburg, Virginia
- **Roanoke County Public Safety Center**
  Roanoke, Virginia
- **Stafford Public Safety Center**
  Stafford County, Virginia
- **New River Valley Regional Jail**
  Dublin, Virginia
- **Meherrin River Regional Jail**
  Brunswick County, Virginia
- **Patrick County Regional Jail**
  Stuart, Virginia
- **Mecklenburg Regional Jail**
  Boydton, Virginia
- **Fredericksburg Court Complex**
  Fredericksburg, Virginia
- **Green Ridge Recreation Center**
  Roanoke County, Virginia
- **Cosby Road High School**
  Chesterfield County, Virginia
- **Lafayette Upper Elementary School**
  Fredericksburg, Virginia
- **James Monroe High School**
  Fredericksburg, Virginia

Additional accomplishments include:

- Over 100 years in business - always family-owned
- Experts in excavation and site preparation
- Completed work in 8 states throughout the mid-Atlantic and southeast
- Owns one of the largest fleets of equipment in the mid-Atlantic
- Solid financial standing
- Has maintained the same bonding company and the same workers compensation insurance company for over 60 years

Architects Design Group

Architects Design Group (ADG) was established in 1971 by I.S.K. Reeves, V, FAIA as a full-service architectural and planning firm. Since then, ADG has grown to a national firm providing spatial needs analysis, site selection, master planning, and design services for over 300 governmental agencies across the United States.

ADG is a design-oriented firm blending the science of building technology, problem-solving, and the "art" of architecture. We believe in the tenets of authentic, contemporary architecture, and direct our practice to achieve the highest standards of design quality. With each project, we embark on a search for design excellence. Our success reflects the resolution of specific design issues while meeting the functional needs of the program within the established budget.

Over the years, ADG has narrowed its focus from a diversity of project types to a small number of areas of specialization. The primary areas of expertise include providing spatial needs analysis, site selection, master planning, conceptual design, design, and construction administration services for law enforcement and public safety facilities. Our projects reflect our current knowledge of facility programming, design, and our ability to focus collective talents toward innovative applications.

ADG has two separate, but inter-supporting design studios, each directed by a registered architect. The studio director whose experience best relates to each project serves as the project architect and client contact. Additionally, each project is overseen by the firm's president, Ian Reeves.

ADG is proud to have earned numerous national, regional, and local awards that reflect our firm's ability to solve complex design challenges, use the most innovative and cost-effective techniques, maximize space functionality, and achieve the highest level of overall quality. The result is an environment that encourages efficiency and productivity.

Over the past 47 years, ADG has received many honors and awards for design excellence including AIA Orlando Firm of the Year and AIA Florida Firm of the Year. Additionally, ADG has won AIA, design, and technology awards for over 75 of our municipal projects including the Orlando Police Department Headquarters and Georgetown Public Safety Complex.

ADG is an active member of the following associations:

- International Association of Chiefs of Police
- International Association of Law Enforcement Planners
- International CPTED Association
- Association of Public Safety and Communications Officers

ADG Projects include:

- Alpharetta Public Safety Facility
- Alachua County Sheriff's Complex
- Altamonte Springs Public Safety Complex
- Auburndale Police Facility
- Aurora Police and Fire Department Joint Training Facility
- Bal Harbour Police Facility
- Baytown Police Headquarters
- Belton Public Safety Facility Renovation
- Boca Raton Police Services Facilities
- Boca Raton Public Safety Information Management Center
- Boynton Beach Police Facility
- Bradford County Public Safety Facility
- Brentwood Police Headquarters Preliminary Spatial Needs Assessment
- Brunswick Police Department
- Cape Canaveral Police and Municipal Facilities
- Cape Coral Police Headquarters
- Cedar Falls Public Safety Facility
- Cedar Park Police Headquarters Renovation
- Clermont Police Department Headquarters
- Cobb County Police Headquarters
- Cobb County Training Facility
- Cocoa Beach Public Safety Complex
- Cookeville Police Headquarters
- Corinth Public Safety Facility
- Covington Police and Courts Facility
- Daytona Beach Shores Public Safety Complex
- DeSoto Police Training Facility
- Elmira Police Facility
- Eastern Florida State College Public Safety Training Center
- Frankfort Public Safety Facility
- Ft. Lauderdale Police Facility
- Gainesville Police Facility Renovation
- Gainesville Police Department Training Facility
- Georgetown Public Safety Operations
- and Training Complex
- Granbury Police Headquarters
- Grand Prairie / Irving Public Safety Training Facility
- Greene County Public Safety Coordination Center
- Gulfport Public Safety Facility
- Highlands County Sheriff's Law Enforcement
- Highlands County Sheriff Detention Center Reconfiguration
- Hillsborough Public Safety Operations Facility

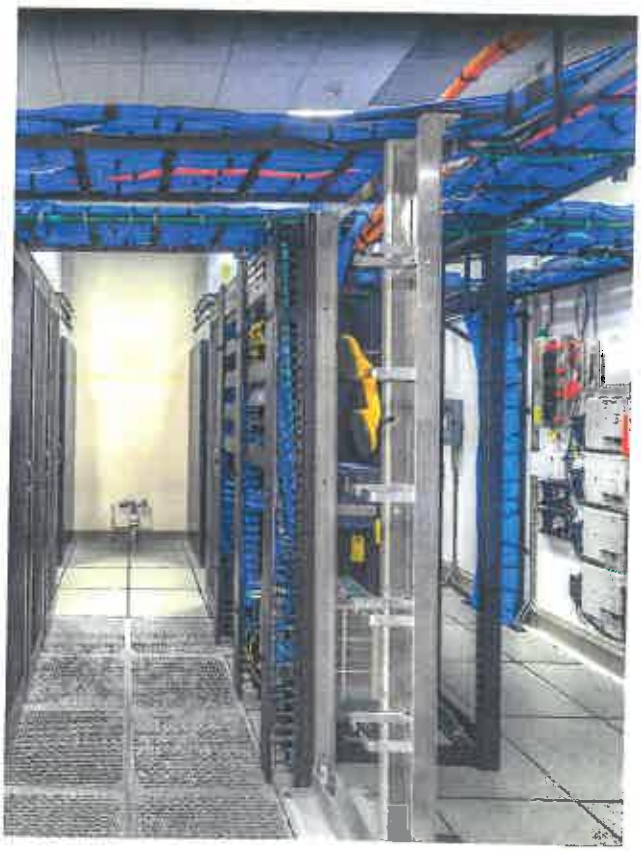
- Indian River County Sheriff's Office
- Johnston Public Safety Complex
- Kissimmee Police Training Facility
- Largo EOC and Police Training Facility
- Lebanon Police Department
- Linn County Sheriff's Office
- Lowell Police Headquarters
- Lynchburg Police and Courts Spatial Needs Assessment
- Manchester Police Department Headquarters
- Mansfield Police Headquarters
- Martin County Public Safety Facility
- Miami Fire Department USAR Facility Master Plan
- Minneola Police and Fire Facilities
- MNCPPC National Division Headquarters
- Mount Dora Public Safety Facility Renovation
- Niceville Police Headquarters
- Northglenn Police and City Hall Complex
- Ocoee Police Facility
- Orange County Sheriff Sector II
- Orlando Police Department Headquarters
- Orlando Police Department Firing Range and Training Facility
- Owensboro Police Facility
- Palmetto Police Headquarters
- Pembroke Pines Police Headquarters
- Pinellas Park Police Facility
- Plantation Firing Range
- Polk County Sheriff District Command Center
- Port St. Lucie Police and EOC
- Port Fourchon Public Safety Center
- Provincetown Public Safety Facility
- Riviera Beach Police Facility
- River Vale Police Department
- Rochester Police Department
- Rockledge Police Department
- Sanford Public Safety Complex
- Sarasota Police Facility
- Sarasota County Public Safety Center
- Silverton Police Department
- Springfield Police Headquarters
- Spring Hill Police Headquarters
- St. Charles County Evidence Facility
- Sunrise Public Safety and Training Complex
- Tallahassee Police Headquarters
- Waukee Public Safety Facility
- Wells Public Safety Facility
- Wildwood Police Department
- Williamson County Public Safety Facility
- Winter Haven Police Facility
- Winter Park Public Safety and Training Facility
- Winter Springs Police and EOC Facility
- Wylie Public Safety Facility

TLC Engineering

TLC Engineering for Architecture, Inc. provides exceptional high-performance engineering design, consulting and energy services. Founded in 1955, TLC is an industry leader with expertise on a wide array of building types. Among the firm's accolades, TLC was selected by ENR southeast as the 2016 Design Firm of the Year. TLC's combination of extensive experience and expertise is applied to engineer high-performance, complex projects around the world.

Using the latest software and tools, TLC's RCDD-credentialed staff produces cutting-edge designs that support unique project requirements. Rapidly evolving technology demands that designs are crafted for flexibility, growth and change. Specialized applications include integrated security, audio/visual presentation, voice/video/data distribution, public address/sound, acoustical analysis, intercom, closed circuit television, broadband distribution and video telepresence.

TLC has provided design services for over 125 public safety facilities throughout the United States, including 55 with ADG. Our professionals are adept at designing electronic systems to meet a wide variety of requirements. Using the latest computer-aided design and testing tools we produce cutting-edge designs that support each client's unique operations. Every design is crafted to allow flexibility for growth and change. Specialized systems include integrated CCTV and security access control, CAT6 or 6A with multi-mode and single-mode fiber optics voice/video/data distribution, public address system, intercom, CATV coax broadband distribution, and audio/visual presentation systems. They will also assist with the technology needed for the proposed fusion center. The facilities are provided with redundant telecommunications services for an increase in survivability, including both telecommunications connectivity and cable TV from separate points of presence or different providers. As a support function, the facility does generally have the need for a dedicated communications tower adjacent to the facility for multiple RF radio systems.



T&L Engineering

Since 1956, Thompson & Litton has been guided by professionals. Visionary founders, William A. Thompson, Jr. and John W. Litton built their engineering practice on rock-solid principles reflecting and honoring the character of the rugged, individualistic people of southwestern Virginia. They know booms. They know busts. They know how to solve problems. More than anything, they get to know their clients and commit to serve them well. Integrity and respect is essential to a business that's built to stay.

T&L started with projects serving the coal industry 62 years ago. Because of their deep ties to the region, they have grown with it. Since their earliest days, T&L has emphasized serving their clients by producing quality work from committed people. Bill Thompson often underscored that dedication by noting that "Firms don't design projects. People do." Those principles are stronger than ever, backed by a staff of 94 employees.

Over the years, T&L has been shaped not only by their history but by their clients: leaders and innovators. Taking each client's advice to heart is a cornerstone value that has shaped T&L's practice and fueled their success. Often in southwestern Virginia, a successful project is the outcome of deep and lasting professional relationships - not only with clients, but with partners and vendors as well. Their commitment to maintaining great relationships shows up when it's needed most in situations like last-minute changes, unexpected twists, or weekend phone calls.

T&L serves its five-state mid-Atlantic client base from offices in Wise, Radford, Tazewell, and Chilhowie, Virginia and Bristol and Mosheim, Tennessee. T&L has a professional and full-service staff of engineers, surveyors, land-use planners, construction administrators, grant / financing specialists, and other support personnel.

Roanoke County Public Safety Center

English Construction, as a general contractor, completed this new three-story, 80,000-SF modern office building. This facility houses the county's public safety services featuring the latest technology in 911 communications among the various local, state, and national agencies. This project was procured under the new PPEA legislation.

Owner
Roanoke County, VA

Contact
Thomas Gates
County Administrator
tgates@bedfordva.gov
540-772-2004

Address
P.O. Box 29800
Roanoke, VA 24018

Project Budget
$10,896,881

Final Cost
$10,961,804

Proposed Schedule
Proposed: NTP March 2005 to completion December 2006
Actual: Start date July 2005 to completed December 2006

Ford T. Humphrey Public Safety Building

English Construction completed this 114,000-SF, two-story public safety building as a PPEA project and included an extensive amount of site work. This facility houses all county public safety agencies and includes high-tech communications equipment for all of the required dispatch services. This project was also procured under the new PPEA legislation and many of our proposed team members were involved with the Roanoke County PPEA Public Safety Building project.

Owner
Stafford County, VA

Contact
Kathleen Fox
Construction Project Manager
kfox@staffordcountyva.gov
540-658-7300

Address
1300 Courthouse Road
Stafford, VA 22554

Project Budget
$14,822,738

Final Cost
$14,822,738

Proposed Schedule
Proposed: NTP June 2006 to completion January 2008
Actual: Start date July 2006 to completed January 2008

Fredericksburg Police Headquarters

English Construction, as a general contractor, completed the Fredericksburg Police Headquarters, which houses police administration, patrol services, investigations, and forensics operations as well as the city's E-911 communication center in a 34,000-SF one-story structure. Locker rooms and a fitness facility are included. The building features a large multipurpose room for police department training programs and community groups. The multipurpose room can be accessed by the public without compromising the security of the rest of the facility. Storage is provided for various equipment and logistical support needs, including secure evidence storage. Public and police vehicle parking are well-separated, with a fenced police vehicle lot to optimize security.

Owner
City of Fredericksburg

Contact
Bill Downey
Construction Manager
billd@downeyscott.com
540-347-5001

Address
6799 Kennedy Road Unit F
Warrenton, VA 20817

Project Budget
$10,232,616

Final Cost
$10,232,616

Proposed Schedule
Proposed: NTP October 2005 to completion July 2007
Actual: Start date February 2006 to completed July 2007

Fredericksburg Courthouse and Juvenile & Domestic Court

English Construction served as the general contractor for the new courthouse. This project was implemented in phases to comprehensively address the city's court facility needs. First, a temporary juvenile and domestic relations court facility was constructed in an existing building. A new four-level courthouse with four courtrooms was subsequently constructed on the site of the former J&DR court building, which was demolished. The former general district court building was then renovated. The new 78,500-SF courthouse contains the circuit and general district court, their clerks, and secure, enclosed parking in the basement level. The building's signature cupola is open to the third-floor lobby below. On its downtown site, the new courthouse is contextually appropriate for Fredericksburg's Historic District and draws from elements of historic architectural styles.

Owner
City of Fredericksburg

Contact
Bill Downey
Construction Manager
billd@downeyscott.com
540-347-5001

Address
6799 Kennedy Road Unit F
Warrenton, VA 20817

Project Budget
$31,865,831

Final Cost
$31,481,371

Proposed Schedule
Proposed: NTP February 2012 to September 2015
Actual: Start date February 2012 to completed September 2015

United States Federal Courthouse and Post Office

English Construction completed this new federal courthouse and branch post office consisting of a new five-story court and office building, complete renovation of an existing three-story schoolhouse for additional courtroom and offices, and a freestanding one-story post office. The schoolhouse renovation includes exterior masonry, wood cornice repair, a new roof, and replacement windows. The courthouse is comprised of a district courtroom, bankruptcy courtroom, and magistrate courtroom that can also be used for bankruptcy jury trials and grand jury proceedings. Site improvements include five-vehicle parking areas, retaining walls, pedestrian paths, and streetscaping. The new complex provides dignified spaces and efficient operations for the courts, federal agencies, the U.S. Postal Service, and the public and encourages further development of downtown Lynchburg.

Owner
Keating Building Corporation

Contact
Daniel Keating
Chief Executive Officer
610-660-6060

Address
1600 Arch Street
Philadelphia, PA 19103

Project Budget
$15,850,000

Final Cost
$15,767,585

Proposed Schedule
Proposed: NTP September 2003 to completion February 2005
Actual: Start date September 2003 to completed February 2005

City of Lynchburg Utility and Streetscape Improvements

English Construction was the general contractor for proposed improvements for the downtown area included replacing aging utilities, updating streetscape features such as sidewalks, crosswalks and signals, and creating an overall pedestrian and business-friendly space for a sustainable downtown. The primary purpose of this project was to replace all water lines in downtown Lynchburg. Since that caused significant disruption, additional utility and streetscape work was done at the same time to reduce inconvenience. The project was constructed in multiple phases over the course of several years. The full project consists of water line replacement and the reconstruction of streets and sidewalks for approximately 50 blocks in the downtown area of Lynchburg. Much attention was given to street parking safety. Some replaced waterlines dated back to the mid-1800's.

Owner
City of Lynchburg

Contact
James Talian, PE
Chief Engineer
james.talian@lynchburgva.gov
434-455-3953

Address
900 Church Street
Lynchburg, VA 24504

Project Budget
$8,500,000

Final Cost
$7,500,000

Proposed Schedule
Proposed: NTP May 2016 to completion September 2017
Actual: Start date May 2016 to completed October 2017

Meherrin River Regional Jail

English Construction provided development, design, and construction of a new jail facility consisting of approximately 160,000 SF with 400 beds and core facilities for 600 inmates located in Brunswick County, Virginia. The site is at the intersection of two roads in order to provide access from two separate points with main access for the public, staff, and intake functions. The building construction incorporated a pre-engineered metal building exterior white the interior secure perimeter is composed of 8", secure, CMU-steel cells and security ceilings. All work outside the secure perimeter was constructed normally. The facility is fully sprinkled and conditioned. Other features include a drive-through sally port, work release, video visitation, magistrate's office and administration space.

Owner
Meherrin River Regional Jail Authority

Contact
Sherriff Brian Roberts
broberts@brunswickco.org
434-848-3133

Address
9000 Boydton Plank Road
Alberta, VA 23821

Project Budget
$44,484,924

Final Cost
$40,064,628

Proposed Schedule
Proposed: Start date May 2010 to June 2012
Actual: Start date May 2010 to completed June 2012

New River Valley Regional Jail

English Construction, in a joint venture effort with Balfour Beatty, provided services for the expansion and renovations to the existing regional jail facility. Originally designed by Thompson & Litton, the new construction consisted of approximately 148,053 SF of space with renovations to 12,351 SF of existing spaces that accommodate 712 inmates. The renovations to the existing facility entailed a complete interior demolition to the existing food service facility and required an on-site temporary kitchen facility, security electronic system upgrades and expansion of new housing units.

Owner
New River Valley Regional Jail Authority

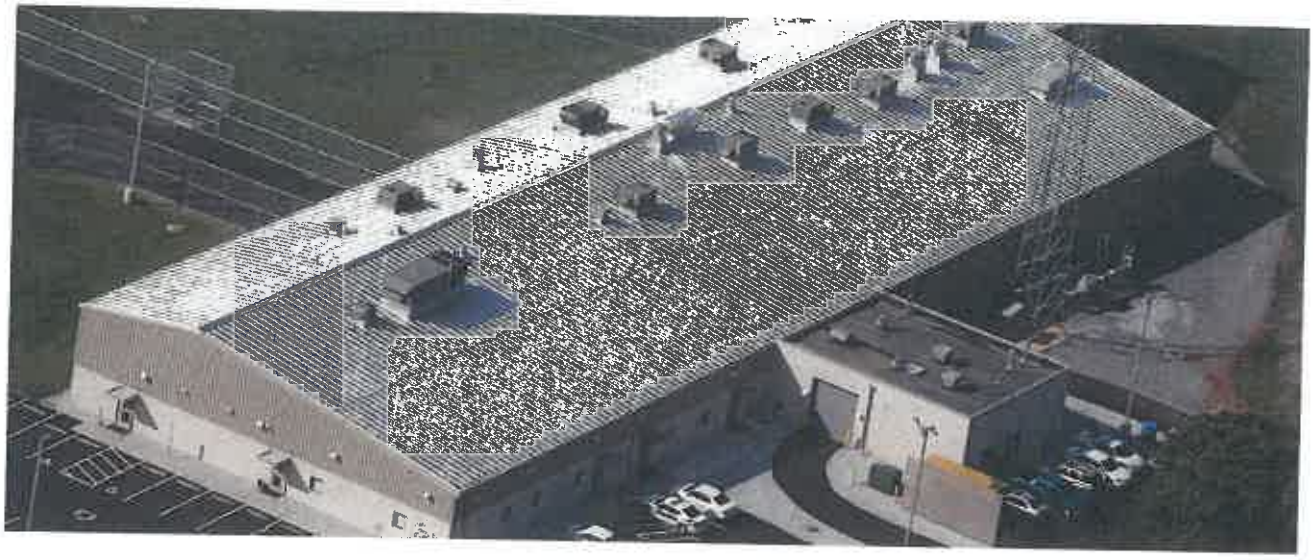
Contact
Gerald McPeak, Superintendent
mcpeak@nrvrj.org
540-643-2001

Address
108 Baker Road
Dublin, VA 24084

Project Budget
$55,200,000

Final Cost
$55,200,000

Proposed Schedule
Proposed: March 2008 to February 2010
Actual: March 2008 to completed February 2010



Patrick County Regional Jail

English Construction provided development, design, and construction of a new jail facility consisting of approximately 24,000 SF. This facility provides 60 beds with indirect supervision and provisions for double bunking to achieve a capacity of 120 beds. There is also provision for expanded kitchen and laundry of 1,454 SF to be located at the site. The Patrick County Regional Jail is a 12-acre site located within the town limits of Stuart, Virginia. The site is accessed from Commerce Street and is situated between the street and the Mayo River.

Owner
Patrick County Board of Supervisors

Contact
Sherriff Dan Smith
dmsmith@sherrif.co.patrick.va.us
276-694-6094

Address
742 Commerce Street
Stuart, VA 24171

Project Budget
$9,960,000

Final Cost
$9,960,000

Proposed Schedule
Proposed: August 2009 to December 2010
Actual: August 2009 to completed December 2010

Mecklenburg Regional Jail

English Construction was the GMP general contractor for the Mecklenburg Regional Jail Facility. This facility is a 39,000-SF 80-bed jail located in Boydton, VA. It serves as a satellite jail to the main facility in Alberta, VA. Mecklenburg Regional Jail uses pre-manufactured steel building for a shell with masonry veneer on the front face of the building. The cells are manufactured steel cells that will be double-stacked in the housing area. The facility hosts an administration area, medical area, kitchen, warehouse, and shop along with the housing area for inmates.

Owner
Meherrin River Regional Jail Authority

Contact
Sherriff Brian Roberts
broberts@brunswickso.org
434-848-3133

Address
120 Hicks Street
Lawrenceville, VA 23868

Project Budget
$11,995,326

Final Cost
$11,340,376

Proposed Schedule
Proposed: August 2011 to completed December 2012
Actual: August 2011 to completed December 2012

Dover Police Headquarters

Architects Design Group, in association with a local architecture firm, was selected by the City of Dover to design the new 28,000-SF Dover Police Department Headquarters and 121,000-SF municipal parking garage. The goal was to design for current and future needs of the expanding police department and integrate a much-needed public parking garage. The facility was built in the downtown core of Dover, a mature city that boasts a brick industry and successful mill operations.

This project focused on using space wisely and working with the community to find solutions to the multiple requirements, all while melding into the overall historic urban fabric design. Included in the space is a jointly-accessible police and community parking garage, a viable community enhancement. The new police headquarters is comprised of the police administration, uniform patrol, communications / dispatch, criminal investigations division, evidence processing and storage, code enforcement, records, booking and intake, professional services, and a municipal emergency operations center. Similar to Blacksburg, the municipal parking garage provides parking spaces for joint-use by the public and law enforcement with two separate secured entrances for police department staff only.

One of ADG's unique design solutions was to leverage premium building square-footage. The facility provides flexible multi-use opportunities in concert with the defined spatial requirements. One specific example is the meticulous design of the sally port. Detainees can be brought into the secured booking and intake area without interfering with police vehicle storage or additional municipal parking.

Contact | William Breault, Police Captain | w.breault@dover.nh.gov | 603-742-4646
Final Cost | $19,345,000

> Ian and his team's cooperation with the police department staff was instrumental in planning and budgeting for the project. Ian's willingness to meet with city officials, community members, and department staff in order to ensure the overall design quality was vital in gaining support and authorization of the project.
>
> -William Breault,
> Police Captain

Georgetown Public Safety Complex

Architects Design Group, in association with a local architecture firm, was selected for the programming update, master planning, and design of the new 76,831-SF Georgetown Public Safety Operations and Training Complex, which houses over 125 PD staff. An additional 16,697-SF tactical training facility was also designed within the new public safety complex and includes a flexible training area with reconfigurable walls for use with simulations or other training exercises. The new complex was designed to meet current and future needs through year 2030.

Designed to withstand estimated F3 tornado forces, the facility is able to maintain continuity of operations and accommodate state-of-the-art technologies throughout the foreseeable future. In addition to administration offices and training classrooms, the new facility houses several specialized areas including a communications center, evidence processing and storage, simunitions building, criminal investigation and interview areas, hybrid indoor / outdoor firing range, and low speed EVOC track. A 125-foot high communications tower is included with an on-site central energy plant. All facilities can be self-sustaining for up to 24 hours.

The complex includes a chemical processing lab, crime scene investigations lab, an evidence processing lab, and two vehicle evidence processing bays. The labs utilize stainless steel counters, chemical-resistant cabinets, epoxy flooring, fume hoods, an emergency eye wash station, and various counter-mounted materials analysis equipment. The bulk evidence storage is located directly adjacent to the evidence processing lab on the building's lower level. It contains high-density storage units that provide three times the storage capacity of conventional storage units. Additionally, three industrial refrigeration units and storage for weapons, cash, and narcotics evidence can be found here.

Contact | Wayne Nero, Chief of Police |wayne.nero@georgetown.org | 512-930-8450
Final Cost | $22,677,306

> I have had the distinct privilege of working closely with the ADG team. Ian and his staff have become more than our architecture firm, they are part of our family. They have listened to every concern and challenge, valued our best interests, provided the most value, and have been keenly attentive to our needs.
>
> -Wayne Nero,
> Chief of Police

Clermont Police Department Headquarters

In order to provide the Clermont Police Department with adequate space for improved services, safety, and increased staffing levels, Architects Design Group developed a spatial needs assessment, master plan, and site analysis for an addition and renovation to the existing police headquarters. Strategic planning included a new secure sally port, expanded temporary holding area, specialized property and evidence storage areas, and technologically advanced records retention area. Due to numerous issues including parking, cost to renovate the existing building, and community concerns, the addition and renovation approach was determined to be unfeasible and the city decided to proceed with a new construction option.

The city then entered into a developer's agreement to purchase a pad-ready site from the local developer. The design, construction documents, and permitting were completed for a new site. Contract issues with the developer and the cost of a pad-ready site forced the project to be placed on hold again. ADG was contracted further to investigate an addition to the newly purchased City of Clermont Arts & Recreation Center. This option was also abandoned. Because time had lapsed since the original study, an updated spatial needs assessment was provided to the police department along with analysis of various sites. A final site was selected, and ADG proceeded to update the construction documents prepared for the new site.

The completed 30,611-SF building is a two-story structure which includes an evidence processing lab, evidence bulk storage, a training classroom, temporary holding cells, a sally port, and the regular administration areas needed in a facility of this nature. The building has been programmed to satisfy the current and future needs of the Clermont Police Department to the year 2030.

Contact | Charles Broadway, Police Chief | cbroadway@clermontfl.org | 352-394-5588
Final Cost | $7,308,000

> They listened to our needs and gave us a building that met our requirements and expectations. Ian and his team are extremely professional and responsive. ADG was a great partner from the design process to the completion of our much-needed facility. We strongly recommend them for similar projects.
>
> -James Kinzler,
> Director of Capital Projects

Johnston Public Safety

In association with a local architecture firm, Architects Design Group was selected as the specialty design architect to provide programming, conceptual design, and voter referendum assistance, which was followed by full design services for the City of Johnston's public safety departments. The project included the analysis of the community's public safety needs and ISO ratings to determine the appropriate location for the public safety facility and the stand-alone fire station on the west side of town. The study concluded that two new facilities would best meet the needs of the community. The main facility is designed to LEED Silver standards and is 40,000 SF. It contains the headquarters for police and fire administration, as well as the main fire station.

This state-of-the-art facility includes the following law enforcement spaces: public lobby, interview rooms, records, investigation offices, crime lab, property and evidence storage, vehicle prep and evidence bays, booking and intake, virtual firearms training simulation room, IT support services, physical agility space, support services, and a sally port. The integral training room also serves as the city's EOC.

The ADG team assisted the city with its community outreach program in their efforts to promote a voter referendum, the selected mechanism for funding the project. The city had previously failed referendum attempts for other facilities, but extensive work by city staff and elected officials, with guidance and assistance from the ADG design team, resulted in successful passage of a $14M bond referendum. For a video that shows more of this facility's features, please visit: https://tinyurl.com/JohnstonPublicSafety.

Contact | Jim Sanders, City Administrator | jsanders@cityofjohnston.com | 515-727-7760
Final Cost | $9,528,134

> We are very happy with the building's appearance and work areas. Ian and his team demonstrated exceptional knowledge and skills in designing the building, especially the sensitive areas of police operations. They listened to our needs, educated us where necessary, and gave us a facility to meet our expectations.
>
> -Bill Vaughn,
> Retired Police Chief

Gulfport Public Safety Facility

ADG, in association with a local architecture firm, was selected to conduct a detailed spatial needs assessment, master plan, and design for the police and municipal courts departments. Based on the in-depth analysis of the department and interviews conducted with staff, the spatial needs for a joint Gulfport Police and Courts Facility was developed. The master plan provided for a phased development approach.

The design team assisted the city with evaluating several potential sites for the new facility. Devastated by Hurricane Katrina, much of the rebuilding occurred north of downtown. The local businesses in the area, however, fought hard to keep the new building in the downtown core to reinforce the economic recovery of the area. After much deliberation, it was recommended to build the new facility on the existing downtown police department site. The city made a significant commitment to the revitalization of its downtown by choosing to build the municipal court and police facility in pre-Katrina locations.

Specific law enforcement components include booking and intake with separate holding facilities for males, females and juveniles, evidence intake and processing, a detectives division, interview rooms, administrative spaces, a special operations unit, a crime reduction office, an emergency operations center, and communications / dispatch. In order to achieve judicial impartiality, the facility was designed with separate entrances for the public, police, and judiciary.

Contact | Dr. John Kelly, Chief Administrative Officer | jkelly@ci.gulfport.ms.us | 228-868-5770
Final Cost | $14,700,400

> ADG has once again shown why they are rated as one of America's great architecture firms. They exceeded our expectations at every step of the process. Their knowledge and experience in the design of police and judicial facilities was shown daily and is shown in the quality of the facility. We are extremely pleased.
>
> -Dr. John Kelly,
> Chief Administrative Officer

Manchester Police Headquarters

The City of Manchester was in the process of launching a large-scale public works complex when it became apparent that the property could also accommodate a new police headquarters facility to house the police department's 230 sworn officers. ADG teamed with the architect under contract with the city for the public works complex. ADG developed a detailed spatial needs assessment, updated the existing master plan for the entire complex to reflect the specialized needs of the police department, and developed the interior operational adjacencies for the new facility.

Working directly with the Manchester Police Department staff, ADG developed detailed design documents of all interior layouts, specialized equipment coordination, security systems design and specification, and development of the critical infrastructure redundancies to support the facility. Departments housed in the new facility include property and evidence, records, investigations, communications, a detectives unit, and a street crimes unit. This facility also includes a state-of-the-art evidence storage and processing lab. Inclusive in the design is an eight lane indoor firing range as a major component of the training unit. ADG's expertise in law enforcement planning and design has ensured that the new facility is designed to stand up to the most rigorous inspections in the pursuit of CALEA accreditation.

Contact | Fred Roach, Retired Captain | fred-r@comcast.net | 603-315-3393
Final Cost | $15,700,000

> Despite the pressures of space and budget, the ADG team rose to the challenge of providing us with a first-class and professional police department that we can utilize for years to come.
>
> -David Mira,
> Chief of Police

Orlando Police Headquarters

Architects Design Group, as the architect of record for a design-build team, was selected to update the design build criteria package and complete full design services for the new Orlando Police Department Headquarters. This effort included analyzing what development could be realized within the fixed construction budget. It became readily apparent that the needs of the department far exceeded the city's development budget. Working together, the design team and general contractor prepared four development options to address the program requirements, which allows for 450 sworn officers to operate out of the new headquarters. Of the four options, only one would conceptually allow the project to be developed within the fixed construction budget while meeting all program needs. This option, in addition to the construction of a new headquarters facility, included the adaptive reuse of an off-site warehouse for property and evidence, crime scene, and a portion of the training unit program requirements. The city project management team, Orlando Police Department Chief Mina, and his key staff members all endorsed this solution.

The 100,000-SF Orlando Police Department Headquarters serves as a major catalyst for thoughtful urban growth while integrating itself into the sensitive context of a historic neighborhood, the Parramore District. This area is rapidly becoming a vital component to the downtown urban fabric with three major athletic venues in proximity to the site. The entrance plaza is located at the most prominent corner of the headquarters site and welcomes public visitors through the north public entrance atrium. The building features a community meeting room for up to 320 people, a 4,500-SF gymnasium, and over 35,000 SF of office space for every bureau within the police department. Openness and transparency is maintained at the interior of the headquarters, contributing to daylighting within the interior work spaces. The meeting room is a multi-purpose space with an adjacent warming kitchen and chair storage space offering the flexibility to accommodate a full range of uses from graduation banquets for the police academy and other community meetings.

Contact | Claudio Rosa, Support Services Manager | claudio.rosado@cityoforlando.net | 407-246-2656
Final Cost | $23,532,755

> They have addressed our needs, acted efficiently to design changes, and have been positive throughout the process working with an extremely tight budget. In my experience, ADG is one of the best in the industry. I would not hesitate to work with ADG again and I would recommend them to other organizations.
>
> -John Mina,
> Chief of Police

Orlando Police Crime Lab / Evidence Facility

As part of a design-build team, ADG was selected to provide programming, master planning, design, and construction administration of a new crime scene and evidence facility for the Orlando Police Department. The project consists of the adaptive reuse of an existing 82,000-SF warehouse to accommodate evidence operations.

The evidence facility includes the property and evidence unit, storage, crime scene investigations and processing labs, training rooms, high density storage, bulk receptor storage, drop lockers, vehicle processing, narcotics, and weapons storage.

This project provides the department with 55,000 SF of evidence space, with an additional 27,000 SF of shell space to be built out for future growth. Critical infrastructure components are tied into the existing emergency operations center systems to provide redundancies for continuity of operations.

Contact | Claudio Rosa, Support Services Manager | claudio.rosado@cityoforlando.net | 407-246-2656
Final Cost | $10,752,750

> We worked with ADG in a design-build relationship and found them to be attentive to the project budget and schedule throughout the project. When issues arose they were quick to work with us to get them resolved. We look forward to an opportunity to work with them again.
>
> -Robert High,
> HJ High Construction

Sunrise Public Safety Complex

ADG was selected by the City of Sunrise for the design of the new Sunrise Public Safety Complex. The contracted scope of services included the development of a detailed spatial needs assessment, master planning, cost estimating, design, and construction administration. The public safety complex houses the entire operations of the Sunrise Police Department's employees, the joint county / city 911 communications center (PSAP), fire-rescue administration and training, municipal EOC, city-wide MIS data center, and an eight-lane indoor firing range.

Police divisions within the complex include administration, internal affairs, records, detectives division, crime scene unit, crime analysis unit, property and evidence, victim advocacy program, patrol, SWAT, and crisis negotiation unit. The facility includes an evidence processing lab, located on the second floor across from the evidence drop and storage area. The lab includes stainless steel counters, chemical resistant cabinets, epoxy flooring, a fume hood, emergency eye wash, and various analysis equipment.

The project site is located on the city's municipal complex. The existing buildings on-site provide a context for the design that are referenced through colors, materials, and complimentary details, creating a unified sense of identity within the complex. During the project planning phase, ADG examined vehicle and pedestrian access, utility network, and overall site infrastructure connections with modification recommendations to benefit current municipal complex functionality and enhance future improvements.

Contact | John Brooks, Retired Chief | johnebrooks@att.net | 954-931-7117
Final Cost | $31,930,000

> ADG's commitment to professionalism and quality customer service was showcased during the inception of the project. Their creative experience and talent provided what would eventually become a first-class home for over 300 employees. ADG's ingenuity was the driving force of what stands here today.
>
> -John Brooks,
> Retired Chief of Police

Sarasota Police Headquarters

ADG was selected to provide a detailed spatial needs assessment, site analysis of multiple sites, master plan, full-design documents, construction administration, and voter referendum assistance for the new six-story Sarasota Police Headquarters, which houses the department's 250 employees. The project was completed on-time and under the approved budget.

The new 102,000-SF facility includes spaces for professional standards, support services, internal affairs, criminal investigations, property and evidence, and records. The building also includes 21,790 SF for crime scene investigations, 9,275 SF for forensics and evidence storage, and 2,860 SF for vehicle processing.

While design was underway, a proposed joint parking structure with the county fell through. This led to the challenge of designing a 200+ space parking structure within an already constrained site. The design revisions were accomplished in under 6 months and the building grew to 196,000 SF. A number of specialized areas are designed into the secured garage including a SWAT-tactical ready room, SWAT vehicle storage, vehicle evidence processing bays, and the central energy plant, which includes the HVAC chillers and emergency generator / fuel tank.

The entire facility is designed to withstand Category 5 hurricane force winds. With the critical infrastructure redundancies that are in place, this headquarters is built to maintain operations during or after a significant event. This LEED-certified facility fronts a beautiful 40-acre passive recreation park, creating a large-scale backdrop to the park.

Contact | Barb Ross, Assistant to Chief | barbara.ross@sarasotafl.gov | 941-954-7012
Final Cost | $34,050,560

> We would highly recommend the design services of Architects Design Group. ADG's experienced and cooperative approach focused on guaranteeing project success for all participants in the process, and was a unique, refreshing, and welcome asset to the city.
>
> -Jim Lalumiere,
> Owner's Representative

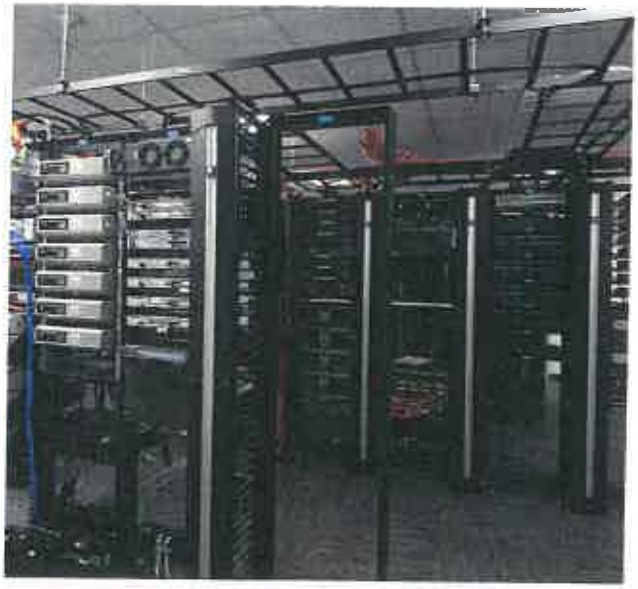
Cape Coral Police Headquarters

The City of Cape Coral selected ADG to provide programming, master planning, design, and construction administration services. The new 100,755-SF headquarters provides the police department with state-of-the-art facilities for their 345 employees and includes areas for administration, patrol, investigative services, professional standards, communications, property and evidence, holding and processing labs, and a multitude of training facilities outfitted with the necessary technology to be easily converted to the city's emergency operations center. The facility includes 3,200 SF for crime scene investigations, 11,425 SF for forensics and evidence storage, and 1,600 SF for vehicle processing.

Due to very unusual political influences, the design and construction had to be completed in less than one year. To accomplish this feat, ADG delivered this project through a fast-track schedule utilizing a hybrid design and construction process. Within two-and-a-half months, the city issued a permit for all site work and the structural envelope.

The team had completed 100% of the site engineering, 90% of the structural engineering, and a 30% complete set of construction documents. The 30% complete set was aggressively let out for competitive bids to the local subcontractor community and produced 201 bids from 47 disciplines of construction. The team was able to deliver a GMP to the city, almost $4 million dollars under the budget. The design team then completed the remaining design / engineering documents in less than four months while construction was ongoing, ultimately completing the project on time and within less than one year from start to finish.

Contact | Jay Murphy, Retired Police Chief | jmurph@comcast.net | 239-229-0911
Final Cost | $21,657,302



> The ADG design team, led by Ian Reeves, has guided our staff throughout the process. ADG's expertise in public safety facilities and its intimate knowledge of law enforcement accreditation standards ensures that even the smallest details are included.
>
> -Jay Murphy,
> Retired Police Chief

Sanford Public Safety Facility

This facility was a concept nearly two decades in the making. A spatial needs assessment conducted by ADG showed the police and fire services had outgrown their existing facilities. To provide state-of-the-art facilities, ADG designed a two-story facility housing the city's police department, fire administration, and a five-bay fire station. Both departments are designed as separate facilities connected by a shared two-story atrium, which includes vertical circulation, lobby / reception, a historic apparatus display, and community meeting room that overlooks the civic plaza.

The facility includes a state-of-the-art crime lab that is part of the investigative services / crime scene department. Several aspects of the facility support the crime lab, including a central evidence drop-off / processing area, biohazard evidence storage and blood drying rooms, crime lab with fuming hoods, latent print analysis, forensic science support, and forensic facial imaging.

Exterior walls are concrete tilt-wall construction with hurricane-impact glazing throughout, designed to withstand 150-mph winds, and is designed with 100% backup to all mechanical and electrical systems. Additionally, ADG assisted the city with obtaining a $1,006,000 in federal (FEMA-HMGP) grants.

Contact | Jim Krzenski, Administrative Services Manager | jim.krzenski@sanfordfl.gov | 407-688-5070
Final Cost | $15,314,000

> ADG's initiative and perseverance to this endeavor was a critical component in making our project a reality in such an uncertain fiscal climate. This effort was and continues to be characteristic of their approach to services the client.
>
> -Gerard Ransom,
> Retired Fire Chief

Allen Hamblen, LEED AP

Project Executive

Allen will serve as project executive and will oversee the entire design-build process. During the preconstruction phase, Allen will work with the design team, estimating department, and project manager to ensure accurate and timely estimates. He will also negotiate the majority of subcontracts, dealing directly with the owner of those firms and thereby getting the best deal. Throughout construction Allen will make regular visits to the jobsite to help resolve any outstanding issues ensuring any concerns the client may have are addressed. Once construction is complete, he will work with the project manager on warranty items.

EDUCATION
University of Richmond

REGISTERED IN
Contractor - VA

EXPERIENCE
Allen Hamblen is the senior executive responsible for management of the building division which includes public safety, correctional, regional jails, and municipal utilities. Allen has over 43 years of experience in the construction industry in estimating, procurement, and project management. Since the incorporation of the public private partnerships, design-build, and construction management projects, he has also been involved in the development, budgeting, and management of projects costing in excess of $550,000,000. Allen's role will be to ensure expectations are exceeded and project goals are being met. He will serve as the executive point of contact and will work directly in planning and executing the project. Allen has a demonstrated success on public safety facilities, and he will provide support as needed to address project issues and challenges should they arise. Allen will maintain executive oversight of the project, and as English's project manager, will have full authority regarding decision making and the allocation of English resources.

PROJECT LIST

- Fredericksburg Courthouse
- Fredericksburg Juvenile and Domestic Court Renovation
- Roanoke County Public Safety Center
- Ford T. Humphrey Public Safety Building
- United States Federal Courthouse and Post Office (Lynchburg)
- Fredericksburg Police Headquarters
- Patrick County Regional Jail
- New River Valley Regional Jail
- Meherrin Regional Jail
- Mecklenburg Regional Jail
- Deerfield Detention Facility Wastewater Treatment Plant, VDOC
- Medium Security Correctional Facility and WWTP

Rodney McManus, LEED AP

Design Principal in Charge

For this project, Rodney will serve as design principal in charge. He will oversee the project and will provide quality control during all project phases. Utilizing his experience, he will assist Ian and Rick with the management of the project budget and schedule. Rodney will be active throughout the entire project.

EDUCATION
Bachelor of Architecture, University of North Carolina at Charlotte

REGISTERED IN
LEED AP

EXPERIENCE
Rodney McManus is the vice president of ADG and has worked with the firm for six years. He is LEED AP-accredited and has overseen multiple LEED-certified projects in his career. His work as a project and account manager in the public sector includes municipal facilities and public safety facilities. Prior to joining ADG, Rodney was a partner of an architecture firm in New York City where his focus was on large scale projects in the city and throughout the US.

Rodney's tenure in architecture enables him to understand a project from many perspectives. He is detail-oriented and is able to maintain a global focus throughout the project. His management style allows him to understand the nuances of a project and provide specific information and guidance to the design team while responding to the needs of the client. Rodney's multi-faceted background, ranging from ground-up work to interior-based projects gives him a solid understanding of the specific project requirements, which allows for the smooth development of a project from programming to completion.

Rodney understands that the foundation of a project, beginning with the initial interviews and programming, is of the utmost importance and paves the way for a project's success. His hands-on approach to project management and knowledge of various building types ensures success each time.

PROJECT LIST

- Village of Palm Springs Police and Municipal Complex
- Cocoa Beach Police Department and City Hall Indian River County Sheriff's Office
- Cookeville Police Headquarters
- Spring Hill Police Headquarters
- Greenwood Police Department and Courthouse
- Hunterdon County Public Safety Training Center
- Citrus County Courthouse
- Gilchrist County Courthouse
- Brentwood Police Headquarters Preliminary Spatial Needs Assessment
- Wildwood Police Headquarters

Ian Reeves, AIA

Project Architect

Ian will serve as the project architect and be the lead designer for the Blacksburg Public Safety Complex. He will serve as the point of contact and will lead all phases of design, team members, schedule, and budget. He will maintain communication with the project stakeholders and town staff.

EDUCATION
Master of Architecture, University of Florida
Bachelor of Arts in Architecture, University of New Mexico

REGISTERED IN
Architect - VA, AL, CO, FL, GA, LA, IL, IN, MA, MO, NJ, NY, OH, OK, RI, SC, TN, TX, UT, WI

EXPERIENCE
Ian Reeves, AIA, ICA, IALEP is president of ADG and has been with the firm for over 20 years. He has been involved in the planning and design of numerous law enforcement, evidence, and public safety facilities. He participates in all phases of architecture providing oversight for programming, design, and construction administration. He is an expert in both CPTED and CALEA Design Standards and has assisted many police departments in obtaining this important accreditation through facility design. Mr. Reeves will be involved throughout the entire project and will lead in implementing the project's scope and goals. Additionally, Mr. Reeves works very closely with the client ensuring that ADG's "Participatory Planning Process" results in a product that exemplifies design excellence while exceeding all program requirements. Ian has served in a similar role on the pre-design services for the Lynchburg, VA Police Headquarters.

Mr. Reeves also assists in ADG's grant-writing services by helping clients with effectively utilizing grant resources and efficiently obtaining funding for their projects. He has been successful in helping our clients receive millions of dollars in funding, through local, state, and federal grants, FEMA Hazardous Mitigation Grant Program (HMGP), bond issues, reallocation of revenue funds, and other innovative methodologies including $1,001,305 in funding for the Sanford Public Safety Facility.

PROJECT LIST

- Lynchburg Police Headquarters Pre-Design
- Johnston Public Safety Facility
- Waukee Public Safety Facility
- Sunrise Public Safety Facility
- Sarasota Police Headquarters
- Cape Coral Police Headquarters
- Manchester Police Headquarters
- Dover Police Headquarters
- Georgetown Public Safety Complex
- Springfield Police Headquarters
- Cobb County Police Headquarters
- Daytona Beach Shores Public Safety Complex
- Northglenn Police and City Hall

Rick Mullis, LEED AP

Project Manager

For this project, Rick will serve as the project manager. He will assist Ian and Rodney with the design of the new Blacksburg Public Safety Complex. Rick's experience managing police facilities makes him a valuable asset to the team. He will also coordinate with daily communications to subconsultants and project stakeholders, as well as answer any RFI's.

EDUCATION
Master of Architecture, University of Florida
Bachelor of Science in Architectural Studies, Florida A&M University

REGISTERED IN
Architect - FL
Contractor - FL

EXPERIENCE
With over 18 years of project management experience, Rick is a highly creative and responsible architect with extensive knowledge in design, production, and construction administration on multiple project types including law enforcement and public safety. With his specialized experience, Rick is knowledgeable in CALEA, IAPE, and CPTED Design Standards. Rick's experience includes drafting, research, coordination, project budgets, proposals, and construction administration. In addition, Mr. Mullis holds a certified building contractor's license and is a LEED-accredited professional.

PROJECT LIST

- Orlando Police Headquarters
- Orlando Police Department Crime Scene and Evidence Facility
- Tallahassee Police Department Headquarters
- Highlands County Sheriff's Law Enforcement Complex
- Miramar Public Safety Facility
- Miramar Crime Scene Building
- Indian River County Sheriff's Office Crime Scene Building
- Georgetown Public Safety Complex
- Clermont Police Headquarters
- Sarasota County Public Safety Building
- Pembroke Pines Police Headquarters
- Boynton Beach Police Headquarters

Marwan Rashid, CTS

Security and Technology

For this project, Marwan will serve as the security and technology consultant providing the design of the security, voice / data, and audio / visual systems. Marwan is highly skilled in public safety technology due to his extensive years of experience designing the systems required for this specialized building type.

EDUCATION
Bachelor in Engineering, University of South Florida

REGISTERED
Certified Technology Specialist (CTS)

EXPERIENCE
Marwan is the senior project manager for TLC's communications & technology division. With 11 years of experience on public safety facilities, Marwan understands the unique needs of this project and will be a resource to the team for providing communications technology with flexibility and ease of use. Marwan has worked with ADG on dozens of public safety projects over the last 10 years.

Technology is constantly changing in these critically important building systems and the division is well versed in the latest technologies and systems and help identify the most appropriate systems when planning for a new facility. Marwan is adept at using the latest computer-aided design and testing tools, producing cutting-edge designs that support the client's unique operations. Specialized systems include integrated CCTV and security access control; CAT6 or 6A with multimode and single mode fiber optics voice/video/data distribution; public address system; intercom; CATV coax broadband distribution and audio/visual presentation systems.

PROJECT LIST (WITH ADG)

- Cookeville Police Headquarters
- Spring Hill Police Headquarters
- Dover Police Department
- Cobb County Police Headquarters
- Clermont Police Headquarters
- Orlando Police Department Headquarters
- Sunrise Public Safety Complex
- Georgetown Public Safety Complex
- Sanford Public Safety Facility
- Cedar Park Police Headquarters
- Alpharetta Public Safety Facility
- St. Charles Police Evidence Facility
- Miramar Public Safety Facility

Steve Brooks, PE
Engineering Project Manager

As the engineering project manager for T&L's services on the project Steve will coordinate the internal efforts of the T&L team and will also coordinate with English Construction, ADG, the Town of Blacksburg and other project stakeholders.

EDUCATION
Bachelor of Science, Civil Engineering, Virginia Polytechnic Institute & State University
Master of Science, Structures, Virginia Polytechnic Institute & State University

REGISTERED
Project Engineer

EXPERIENCE
Steve Brooks is a graduate of Virginia Tech receiving a Master's of Science Degree in Civil Engineering (structural emphasis) in 1989 and a Bachelors of Science Degree in Civil Engineering in 1988. Having over 29 years of experience as both a structural and civil engineer, Steve has the ability to understand the many facets of a project and bring it to a successful completion.

After spending three years with Lockwood Greene in South Carolina, he came back to T&L where he began as a project engineer for civil projects. He became the lead structural engineer and founded the firm's structural practice. He lead the firms endeavor to start a MEP practice when becoming the design supervisor of the building services group. Steve later became vice president of engineering.

Today he holds the position of senior vice president of operations. In his current role as senior vice president of operations, Steve contributes his expertise to all engineering disciplines as officer in charge, providing oversight and guidance, QA/QC and ensures that the project team has access to the resources necessary to complete the project on time and within budget.

PROJECT LIST

- Patrick County Regional Jail
- Mecklenburg Regional Jail
- Abingdon, Virginia Police Station
- Bland County, Virginia Courthouse Addition and Renovations
- Meherrin River Regional Jail
- New River Valley Regional Jail
- Montgomery County, Virginia Courthouse and Parking Structure
- Radford, Virginia Municipal Building Additions and Renovations
- Russell County, Virginia Courthouse Physical Needs Assessment
- Russell County, Virginia Courthouse Renovations
- Wise, Virginia Municipal Building

Steven Farris, PE

Mechanical Design Supervisor

Steven will serve as the mechanical engineer for the Blacksburg Public Safety Complex project. His duties will include design and analysis of HVAC systems, code review, cooling / heating load calculations, equipment selection, and specifications for the buildings.

EDUCATION
Bachelor of Science, Mechanical Engineering, Tennessee Technology University

REGISTERED IN
Engineer - VA, TN, NC, GA, KY, SC, WV, OH

EXPERIENCE
Steve Farris, PE has over 27 years of experience, and was the lead engineer and president of SEDA, Inc., before merging with T&L. He began his career in the mechanical contracting field, gaining hands on insight into all aspects of the design and function of mechanical systems.

Steve has served as design engineer and project manager on a broad range of projects including public safety and municipal facilities. Steve has performed energy audits for various building types and has earned his certification as an energy manager.

PROJECT LIST

- Blacksburg Police Department PAR
- Giles County Public Safety Building
- Johnson County Courthouse
- Pulaski County Administration Building Life Safety Improvements
- Petersburg City Hall
- Roanoke Department of Social Services Building
- Franklin County Courtroom and Office Renovations
- Madisonville Library Renovation
- US Fence New Processed Chilled Water System
- US Nitrogen Office Building
- Whitley County Airport New Corporate Hanger
- Western Carolina Moore Hall - Converted Dorm Hall to Medical Classrooms

Russell Anderson, PE, LEED AP

Electrical Engineer

For this project Russell will serve as the electrical engineer with expertise in the areas of lighting, power, fire alarm systems, and electrical system support for technology systems. He will oversee all electrical system engineering design and load calculations for the Blacksburg Public Safety Complex project including preparation of design documents for interior lighting, power distribution, telephone, and data raceway systems.

EDUCATION
Bachelor of Science, Electrical Engineering, Virginia Polytechnic Institute and State University

REGISTERED IN
Engineer - VA

EXPERIENCE
Russell Anderson, PE, LEED AP is an electrical project engineer with experience working on a variety of projects including municipal projects.

His primary responsibilities include design, layout, and specifications preparation for the following: interior and exterior building lighting, site lighting, street lighting, facility power delivery and distribution, motor control design, lightning protection systems, grounding systems, fire alarm system layouts, security systems, telecommunications layout, and anti-terrorist force protection. Rusty also has experience in cost estimating, load calculations, voltage drop calculations, short current calculations, lighting modeling and calculations, lightning risk calculations, arc fault calculations, breaker coordination, plan and construction review for code compliance, and has experience with LEED design on various projects.

PROJECT LIST

- Blacksburg Police Department PAR
- Smyth County Parking Garage
- Roanoke County Public Service Building Planning Study
- Washington County Public Safety Building Roof Replacement / HVAC Replacement
- Franklin County Courthouse Improvements
- Franklin County Courthouse Security
- Scott County Courthouse Improvements
- Washington County Courthouse Needs Assessment
- Pulaski County Administration Building Life Safety Improvements
- Roanoke County Public Service Center (Kessler Mill Road) Renovations and Structural Evaluation
- Washington County Government Center

David Blevins, PE, LEED AP

Plumbing Engineer, Fire Protection

David will be responsible for the plumbing and fire protection design services. His duties will include design and analysis of plumbing system requirements. These requirements include sanitary waste / vent piping systems, domestic cold / hot water distribution systems and piping, equipment selection, and specifications for the project. David will also design the fire protection systems.

EDUCATION

Master of Science, Electrical Engineering, Virginia Polytechnic Institute and State University
Bachelor of Engineering, Mechanical Engineering, University of Virginia

REGISTERED IN

Engineer - VA, OH, TN, MD, KY, NC, OK

EXPERIENCE

David Blevins, PE, LEED AP has 48 years of experience in building engineering which includes a broad range of projects involving heating, ventilating, and air conditioning (HVAC), plumbing, security, and electrical design for all types of buildings, including municipal facilities. His responsibilities have included industrial process and material handling installations and engineering studies for special projects, such as machinery design and hydroelectric design.

David has specific experience in designing complete HVAC, mechanical, electrical, plumbing, and structural systems. David's responsibilities have also included project management and energy conservation, as well as mechanical, electrical, structural, and civil engineering design. He has specialized experience in heat generation systems, solid fuel combustion / ignition systems, and corrosion protection. As a LEED-accredited professional, David has a comprehensive understanding of green building design practices, principles, and the LEED Rating System.

PROJECT LIST

- Montgomery County Courthouse and Parking Structure
- Wise Courthouse Space Needs Assessment
- Botetourt County Public Safety Building Hot Water Evaluation
- Roanoke Department of Social Services Building Renovation
- Pulaski County Administration Building Life Safety Improvements
- Franklin County Courthouse Improvements
- Franklin Center Lower Level Improvements
- Radford City Schools - Comprehensive Needs Assessment
- Roanoke Regional Airport Security Systems Evaluation

Keith Almoney, PE

Structural Engineer

Keith will serve as Structural Engineer for this project. He will be responsible for all aspects of structural engineering including analysis, design, investigation, inspection, construction document preparation, cost estimating, and oversight of structural related items for the public safety building and parking garage.

EDUCATION
Bachelor of Science, Civil Engineering, Virginia Polytechnic and State University
Attended Bridgewater College
Attended Pennsylvania State University and Institute

REGISTERED IN
Engineer - VA, CO

EXPERIENCE
Keith Almoney, PE has 19 years of experience in structural design including extensive experience in blast engineering. During his tenure designing structural systems he has utilized a multitude of various materials including steel, concrete, masonry, and timber. As a project engineer, he will gather and evaluate project data, provide recommendations, and develop design details and construction documents.

PROJECT LIST

- Giles County Public Safety Building
- Craig County Courthouse and Department of Social Services Building DSS PAR
- New River Resource Authority Administration Building Expansion
- Bristol Fire Station
- Franklin County Fire Training Facility
- Riner Fire Station
- Franklin County Fire Training Facility 2016 Structural Inspection and Report
- Virginia Department of Transportation, Fremont Headquarters
- Virginia Department of State Police - Christiansburg Offices
- Virginia Military Institute A/E Term Contract
- Southside Virginia Community College, Student Service and Learning Resources Center (Christanna Campus)

Jeremiah Tuggle, PE

Civil Engineer

Jeremiah will be responsible for overseeing all site design activities for the Blacksburg Public Safety Complex. He will complete all civil engineering tasks. Specifically, he will prepare and coordinate all grading, drainage, and site utility aspects of each station. He will also coordinate the site permitting process of all governing boards needed.

EDUCATION
Bachelor of Science, Education, Concord University
Bachelor of Science, Civil Engineering Technology, Bluefield State College

REGISTERED IN
Engineer - VA, WV

EXPERIENCE
Jeremiah Tuggle, PE has 10 years of experience in the design and construction of engineering projects. Since joining T&L in 2009, he has played a key role in the preliminary and final design of a variety of development projects for multiple civil engineering and architectural projects.

PROJECT LIST

- Giles County 911 Public Safety and Public Works Building Master Plan and Facilities Study
- Montgomery County Courthouse and Parking Structure
- Montgomery County Courthouse - Jail Security Electronics Additional Services
- Montgomery County Courthouse 11 Main Street / Crowgey Building Demolition
- New River Resource Authority Administrative Building Expansion - Conceptual Design
- Dickenson County Courthouse - Construction Layout
- Snowville Volunteer Fire Department / Emergency Services - Conceptual Plan and Cost Estimate Review
- Pulaski County Garage Facility - Efficient Lighting Replacement Project

CONTACT

1C. Provide the names, addresses, email addresses, and telephone numbers of persons within the firm or consortium of firms who may be contacted for further information.

ALLEN HAMBLEN, LEED AP
Vice President / Project Executive
ahamblen@englishconst.com
English Construction Company
615 Church Street
Lynchburg, VA 24504
434.455.3142

IAN REEVES, AIA
President / Architect of Record
marketing@adgusa.org
Architects Design Group
333 North Knowles Avenue
Winter Park, FL 32789
407.647.1706

FINANCES

1D. Provide the most recent audited financial statement of the firm or firms, and each partner with an equity interest of twenty percent or greater.

Financial statements will be provided if requested by the Town of Blacksburg as no firm included in the proposal has any equity interest in the project.

VIRGINIA CODE

1E. Identify any persons known to the proposer who would be disqualified from participation in any transaction arising from or in connection to the project pursuant to The Virginia State and Local Government Conflict of Interest Act (Virginia Code § 2.2-3100 et seq.).

We have reviewed the Virginia State and Local Government Conflict of Interests Act, and we confirm that none of the individuals on our team would be obliged to disqualify himself or herself from participation in this project.

ORLANDO

PROPOSED PLAN

2A. Provide a description of the project, including the conceptual design. Describe the proposed project in sufficient detail so that the type and intent of the project, the location, and the communities that may be affected are clearly identified. Include a description of any components, planned initially or for the future, that are expected to generate revenue for the project or the proposer.

PROJECT OVERVIEW

This project includes two main components, the police headquarters and the public parking garage, which will be situated on the corner of Clay Street and Church Street. The police headquarters will be approximately 36,560 SF and include administration, field operations, criminal investigations, special investigations, evidence processing, and information technology. The project will include training areas with classrooms and physical agility training areas. A large community meeting room with support spaces will also be located immediately off of the main lobby so it is readily accessible to the public. The parking garage will consist of approximately 300 spaces for public use and 24 for secured police functions. Our team has taken an initial look at the site in order to fully understand the needs of the police department. The following information is a preliminary analysis.

SITE / LOCATION

The proposed site at the corner of Clay Street and Church Street presents opportunities to design a building on a prominent corner in close proximity to the center of the town and become a catalyst for the revitalization of this area. The site has good access to major roadways to access throughout the town.

CONCEPTUAL DESIGN

Several options were evaluated to provide all program requirements on the site. Our proposed development option has the police building's public entrance on the corner of Clay and Church street, to create an inviting lobby that integrates with the surrounding community. Due to the size limitations of the site, the structure left little room between itself and surround streets. The corner entrance has been carved into and the height increased to give an open focal point. The columns only accent the open focal point, while giving support to the entrance overhang. The structure has brick accents which are paired with white metal paneling allowing it to feel more traditional, but keeping with a modern trend. Due to the size and proximity of the parking garage a commonality between both structures are needed. The concrete accent works in just that way, creating a bond between both while also helping develop the delineation between the police department and secured parking. The concept also adheres to the design principles of CPTED (Crime Prevention Through Environmental Design), as well as providing a design that supports the Department's commitment to community-oriented policing. These gestures create a strong but inviting presence for the Blacksburg Police Department.

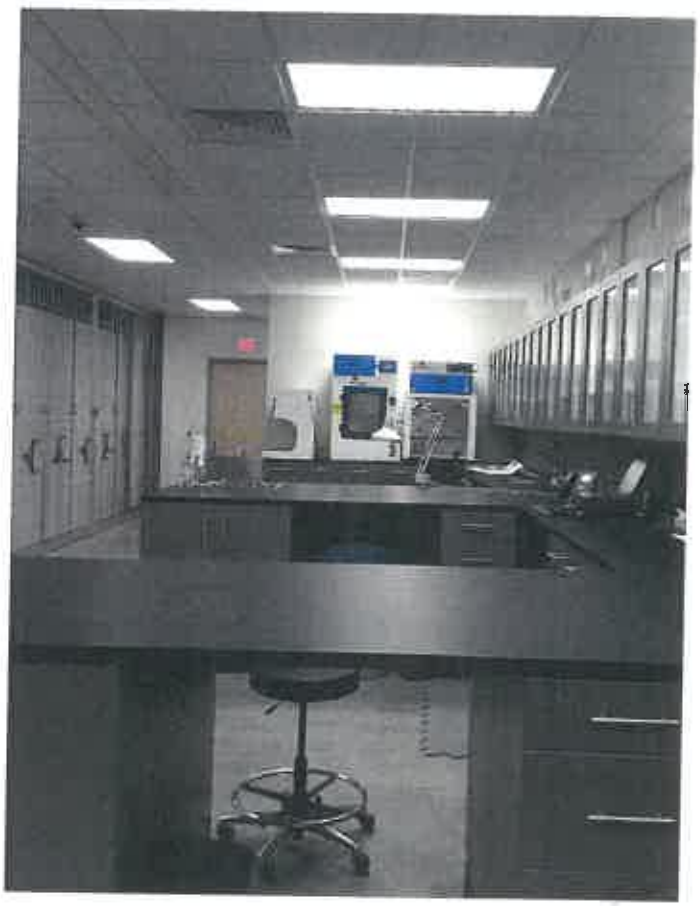
CIVIL

It is our understanding that Midtown Redevelopment Partners group will be responsible for providing a pad-ready site for the new Town of Blacksburg Public Safety Complex and municipal parking garage. Accordingly, very little earthwork and grading is anticipated for the project. In doing so, Midtown Redevelopment Partners would be responsible for removal of the existing surface parking area on the site (across the T intersection of Church Street and Clay Street). Earthwork is anticipated to be primarily limited to utilities, footings, and minor surface grading to promote proper surface drainage.
Our discussions with the developer's civil engineer, Balzer and Associates, and with Town of Blacksburg officials indicates that an underground storm drainage collection area for the overall development will

be located roughly midway between Clay Street and Eheart Street. Accordingly, our team will coordinate with the developer's civil engineer to integrate the storm water drainage plan for the new public safety complex and municipal parking garage site with the overall development group's storm water management plan. It is our further understanding that overall development's underground stormwater management facility will address stormwater quantity and quality for the public safety complex and municipal parking garage site in accordance with the Virginia Department of Environmental Quality's (VDEQ's) Stormwater Management Regulations. Therefore, stormwater management for the project will be provided using drainage ditches, curb and guttering, storm drains, culverts, and roof drains. Surface runoff will be collected and conveyed to the overall development group's storm water management facility. Storm drain piping and culverts will utilize corrugated high density polyethelene (HDP) piping and all storm drainage structures (curb and gutter, drop inlets, endwalls, etc.) will be designed and constructed in accordance with the Virginia Department of Transportation's (VDOT's) Road and Bridge Standards.

An erosion and sediment control (E&SC) plan will be developed for the site to minimize erosion and sediment transport during the construction of the facilities. This plan will utilize silt fencing, inlet protection, a dedicated construction entrance, and other temporary measures, as necessary. All on-site surface drainage will be directed to these temporary controls prior to entering off-site drainageways.

A geotechnical exploration will need to be performed to characterize the site's soils for selection of the appropriate building foundation system and to determine the suitability of the site's soils for fill material. Any unsuitable material encountered on the site would be removed and disposed of off-site; unsuitable material would be replaced with select fill obtained from acceptable off-site borrow sources. Primary vehicular access to the site would come from Clay Street. A key consideration in the traffic design element of the project will be the queuing of vehicles along Clay Street after turning from Main Street. The design will need to minimize the possibility of back-ups on Main Street that might be caused by vehicles waiting to enter the garage from Clay Street.
Pedestrian access will be provided at the front door area of the police station and for users of the parking garage that may be walking along Clay Street after shopping or gathering in downtown Blacksburg.



Pedestrian access will also be provided to both the public safety complex and the parking garage from future development areas of the overall site development.

Water service will be provided by an existing water main owned by the Town of Blacksburg. Water service for the project will require a connection to the water main and the extension of a domestic water line and a fire water line to serve the new buildings. Our team will analyze water pressure to determine whether a fire water pump is required.

Sanitary sewer service for the project will be provided by an existing gravity sanitary sewer system owned by the Town of Blacksburg. Sanitary sewer service for the project will require the construction of a sanitary sewer lateral to serve the police station. It is not anticipated that the parking garage will have toilet facilities, therefore, a sanitary sewer extension to the parking garage will not be required.

STRUCTURAL

Due to the specialized nature of work, the new building will be assigned a Risk Category of IV (per the Virginia Uniform Statewide Building Code, or VUSBC) and will be designed accordingly for the increased environmental loads (i.e., wind, seismic) and a greater degree of resilience of the structure to those loads.

The areas in and around the Town of Blacksburg are known to have karst (cavernous) geology, which carries the possibility of sinkholes developing. A geotechnical investigation of the site by a licensed geotechnical engineer will be performed to determine the physical properties of the soils and to determine if there is any karst geology below the surface at the site. The foundations for the public safety complex and the parking garage will be designed based on the geotechnical investigation and its recommendations. It is presumed that the building will be founded on shallow foundations based on the size of the building and the foundations of similar structures within the town's limits. If deep foundations are required due to karst geology at the site then the foundations will be designed accordingly.
We anticipate the public safety complex will be constructed using a structural steel frame (wide flange members) as this is generally the most cost effective structural system for buildings of a similar size.

The ground floor will be a concrete slab-on-grade and elevated floors will be concrete slabs on metal deck supported by structural steel framing

It is presumed that the roof will consist of metal decking on cold-formed steel trusses to provide a pitched roof that matches other proposed structures within the overall development. Exterior walls are anticipated to utilize masonry units with steel stud back-up at non-secure areas and masonry with grouted, reinforced CMU in secure areas.

It is anticipated that the parking garage will be constructed with pre-cast material to the greatest possible extent. A key design consideration will be incorporating other materials into the pre-cast components to provide an aesthetically pleasing look and feel for the facades of the garage that face public areas.

MECHANICAL / HVAC

The mechanical / HVAC design for the public safety complex will be designed to comply with Leadership in Energy and Environmental Design (LEED) criteria for new construction, with the goal of achieving a Silver rating from the United States Green Building Council (USGBC).

Heat gains and losses from / to the building's exterior will be calculated using ASHRAE outdoor design conditions selected in collaboration with the Town of Blacksburg. Indoor design conditions for each space will be verified with Blacksburg Police Department early in the design phase of the project.

Heating and cooling will primary be provided using multi-zone type equipment - variable air volume (VAV) boxes with electric reheat - to provide independent zone control for temperature, and to allow simultaneous heating and cooling of different zones. Our team will work with Blacksburg Police Department to determine a reasonable zoning strategy for the building that balances first costs with the need / desire for separate control zones. Air distribution ductwork will be designed for a balance between first costs, ongoing operational costs, and noise considerations like appropriate ductwork velocities and discharge velocities at terminal devices, pressure losses, etc.

It is anticipated that the building's primary cooling system will consist of one or more rooftop direct expansion (DX) packaged air handling units. Each

system's efficiency and controls strategy will be selected to exceed ASHRAE 90.1 base energy standards in recognition of requirements necessary to achieve a LEED Silver certification. This may include the use of energy recovery systems for code-required exhaust air, demand-controlled ventilation, specific operating control strategies, and/or the inclusion of optional features on specific pieces of equipment. The space heating source – natural gas, liquid propane or hot water – will be determined early in the design of the facility. If hot water is the source a boiler will be included to heat hot water. Ventilation and exhaust systems will be provided as required by applicable codes for custodial, kitchen, restroom and similar spaces. Particular attention will be paid to the quantity of outside air required to provide a healthy indoor air environment.

Equipment will be located to provide ease of accessibility for both routine and unplanned maintenance. A life cycle cost analysis (LCCA) will be performed to optimize the balance between first costs and operating costs for the HVAC systems. The parking garage should not require mechanical ventilation as an open design concept will be pursued. Support areas for the parking garage will be provided with heating, air conditioning and exhaust, as required. A rooftop solar panels installation will be evaluated for possible inclusion in the project's design. At a minimum the design will provide facilitization for a future solar panels installation.

PLUMBING

Plumbing systems for the new facility will include toilet fixtures and equipment, waste and vent piping, roof drains, overflow drains, and potable and non-potable hot and cold water systems. These systems will be designed to provide the agreed upon points needed to achieve a LEED Silver certification. The systems will be designed in accordance with the applicable portions of the Virginia Uniform Statewide Building Code. For the domestic water system, low flow fixtures will be used to reduce total water usage for the building. All fixtures will be provided with sensor-operated valves or faucets where applicable. The water service will be metered and separate meters will be specified to monitor water usage for the different systems within the structure that require water supply. Domestic hot water will be provided by a high-efficiency water heater.

It is not anticipated that any compressed air or vacuum systems will be required for the new facility.

The prisoner holding area(s) will be designed with plumbing fixtures appropriate for such spaces. A rainwater collection system will be evaluated for potential inclusion in the project's design to help meet LEED Silver requirements.

FIRE PROTECTION

The public safety complex will be fully sprinkled. The system will be designed and constructed to meet the requirements of NFPA 13. The system will consist of a wet-pipe system for the public safety building while the parking garage will be protected by a dry-pipe system. A fire pump is not anticipated for the project but a final determination will be made based on water flow test data and calculations.

ELECTRICAL

An emergency standby generator will provide power to a portion of the building for three emergency systems – (1) required emergency life safety, (2) legally required standby, and (3) optional standby loads. These three systems will be physically separated with dedicated output breakers at the generator and automatic transfer switches and associated panels.

The emergency generator will be in an exterior sound attenuating weatherproof enclosure. The fuel source supply will be evaluated between diesel, liquid propane and natural gas.

Secondary distribution in the building will be designed to respond to the power needs of the building program with the flexibility to accommodate future space and function changes. To accomplish this, multiple electrical closets will be located on each level to contain equipment dedicated to the functions on a particular floor or area of a floor.

The distribution system will be designed to provide the reliability and flexibility required in the building with special considerations for separation of delicate equipment (computers, IT equipment, etc.) from unstable voltage / amperage loads (motors, elevators).

Secondary distribution voltages will be 480 / 277 volt, 3-phase, 4-wire, plus ground. These voltages will be used to provide service to mechanical equipment, general lighting loads, and the elevator. This voltage will be further transformed down to 208Y / 120 volt, 3-phase, 4-wire plus ground as necessitated by the building's utilization loads and their locations. Generally, lower voltage will be utilized for receptacles, computers, and miscellaneous equipment. Short

circuit and voltage drop calculations will be provided using industry standard electrical power system analysis software tools. Arc-flash and selective coordination studies will be provided using industry standard electrical power system analysis software tools.

LIGHTING

Lighting systems will provide light quantity to permit visual performance and light quality to control discomfort, minimize glare and reflections, and to satisfy architectural design aesthetic requirements. Light quantity will be determined by adherence to recommended lighting levels determined by industry standards (ISNA) and code requirements.

Light quality is determined by luminaire selection, lamp color, and light diffusing control methods. The impact of computer displays has led to specialized design approaches to ensure reduced glare on screens to enhance user comfort. Use of lighting to enhance architectural features can create a pleasant environment and facilitate personal comfort and ownership of a space, thereby enhancing human efficiency. This directly affects staff attitude, productivity, and well-being.

Other primary considerations in the lighting design will include occupant safety and energy conservation. Lighting control concepts will be designed using sensors to monitor the building's internal occupancy. Sensors will turn off the associated artificial lighting when a space is not occupied.

Local overrides will be provided for manual override and specialized needs. Lighting systems and controls will be specified for energy-efficient light sources that do not detract from good lighting design principles. In general, the project will utilize LED lighting. Special lighting fixtures, at a minimum, will be considered where necessary for special task lighting and for interior design treatment.

Strategically arranged corridor and stair luminaries will be connected to the emergency power system for code required emergency egress lighting. Means of egress exit signs will be incorporated into the design and be fitted with LED light sources.

Luminaries connected to the emergency power system will be provided for emergency egress illumination in the following essential areas: electric rooms, corridors, stairwells, elevator cabs, large group areas, and exterior doors leading to the public discharge.

In an effort to provide lighting systems which will be in harmony with energy conservation efforts, the following items will be incorporated into the design concepts:

- High-efficiency luminaries and associated diffusers
- Task illumination when the task can be accurately defined
- Multiple switching arrangements in rooms to control separate fixtures or separate lamps in fixtures, reducing illumination and energy usage as the tasks necessitate
- Manual dimming controls for conference / meeting rooms to allow maximum flexibility
- Automatic daylight controls in spaces that allows the intended function(s)

The exterior lighting design will be developed through a collaborative effort between the design team and the Town of Blacksburg. Lighting levels will follow the illumination requirements of IESNA.

The control of the outdoor lighting systems will be accomplished by means of contactor panels with photocell and astronomical time clock.

Building-mounted egress lights and multiple sidewalk lights will provide dusk-to-dawn operating schedules for security purposes.

FIRE ALARM SYSTEM

The fire alarm system will consist of a main fire alarm control panel alarmed to the local fire department via telephone line communication. A remote annunciator unit will be installed at the main entrance to provide coverage and flexibility needed for interfaces with the main fire control panel and for fire department use. The complete fire alarm system will be underwriter's laboratories (UL) listed and function as a communication, signaling, monitoring, and control system.

An analog addressable, state-of-the-art fire alarm system will be installed for the new building. The system will be of a solid state modular design to allow for future expansion with a minimum of hardware

additions. The fire alarm system will be a microprocessor-based monitoring and control system. The complete system will incorporate multiplex wiring techniques, a central processing unit (CPU), annunciator unit, field processing units, and peripheral detection and alarm devices, such as smoke / heat detectors, horn / strobes, and manual pull stations.

The system will be divided into the following major components:

- Detection, supervisory, and signaling system
- Horn notification system
- Visual alarm notification for ADA compliance

DETECTION AND SIGNALING SYSTEM

The fire alarm detection and signaling system will be of the addressable type operating at 24 volts DC with standby battery or UPS power to function for 24 hours during a major power failure in quiescence load and then capable of 15 minute operation under full load alarm conditions. The fire alarm system will also be backed up on the generator. These systems will provide complete fire detection and alarm capabilities monitoring manual pull stations and automatic detectors supplied and connected under the electrical section, and monitoring sprinkler system water flow and valve tamper position indicators provided by the mechanical section. Signaling devices will be via an audible horn system and visual flashing indicator lights for the hearing impaired to comply with ADA requirements. Strobe systems will be synchronized during alarm conditions.

Project Approach

KICK OFF MEETING / PROJECT STAKEHOLDERS WORKSHOP

Our team will conduct an initial meeting with the town and Blacksburg Police Department representatives to review the proposed project and confirm the schedule for specific tasks.

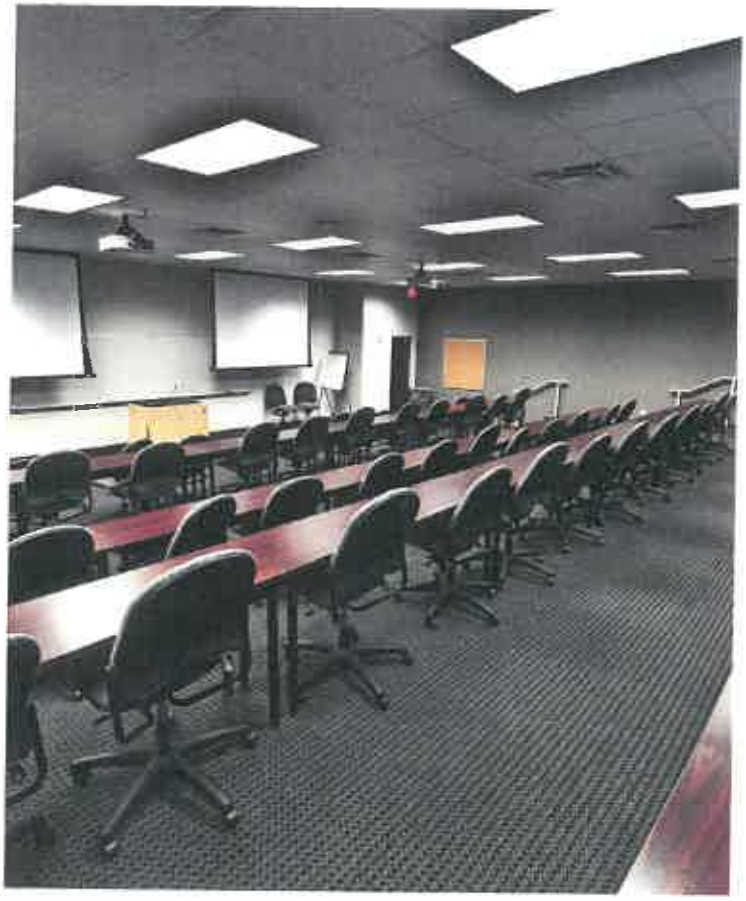
This initial meeting is an orientation to the methodology, project objectives, and responsibilities of the town's project management team, police department representatives, and project stakeholders. The goals and objectives for the project, activities, and project milestones are discussed and agreed upon.

SITE ANALYSIS

We understand the city would like to utilize the property located on the corner of Clay Street and Church Street to house the new police headquarters. Our team members have already walked the site to obtain a better understanding of the conditions.

During the site analysis phase, the team will prepare a detailed report of the proposed site. The civil engineer, T&L Engineering, will obtain to the extent possible existing aerial photographs, town maps, legal description, and surveys to assist in documenting the size and the location of primary features, such as buildings, paved areas, major landscape elements, easements, environmental jurisdictional limits, and other physical aspects that potentially affect or impact upon current and future expansion of the facilities.

The team will obtain documentation through the town's Land Development Ordinance relative to town codes and / or development requirements including criteria relative to buildable area, height limitations, parking requirements, provision of utilities, storm water retention and disposal, environmental issues, soil contamination, landscape requirements, setbacks, and similar factors which may potentially impact upon expansion capability and land usage.



MASTER PLANNING

After the site information is obtained and reviewed, our team will work with the town to develop the conceptual site plans and renderings for this facility. To do this, we will explore various conceptual site plans to achieve current and future needs. Our team will also evaluate the adjacent site areas relative to current zoning and actual land use and reflect this information in the master plan documents. Based upon the accepted spatial needs assessment and issues associated with adjacent site areas, our team will prepare a master plan document illustrating:

- Proposed land utilization
- Location and general configuration of current need of the police headquarters and parking garage
- Areas of potential expansion for future needs
- Location of vehicle access and egress, both staff and public
- Vehicle parking areas for the secured and public access areas
- Pedestrian areas and site circulation with at least two egress points for the police department
- Natural vegetation area designed for storm-water retention / detention
- Environmentally-sensitive areas
- Utility access and distribution
- Site security
- Ability to apply principles of CPTED standards

CONCEPTUAL DESIGN

At this point of design, the concept plan will be further detailed into sketches. This will include site plan refinements showing setbacks, parking and access / egress requirements, block diagrams / floor plans, 3-D massing diagrams, building elevations, and renderings.

MASTER PLANNING AND CONCEPTUAL DESIGN REVIEW MEETING

Our team will conduct an interactive design meeting to review the proposed master plan and conceptual design drawings. This meeting will include English, the design team, town's project manager, members of the police department, planning, town management, and project stakeholders, and if deemed appropriate by the town, interested citizens and / or community groups. The premise of this meeting will be to obtain consensus and agreement on the conceptual site plan, conceptual floor plans, building elevations, and renderings. After feedback from the design meeting, our team will prepare revised drawings illustrative of the proposed solution for the new facility and parking garage.

COVERED OUT DOOR = 1,200
CLASSROOM

FIRING RANGE = 16,850

SITE AREA
TOTAL SITE AREA = 20.17 ACRE
PUBLIC SAFETY SITE AREA = 11.7
FIRE STATION SITE AREA = 8.39

PARKING COUNT
PUBLIC = 76
SECURED = 193
TOTAL = 269

LEGEND

1. PUBLIC ENTRY PLAZA
2. PUBLIC SAFETY BUILDI
3. FEMA SECURED PARKI
4. PUBLIC PARKING
5. SECURED PARKING
6. STORAGE
7. TRAINING
8. SKID PAD
9. EVOC TRAINING AREA
10. FIRING RANGE + STOR
11. OBSTACLE /AGILITY C
12. RETENTION
13. PROPOSED F.D.
BURN BLDG + TOWER
14. PROPOSED F.D.
TRAINING BLDG
15. PROPOSED F.D.
16. SECURED ACCESS

SCHEMATIC DESIGN

During the schematic design phase, on-site design sessions will be conducted to refine design options and alternatives as accepted, which will provide improved facility design and cost savings. The schematic plans will be developed to establish the best possible organization for the Blacksburg Police Headquarters. This will take into consideration the ideal operational adjacencies for the efficient functionality of the facility. In addition, engineering systems and concepts for the building systems will be evaluated. During the on-site session, our team will be continually providing value engineering and constructability reviews. At the end of the schematic design phase, a cost estimate will be prepared for each of the phases and alternatives. We will work with the town to address the priorities of the departmental staff and the project budget constraints to determine an appropriately balanced solution. This phase includes the following:

- Preliminary code research and evaluation
- Preliminary floor plans that provide a layout that has been checked for code compliance
- Concept design for the facility and exterior elevation studies for the police facility and parking garage
- Preliminary finish schedule for all areas of work
- Specification narrative of building systems
- Submit to fire marshall for preliminary review
- A preliminary construction budget

DESIGN DEVELOPMENT

During the design development phase, the building materials, systems, and enhanced functional responses are refined. The design process integrates the design team and town's input responding to environmental and survivability issues, life-cycle cost issues, security issues, and budget considerations. The design approach, preliminary architectural, structural, mechanical, electrical, and plumbing concepts are developed to a level of detail that allows for independent, detailed cost estimating prior to initiating construction documents. As part of this project, our team will provide interior design services including furniture recommendations, layout, contract documents, bidding / procurement assistance, and installation administration. English will provide a GMP at 35% DD's. The following items are concluded at this design phase:

- Selection of systems, materials, and equipment for program response and sustainable design goals
- Preparation of initial design details
- Thorough documentation of architectural, structural, mechanical, electrical, plumbing, and fire protection systems
- Building security (access control and CCTV), audio visual technology, and identification of survivable systems components
- Forecast of potential energy performance, life-cycle cost, and architectural quality of design relative to the previously determined project goals
- Adjustment of the design as necessary to achieve project goals and cost targets

Our team will also implement our responsive security technology approach. This approach is defined as the review and application of all available and emerging systems to secure law enforcement facilities. Some of the highly secured areas that are accommodated by these systems include:

- Perimeter surveillance (site and building)
- Site ingress / egress points
- Gated access points
- All building entrance points
- Primary entry lobby
- Blind areas around site and buildings using CPTED design principals (Crime Prevention Through Environmental Design)
- Interior entrances into secure zones of the building
- Armory
- Property and evidence
- Forensics section / crime lab (evidence processing)
- Secured interview rooms
- Secured staff parking areas
- Vehicle processing bays

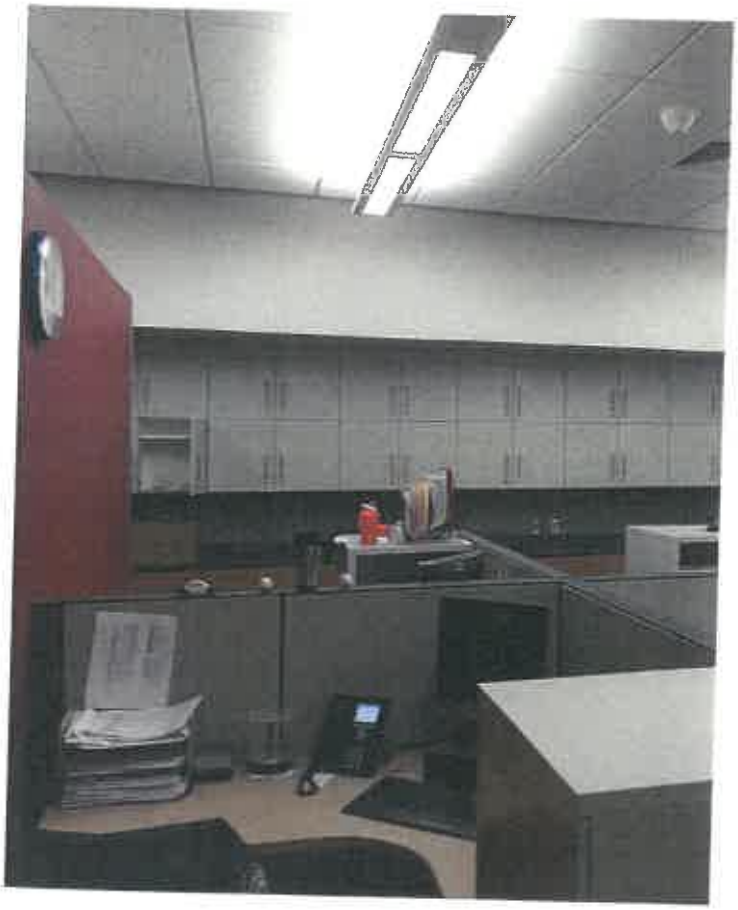
Once the town has accepted and approved the design report and issued the notice to proceed, ADG will begin the construction documents and English will begin the sequencing of construction. At the town's request, our team can develop an early site package at the end of the design document phase to expedite permitting. This will allow for the exiting buildings to be demolished and site construction preparation to begin while ADG is completing the construction documents.

CONSTRUCTION DOCUMENTS

During the construction documents phase, our team will prepare drawings and specifications necessary for bidding and construction. A building code analysis will be included during this phase. Reviews by the town's project manager, facility stakeholders, and the design team will be conducted at the 50%, 90%, and 100% complete phases. The plans will integrate the unique response to the project's goals and will incorporate the changes required to keep the project in budget, on schedule, and to meet the town's project goals. The plans and specifications will undergo ADG's quality control review process which involves a comprehensive review by separate architects and engineers who are senior within our team. This review process begins during design development and is completed with the completion of construction documents. Estimation of probable costs will be updated at the 50% and 80% completion phases of construction documents by English. Prior to completing bid documents, the English / ADG team will hold an interactive, on-site review session with the town. This session will allow for the town to provide comments and review input of the bid package. Our team will prepare the final set of comprehensive construction documents to minimize RFI's, change orders, and any additional costs. At this time, permits will be submitted.

CONSTRUCTION APPROACH

The English / ADG team begins our construction approach by establishing budget, quality and schedule goals, construction means and methods, and critical path items such as permitting, labor-intense trades, and long-lead items. We believe in building your project virtually before stepping the first foot on the job site. This level of intense preparation ensures that we thoroughly understand your needs, the town's intent, and the most cost-effective way to deliver the most value to your project.



PRE-CONSTRUCTION

During the design phase, our construction team members will attend all of the design and planning meetings to gain the best understanding of the design requirements, the limitations placed on the site, the many building components, and the desires of the town. Construction team members will also review and provide input during design planning to ensure constructability, value engineering, sustainable options, project phasing, cost, and schedule implications are considered from the contractor's perspective. ADG will utilize their knowledge of design guidelines to serve as a resource to the team, providing input to various options related to project phasing, cost options, constructability, timing, and details of the project which have worked well on other similar projects.

Detailed progress estimates will be produced as requested to inform the team of the project's anticipated costs and what value engineering options can be considered to reduce the overall cost without sacrificing the quality of the finished product. Even after the GMP is established, we will continue to work to complete the project in the most cost-efficient manner in order to best administer the project budget. Throughout the design process, our team completes constructability reviews of the documents to evaluate for ease of construction, potential conflicts in details, and cost efficiency as it relates to the means and methods which will be required to build the project. Developing a GMP proposal is an exercise in meaningful communication. It is extremely important that the English / ADG team and the Town of Blacksburg understands exactly what is included in the project and the detail that accompanies the decision. Quality of the plans and specifications are paramount to a good GMP. We have found that the information trail can be accomplished through memos, specifications on drawings, and dialogue with subcontractors to assure that not only are the specifications being met, but that the town obtains the best value for the dollars spent.

CONSTRUCTION PHASE TASKS

Services under this phase of the work include the following items:

- Negotiate the subcontracts to complete the project buyout
- Prepare estimates during different phases of project - conceptual, schematic, design development, 50% construction documents.
- Convene pre-bid meetings for the subcontractors
- Hold pre-mobilization meetings for selected subs to get everyone on the same page and assimilated into the team - this includes review of critical path, milestones, project goals, scheduling, constructability, safety and quality goals, and lean construction opportunities
- Determine sustainable elements to be used on the project
- Site development and preparation
- Holds weekly subcontractor coordination meetings
- Holds weekly owner / design-build team coordination meetings
- Prepare and control submittals, requests for information, and requests for change orders
- Maintain tight control of all activities in the field, ensuring a safe job site where all workers go home injury-free
- Monitor all work for quality and compliance with the contract documents and approved submittals
- Obtaining a certificate of occupancy
- Compliance with the town's Minority Business Enterprise (MBE) and Women Business Enterprises (WBE)
- We will certify, sign, and seal the drawings and specifications in compliance with Virginia statutes. ADG will review and approve shop drawings and equipment submittals during the construction phase of the project
- A final as-built package of plan drawings, specifications, shop drawings, and equipment operation manuals will be certified, and furnished to the Town of Blacksburg

SCHEDULING

The English / ADG team scheduling system for pre-construction and construction administration is comprised of several subsections that vary in detail and duration. All project scheduling is accomplished using Primavera CPM. Our schedules are developed with a level of detail to indicate all significant items of work to be completed, the phasing of the project when separated into different work areas, the responsibility of each work item, the area the work to take place, and includes logic to determine how all activities interact with each other. The activities reflected on the master schedule will indicate the critical milestones and key dates for the client and show the flow of work for the project. The bidding documents will also indicate the scheduling requirements for subcontractors.

Owner / architect / contractor (OAC) meetings are convened weekly to keep everyone informed and the lines of communication open. At these meetings, progress is reported and submittals, RFI, and proposed changes are reviewed. The goal is to keep all issues, questions, and decisions moving so as not to negatively impact construction progress. For an accelerated project like this where it is important to you for our team to complete work on time, we will be using a 3- to 5-week look-ahead planning process to help team members stay on track and be ready when they are needed. Some of the lean construction principles of last-planner system scheduling and the plan-do-check-adjust methods will be incorporated to eliminate waste and streamline operations in the delivery process.

The project schedule is as important to a project as the blueprints. It assembles an otherwise unordered list of events into an orderly, sequential list of activities that can then be communicated, monitored, and adjusted as events and needs dictate. Without proper scheduling and schedule maintenance, success on a project is not possible. Through the scheduling control practices we have implemented, English Construction strives to achieve on-time or early schedule project delivery.

CONSTRUCTION PHASE

As the construction phase begins, our construction team members will meet with each subcontractor and specialty contractor to review the scope of work and project expectations, thereby assuring that the town's interests are well protected. During construction our team will remain actively involved with QA / QC, budget / cost control, project oversight, and other activities needed to support project team members. English's project manager, will attend the weekly subcontractor coordination meetings to support our on-site management in making sure the resources needed to complete the project are available and that any upper management approvals needed can be provided quickly. He will also attend the weekly owner / architect coordination meetings to assist in making sure the project is on track and the town's needs are being met. The project manager will maintain tight control of submittals, requests for information, and requests for change order by thoroughly reviewing those documents to be sure the paperwork is valid and in compliance with the contract documents. Our project superintendent will maintain tight control of all activities in the field, closely monitoring the work for quality, safety, and compliance with the contract documents and approved submittals.

PROJECT CLOSE-OUT PHASE

"Project closeout begins day one." It is never too early to start getting subcontractors and suppliers to start thinking about their closeout obligations. The English / ADG team builds the required closeout documents into our submittal log in order to advise the subs early in the project what they are obligated to provide in terms of paperwork. This expedites the closeout duration greatly, as many closeout documents are received long before the project is substantially complete. For those who administer and maintain a facility, there is perhaps no more important closeout document than the project as-builts. These serve as the only record of all concealed work and are invaluable during the life of the facility. In an effort to provide our clients with the best information about their facility, the English / ADG team requires subcontractors to update the as-built documents a minimum of once-a-month as a prerequisite to payment. During underground and wall rough in of the various trades, our team requires the updates to occur weekly and in some cases on a daily basis. The updates must be clear, complete, and provided with dimensional information before they will be deemed acceptable. At project completion our information is transferred to an updated set of documents provided by the architect.

Near the end of each project, the English / ADG team will conduct the required training and demonstrations for facilities and maintenance personnel. These demonstrations will be videotaped and provided to the town and Blacksburg Police Department in electronic format in order to preserve the information for future personnel. Any systems software licensing information shall also be included.

An additional way we work to expedite the closeout process is through punch list management. Punch lists are compiled and completed during every phase of work, ensuring when the next trade begins their work, the substrate which they are working on is properly prepared and ready to accept the new work. This targeted method of preparing each facet of the work eliminates the summation of errors effect caused by compounding problems instead of addressing them as they arise. Near the completion of the project, we develop a more formal preliminary punch list, identifying those items we would expect to see on the client's punch list. This eliminates a vast majority of punch list items, expedites completion, and allows us to turn the project over in a clean and concise manner. Our objective with each project is to achieve a zero-punch final walk.

As the police headquarters and parking garage nears completion, we will designate a customer service representative as BPD's primary point of contact should warranty issues arise. This individual will notify responsible parties of the warranty item and follow up with them and the client in order to ensure quick response and resolution. The English / ADG team also schedules and conducts an 11-month walk through to identify and address any warranty issues previously undiscovered or unreported.

Specialized Law Enforcement Design Expertise

Over the past 47 years ADG has had the opportunity to be involved in the programming, master planning, and design of police facilities throughout the United States. This extensive experience has provided their firm with an insight into those issues which are very specific to these facilities.

There are many areas of the police facility that should be given special design consideration including: public lobby, interior corridors, records, investigative services, property and evidence, crime lab, holding area, armory, SWAT / tactical ready room, briefing and muster, locker and shower rooms, physical agility rooms, community policing, victim interview / waiting room, and shooting range.

The crucial components that are to be considered in the planning and design of police facilities are grounded in the commitment to protect those specialized areas that present the highest risk and liability to the department, such as property and evidence. For example, if a law enforcement agency cannot prove in a court of law that the evidence has been secured and protected from potential access, tampering, or contamination by an unauthorized individual, then the evidence may be deemed inadmissible in a court of law.

PUBLIC ACCESS

The preliminary design approach to protecting the sanctity or chain of custody through design is to prohibit or limit public access to a controlled, highly visible, secure area only. The public must enter the facility through secured gate access points which are monitored and video recorded. With exception to the public accessed lobby / waiting / property return areas, all exterior doors require security access control. The public has no access beyond this point. Additionally, all walls, doors, and glazing adjacent to the lobby / waiting / property return space are bullet-resistant and ballistic-rated. Secure, programmable card-key access by authorized personnel only, is required beyond this point. This ensures both the safety of the public and law enforcement personnel and any potential contamination from an outside influence.

EVIDENCE HANDLING / PROPERTY AND EVIDENCE

The planning and design of property and evidence areas must incorporate all recognized criterion that address the four critical components. They include: (1) preparation, (2) processing, (3) holding / storage, and (4) support infrastructure.

(1) Preparation: Law enforcement evidence custodians/technicians generally follow normal 9-5 business hours. However, a large majority of the property and evidence that comes into an agency does so after these hours and therefore must be accurately documented for the custodians / technicians to process and track the articles. The facilities must be outfitted with an area ADG refers to as the "bag and tag station." This is where the officer will log in the article(s), assign a case number, and securely store the article(s) avoiding access by anyone other than the evidence custodian/technician. As an example, in our Miramar Crime Scene Facility design, evidence is brought to the evidence drop-off through secured corridors and bagged and tagged for storage or further processing in the specialized, lockable evidence lockers. Also required is a chemical-resistant counter top work area with access to stored materials for packaging the property and evidence articles. The space also needs to be located near a bank of evidence drop lockers, in a variety of sizes, to accommodate anything from DUI / DWI video tapes to rifles, as well as a group of refrigerated units that will preserve articles containing DNA or bodily fluids without risk of deterioration. This bank of evidence lockers is a front-loaded, locked, and rear-retrieving configuration placed on a concrete curb with a floor drain located in close proximity to the refrigerated units as the condensation could be released onto the immediate floor area.

(2) Processing: The processing of the property and evidence articles is generally done only by individuals trained and certified in the proper techniques to comply with the sanctity of custody regulations. Initial processing occurs in an open work area, most typically located directly on the secure side of the bank of evidence drop lockers. Again, chemical-resistant or stainless steel counter top work areas should be provided with an integral sink. The custodians/technicians will finalize the case identification for the articles and prepare them for storage. On many occasions, the evidence will need to be further examined by the technicians or crime scene analysts. This requires very specialized lab areas with particular

concern to handling of hazardous and biohazardous materials. A vehicle evidence bay is often located adjacent to a vehicle sallyport area of the facility. The vehicle evidence bay must follow the same regulatory guidelines as other areas associated with the storage and processing of articles of property and evidence. The bays are typically sized a minimum of 20 feet wide to accommodate personnel access on both sides of a vehicle with the doors open. They are outfitted with such components as epoxy chemical-resistant flooring surfaces, floor drains tied into an oil-water separator, pull-down electrical reels and low-velocity air distribution systems. Dual means of access control devices to monitor who has accessed these areas, and CCTV systems (Closed-Circuit Television Cameras) used to record in color / digital format anyone occupying these spaces is also included. High-performance artificial lighting must be provided.

(3) Holding / Storage: The storage of property and evidence is as critical as the processing. Locating the articles relies on the accurate identification and recording of the pertinent case information associated with each article. The storage of the various types of articles is often segregated into the following definitions: bulk evidence, cash / valuables, narcotics, weapons, cold-case files, capital case files, DNA evidence, etc. All holding areas must be equipped with dual-recording access control devices to meet law enforcement (CALEA) accreditation standards. Likewise, any visitor to these areas must have their personal identification checked and verified, their times documented when entering and leaving, and signed by a witness, typically the custodian/technician working this area. High-density storage systems are often utilized to maximize the use of these areas. High-volume ceilings shall be provided to accommodate the storage systems.

(4) Support Infrastructure: The property and evidence areas of any law enforcement agency pose one of the highest areas of potential liability for that agency. The entire compound of the area must be contained within a security perimeter constructed out of tamper proof (solid concrete walls) and ceilings, or of similarly secured construction. The area is provided air conditioning systems designed for 100% exhaust and 100% make-up fresh air to ensure that none of the air from these areas is recycled into the main facility due to the concern of airborne pathogens that may be contained within the articles being stored or processed. Any HVAC ductwork which breaches the perimeter of this area that is larger than six inches in diameter should be installed with No. 5 steel-reinforcing bars (5/8" diameter) at four inches on center and embedded into the concrete at both ends no less than four inches on each side.

The accessibility to the area is regimentally documented at both entering and exiting by all individuals. This is easily accommodated through the use of sophisticated dual-recording access control devices as previously noted. A variety of technology is available such as fob readers, proximity cards, key pads, biometric readers, or a combination thereof. Strict adherence to these protocols and the accreditation standards will confirm an agency maintains the sanctity of custody.

COMMUNITY ENGAGEMENT FOR 21ST CENTURY POLICING

Law enforcement is constantly evolving to meet the needs of today's environment. One of the biggest trends we have seen in the last few years is the emphasis on community engagement and policing. The premise of community engagement is to involve and build relationships with members of the community in order to strengthen the department's presence. We will work with BPD staff, as we have done with many other large police departments, to identify and account for these spaces within the assessment and design of the new headquarters. There are many ways to implement this philosophy; however, facility design can play a critical part in the department's community engagement initiatives. During the planning phases, our staff will meet with the police department to discuss exactly what their specific community needs are. We will then discuss contemporary trends in design, which will detail spaces that can be used to connect with the community. ADG is knowledgeable in this trend and will be able to provide examples related to how the interior and exterior of the building can facilitate community engagement initiatives. At the 2016 IACP Conference, ADG spoke on the implementation of design strategies to promote the community-oriented policing philosophy.

CALEA / VLEPSC / CPTED STANDARDS

CALEA accreditation is recognized as a means of maintaining the highest standards of professionalism in many law enforcement agencies and their facilities. Several states have followed CALEA and established an accreditation commission. Generally, the goals of accreditation and the process follow the National Accreditation Program model. The mission of the Virginia Department of Criminal Justice Services is to provide leadership to improve the criminal justice system in Virginia's communities through effective

training, partnerships, research, regulation, and support. Although the aim of an accreditation program is to enhance the entire spectrum of professional law enforcement services, the facilities available to an agency have a significant impact on success, and more importantly, protects the municipal entity from potentially frivolous litigation. An agency requires adequate and appropriate space for personnel to conduct their work. Certain areas of the facility are assessed and continually undergo scrutiny of how it protects the interests of the department, its personnel, and the citizens coming into contact within the facility. Areas which may be evaluated include the records unit, training, patrol, property and evidence, vehicle sally port and detention, hazardous materials storage, criminal investigations, intake and holding, and dispatch. Programming the facility with these standards in mind, will assist BPD in the re-accreditation process. We understand the Blacksburg Police Department received their initial CALEA accreditation and wishes for their new facilities to comply with these standards.

Crime Prevention Through Environmental Design (CPTED) is defined as a multi-disciplinary approach to deterring criminal behavior through environmental design. CPTED strategies rely upon the ability to influence offender decisions that precede criminal acts by affecting the built, social, and administrative environment. Our team's architect-of-record, Ian Reeves, AIA, IALEP, ICA, has undergone significant training and is an expert in both CPTED and CALEA design standards. ADG is often contracted specifically because of his knowledge and experience with facility design that meets or exceeds accreditation requirements standards.

SUFFICIENT PARKING FOR STAFF AND PUBLIC

Site planning begins the process of defining how the proposed facility will come together. Clearly defined separation of the public and staff vehicles will be accomplished through a series of design measures including the use of readily discernible signage, perimeter security walls and gates, and CCTV surveillance systems. The implementation of design initiatives such as those promoted by the International CPTED Association (ICA), which ADG is a long-standing member of, will decrease opportunities for crime and provide a heightened sense of safety to the visitors and users of the facility. These measures have been incorporated into every law enforcement facility ADG has designed.

SECURITY

Security control is only one of the tools to provide protection of evidence and staff. Established operational procedures including chain of custody must also be established and followed to be successful. Security measures include the following procedures to protect and preserve the evidence:

- CCTV coverage and NVR hard-drive storage of all areas including the intake, storage, handling, and disposition times of evidence.
- Vehicle inspection tear down bays to have door control access where only one door to the area can be opened at a time. Multiple cameras will be installed in all corners of the area used for tear downs / inspections.
- Separate controlled access rooms within the evidence facility for fire arms, narcotics, and currency / valuables. For each of these spaces ADG typically provide dual credential access such as card and pin or card and biometrics. Additionally, within the rooms ADG would provide motion detection, as well as infrared camera coverage. AC grills shall be outfitted with internal bars to prevent access via the AC ducts to these rooms and possibly an in-duct sensor.
- Temperature and humidity sensors / alarms to security control, as well as tie to cell phones when settings are exceeded for specific rooms or spaces.
- Specific ventilation needs for areas where decomposition may occur.
- Generator and UPS back up of key areas and equipment.

WORK BY TOWN

2B. Identify and fully describe any work to be performed by the town or any other public entity.

The success of this project is based on effective collaboration with the Town of Blacksburg and project stakeholders. The town and project stakeholders will have review and approval authority on all major project components. We envision that the town and project stakeholders will actively participate in the activites listed on the next page.

- Architectural program finalization – the architectural program in this proposal will be reviewed, discussed, and verified with the town and project stakeholders
- Design workshop – a design workshop will be conducted with the town's designated design review committee to work with architects to develop alternative site master plans, floor plans, and explore various adjacencies, circulation patterns, entrances, and site features; consensus will be reached within the group to select the most appropriate solution
- Design review and approval – the town will review the proposed design at key milestones and inform the design-build team of any changes required; the town will facilitate communication between the design team, police department personnel, and other project stakeholders
- Site plan review, permitting, and inspections – the town will provide ongoing support throughout the design and construction process to ensure timely decision making

The Town of Blacksburg will also be responsible for the following:

- Property acquisition
- Moving arrangements – the town is expected to arrange and pay for all moving expenses associated with the project
- Computer, communications, and office equipment – the town will assist the design-builder in the selection and procurement of the technology and furniture systems, under an allowance provided in this proposal; the design-builder will provide data and communications cabling from equipment rooms to wall and floor boxes
- Updated environmental assessments – the town will obtain updated environmental assessments of both parcels and provide to the design-builder during development of the detailed phase proposal

PERMITS

2C. Include a list of all federal, state, and local permits and approvals required for the project and a schedule for obtaining such permits and approvals.

In general, the project will require site plan approval and the issuance of a building permit in accordance with the Virginia Uniform Statewide Building Code. Typically, the site plan approval process includes erosion and sedimentation plan and stormwater management plan reviews. These permits will be obtained by the design-builder.

This project will require comprehensive plan compliance review under Code of Virginia §15.2 -2232. This is a responsibility which the town must undertake. We encourage the town to begin this process as soon as possible. The project will require a rezoning, and we understand this process has been initiated by the town and the developer of Old Blacksburg Middle School property, and will be completed this summer.

Upon the completion of schematic design, we will be in a better position to conclusively evaluate zoning and site development requirements. We do not currently envision the need for federal or state permits for the project.

ADVERSE IMPACTS

2D. Identify any anticipated adverse social, economic and environmental impacts of the project. Specify the strategies or actions to mitigate known impacts of the project.

No long-term adverse social, economic, or environmental impacts are anticipated as the result of this project. Construction noise and periodic, short-term disruption of traffic should be anticipated in the immediate vicinity of the construction site. The design-builder will make every effort to ensure that these short-term disruptions are minimized.

POSITIVE IMPACTS

2E. Identify the projected positive social, economic, and environmental impacts of the project.

The proposed site of the public safety complex occupies a strategic location in the downtown. The corner of south Main Street and Clay Street is part of Old Blacksburg Middle School's mixed-use development. The public safety complex will be an attractive building which will provide an employment center for a large and diverse law enforcement agency.

Strong relationships among officers and the community members they serve have never been more important. Police stations are now expected to welcome community members with open arms and reflect the best of their community's values and hopes. No longer glorified bunkers, public safety facilities must instead be beacons of safety that symbolically and physically act as the center of a community. They need to be transparent, consider the cultural and historical context of their location, and act as safe havens in crises. Through its design, the new public safety complex and municipal parking garage will express all these positive goals.

SCHEDULE

2F. Identify the proposed schedule for work on the project, including the estimated time for completion, and any extended or maintenance warranties.

	Start Date	Duration (calendar days)	Complete Date
Sign Comprehensive Agreement	10/1/18	30	11/1/18
Schematic Design for New Public Safety Complex	11/1/18	65	1/4/19
Town Review and Approval of Schematic Design	1/4/19	27	2/1/19
Design Development for New Police Facility	2/1/19	90	5/1/19
Town Review and Approval of Design Development	5/1/19	30	5/31/19
Construction Documents for New Public Safety Complex	5/31/19	125	9/27/19
Town Review and Approval of Construction Documents	9/27/19	30	10/25/19
Construction of New Public Safety Complex	11/4/19	429	1/6/20
Occupy New Public Safety Complex	January 6, 2020		

RISK AND LIABILITY

2G. Propose allocation of risk and liability for work completed beyond the agreement's completion date, and assurances for timely completion of the project.

As part of the PPEA comprehensive agreement between the town and the design-builder, mutually-agreeable business terms will address completion dates and penalties for delays and extensions. We would be pleased to provide examples of agreements made with other municipal clients.

ASSUMPTIONS

2H. State assumptions related to ownership, legal liability, law enforcement, and operation of the project and the existence of any restrictions on the town's use of the project.

We state the following assumptions:

- The property will be acquired by the Town of Blacksburg
- The project will be owned by the Town of Blacksburg
- The town will obtain adquate public financing to support all project costs
- Environmental site conditions do not pose extraordinary risks or expense
- The site does not contain soil conditions that will require extraordinary measures to construct building foundation systems

PHASING

21. Provide information relative to phased or partial openings of the proposed project prior to completion of the entire work.

We recommend a design concept which includes structured parking. It may be necessary to construct this component as a second phase after the main building has been completed.

STANDARDS

2J. Describe any architectural, building, engineering, or other applicable standards that the proposed project will meet. Define applicable quality standards to be adhered to for achieving the desired product outcome(s).

We propose to design and construct a public safety complex that will be within the range of materials and systems considered appropriate for a municipal law enforcement facility. As discussed in more detail on page 90 of the proposal, the design of the new building will comply with CALEA and CPTED standards, specific for this specialized building type. The facility we propose will also be constructed to meet LEED Silver Certification by the U.S. Green Building Council.

PROJECT FINANCING

PRELIMINARY COST

3A. Provide a preliminary estimate and estimating methodology of the cost of the work by phase and / or segment (e.g. planning, design, construction).

A preliminary contract cost limit is included in our team's separate proposal marked "confidential and proprietary."

DEVELOPMENT PLAN

3B. Submit a plan for the development, financing, and operation of the project showing the anticipated schedule on which funds will be required. Describe the anticipated costs of and proposed sources and uses for such funds.

Our proposal does not include project financing. We have assumed that the Town of Blacksburg will issue general obligation bonds in an amount sufficient to pay all project costs. The town's bond ratings are very strong and thus allow the town to borrow money at interest rates significantly lower than the private sector. The information below reflects our preliminary proportioning of project costs:

- A / E fees: reimbursed 90% during design phase; 10% during construction phase
- Builders' Risk Insurance: reimbursed 100% during mobilization phase
- Performance Bonds: reimbursed 100% during mobilization phase
- Site Development: costs proportioned equally during first 7 months
- Building Construction: costs proportioned equally during 18 months of project duration
- Contractor Fee: costs proportioned equally during 18 months of project duration
- Allowances: proportioned as reimbursable expenses are incurred

ASSUMPTIONS

3C. Include a list and discussion of assumptions (user fees, tolls, usage rates) underlying all major elements of the plan.

Our proposal does not envision user fees, tolls, or usage rates. The new Blacksburg Public Safety Complex will be a municipal building. Unsecured areas will be available to the public in accordance with rules and regulations issued by the Town of Blacksburg. Additional assumptions may emerge from schematic design, based on stakeholder input.

RISK FACTORS

3D. Identify the proposed risk factors and methods for dealing with these factors.

ECONOMIC RISKS

Economic risks are those associated with the cost of the project. For this project, we are most concerned about the cost of money and construction inflation. Interest rates, both public and private, are at historic lows. Should interest rates rise, the town's cost of money increases and this directly affects the budgetary impact of annual debt service payments. To minimize this risk, the town should make every effort to expedite its review and approval of the project, and issue bonds at today's relatively low rates. Construction inflation is another significant project risk–especially to thecity. For the past 12 months, we have experienced construction inflation of approximately 5 percent. A similar trend has occurred in the past three years. What causes this inflation is largely a shortage of skilled labor in construction trades. Again, to minimize this risk, the town should proceed expeditiously to approve the project and begin design and construction.

CONSTRUCTION RISKS

Construction risks are those associated with building a structure. Environmental hazards and subsurface conditions are the two most likely risks we encounter. Both risks can be minimized by proper planning. Environment assessments and geotechnical engineering studies typically assist in limiting construction risks.

FEDERAL RESOURCES

3E. Identify any local, state, or federal resources that the proposer contemplates requesting for the project. Describe the total commitment (financial, services, property, etc.), if any, expected from governmental sources and the timing of any anticipated commitment.

We expect the town's support and collaboration, as previously described in our proposal. We do not contemplate requesting resources from state or federal authorities.

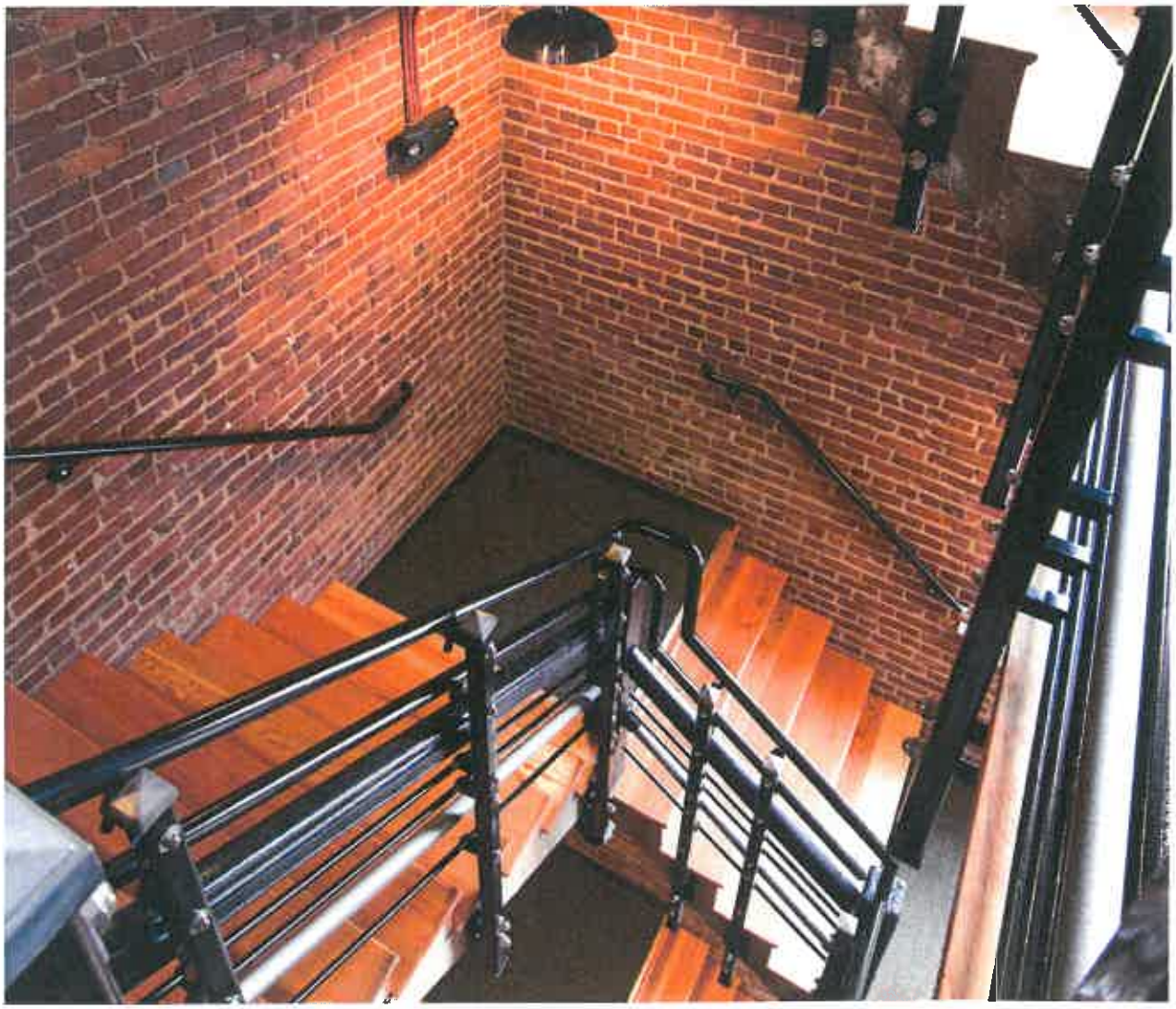
STABILITY

3F. Provide financial information which indicates the proposer's financial stability and ability to finance the project.

As stated previously, our proposal does not include project financing. Instead, we have assumed that the town will provide public financing for the project. We have provided the design-builder's confidential financial statements which we believe attest to the financial strength and stability of our team.

TAX EXEMPTION

3G. Identify any aspect of the project that could disqualify the project from obtaining tax-exempt financing.



We have reviewed U.S. Treasury regulations pertaining to tax-exempt bonds, and do not believe any component of our project would disqualify the town from obtaining tax-exempt financing.

PUBLIC SUPPORT / PROJECT BENEFITS / COMPATIBILITY

BENEFITS

4A. Identify who will benefit from the project, how they will benefit, and how the project will benefit the overall community, region, or state.

The men and women employed by the Blacksburg Police Department will directly benefit from the project. The town has long recognized the inadequate facilities which employees currently work. The new public safety complex will provide state-of-the-art, contemporary, and spacious facilities for law enforcement. These men and women will exhibit improved morale and will be more productive. It has also been our experience that bringing all police divisions together into one building creates synergies for improved collaboration and problem-solving, and fosters better training opportunities. These benefits, tangible and intangible, are key to continuous improvement required for CALEA certification. In a broader sense, the citizens of Blacksburg will also benefit. Improved morale and increased productivity by members of law enforcement are likely to lead citizens to be more satisfied with police services. Members of the community will also benefit from a centralized service location of the police department, as well as municipal parking downtown.

PUBLIC OPINION

4B. Identify any anticipated public support or opposition, as well as any anticipated government support or opposition for the project.

Large, publicly funded capital projects almost always encounter opposition from some taxpayers who do not support the expenditure and who may not fully appreciate the need for the project. However, a decision by the Town Council to construct this project would undoubtedly find widespread support as well. Current police department facilities are clearly inadequate, and this has been well-documented in the recent space planning study conducted by Thompson & Litton.

COMMUNITY

4C. Explain the strategy and plans to involve and inform the general public, business community, and governmental agencies in areas affected by the project.

Keeping the citizens of the town informed about capital projects through effective communication is essential to the success of any public building project. Gaining community consensus is an integral part of the planning and design process. Nonetheless, experience has taught us that it is unrealistic to assume that a major capital project will be totally accepted by everyone, every step of the way. Often, the need for the facility, its cost, location, impact on neighbors, and other issues can be controversial and subject to criticism.

In order to minimize community opposition, our team would strongly recommend developing a community awareness plan at the onset of the project. Our team can work with the town in developing this plan to educate and involve the community. Although meetings may not be conducted until the master planning and conceptual design phase is complete, we would recommend planning the meetings early on. Our team can be available to present the development options and answer any questions regarding the project. Our team is well versed in presenting this information, specifically for law enforcement facilities. Any valuable input from citizens at this meeting will be addressed in future design phases to follow.

COMMUNITY BENEFIT

4D. Describe the anticipated significant benefits to the community, region or state, including anticipated benefits to the economic condition of the town and whether the project is critical to attracting or maintaining competitive industries and businesses to the town or the surrounding region.

Please see section 4A, which addresses this question. This is not a project that spurs economic development by and of itself. Nonetheless, a professional police department with adequate space and physical facilities is necessary for the provision of effective law enforcement. Without effective law enforcement, no modern community will thrive. By demonstrating its commitment to a new public safety complex, the town signals its support for local law enforcement, and such support may create a favorable impression on prospective businesses.

We do wish to emphasize that this project will provide direct and indirect economic benefits during construction. Many construction workers will be employed by this project. The duration of construction is approximately two years. Wages paid to these workers will have an impact on the broader economy, as they use their compensation to buy goods and services, which spurs more economic activity.

COMPATIBILITY

4E. Address project compatibility with the town's master plan, local comprehensive plans, local infrastructure development plans, the capital improvements plan or other government spending plan.

This project is included in the Town's Adopted Capital Improvements Plan for Fiscal 2018-2023. Funding is shown in fiscal 2019 and fiscal 2020. Moreover, the Town Council recently adopted a one-cent increase in the local real estate tax to support debt service on a new public safety center.

The town's comprehensive plan contains a chapter titled "Public Safety and Community Facilities," which discusses the town's policy position in support of strong public safety services. The comprehensive plan indicates that the police department has several key infrastructure and facility needs, and that meeting these needs may require replacing existing facilities to accommodate departmental growth. The comprehensive plan does not identify a specific location for a new facility.

QUALITY STANDARDS

4F. Explain how quality standards of the project will be satisfied in comparison with the qualities anticipated or proposed by the Town of Blacksburg for the project.

Please see section 2J, which addresses this question.

S / M / WBE PROGRAM

4G. Provide a statement setting forth participation efforts that are intended to be undertaken in connection with this project with regard to the following types of businesses: (i) minority-owned businesses, (ii) women-owned businesses, and (iii) small businesses.

We are aware of the town's broad goal for participation by small, women-owned, or minority-owned businesses. Our design-build team pledges to fully support this goal in all subcontractor solicitations. We have a progressive record of enabling SWaM participation in our projects and commit to continuing this effort on the public safety complex project.