

Allsbrook Consulting Engineers, Inc.

electrical.mechanical.fire protection.communications





Langley Housing Office



Highwoods Office, North Carolina



Coaches Store

skillfully solving complex industry problems in timely and cost-effective ways

ABOUT US

Allsbrook Consulting Engineers, Inc. (ACE) provides engineering services from the simplest projects to the most complex designs, in specialty areas of engineering for the design industry, the construction industry and the facility maintenance and facility management. Formerly of Allsbrook Goodman, Inc. consulting engineers, the new Allsbrook Consulting Engineers, Inc. is certified as service disabled veteran owned small business (SDVOSB), and Virginia SWAM certified. Although we are a small business, Allsbrook Consulting Engineers has vast experience when it comes to undertaking projects of a variety of sizes and complexities. We have served a diverse cliental from municipal, federal, DoD, state, and commercial arenas. Allsbrook Consulting Engineers provides professional engineering services in the disciplines of electrical, fire protection, mechanical, architectural and telecommunications / data centers.

With over 28 years of engineering experience, we have worked with more than 50 clients on over 800 projects totaling over \$400 million dollars in security, fire protection, electrical, and telecommunications. ACE has been part of professional teams which have received numerous awards for excellence in design. Our commitment to deliver professional services on time, within budget, and of the highest quality has enabled us to develop strong professional relationships with clients.

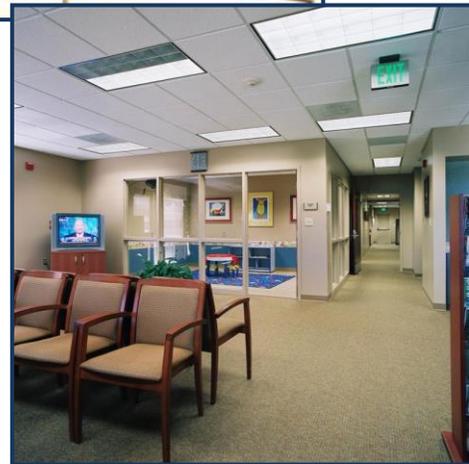
Quality is designed into our services, not added in at the last minute!

Allsbrook Consulting Engineers

ELECTRICAL ENGINEERING

Capabilities

- High and Low Voltage Power Distribution
- Emergency Power Systems
- Computer Power Supply & Uninterruptible Power Systems
- Lightning Protection and Grounding
- Lighting Systems
- Exterior Lighting
- Motor Controls
- Data Center Power Systems
- Electrical System Studies – Loading Analysis and Short Circuit Analysis
- Protective Device Coordination Study
- Arc Flash Hazard Analysis & Evaluation



ACE's years of professional experience in consulting and engineering allows for efficient and safe electrical designs that meet the National Electric Code and the National Electric Safety Code. Extensive experience includes all facets of Electrical Engineering designs, analysis, studies, investigation and assessments.

Capabilities

- Fire Alarm Design
- Fire Suppression/Sprinkler Systems Design
- Life Safety Code Analysis
- Building and Fire Code Compliance and Representation Services
- Fire Protection Systems Inspection Services
- Aircraft Hangar Fire Suppression



ACE is one of Hampton Road's local engineering firms with fire protection engineering capabilities.

Design Capabilities

- Commercial HVAC Systems
- Industrial HVAC Systems
- Process Air Handling And Conditioning
- Controls (direct digital)
- Humidity Control
- Water Supply and Distribution
- Sewer and Waste Disposal
- Energy Conservation and Controls
- Energy Audits and Monitoring
- Alternate Energy Source
- Heat Recovery
- Compressed air
- Gas (Natural and Propane)
- Refrigeration



ACE has extensive experience in mechanical and plumbing systems coupled with LEED certification by the US Green Building Council. We provide functional and efficient designs with a reduced negative environmental impact.

Allsbrook Consulting Engineers

TELECOMMUNICATIONS

Capabilities

- BICSI RCDD experienced with a Professional Electrical Engineer License
- Design new systems or integrate new designs into existing ones
- Coordinate Telecommunication Design with other appropriate building disciplines
- Voice Systems
- Computer Network Systems
- Telephone Systems
- Cable Television
- Capability to Engineer Classified Telecommunication Security Systems up to TS/SCI



We are trained and tested to the highest degree of telecommunications design knowledge in the industry. We provide reliable and valuable future-ready information transport systems specifically tailored for each individual client.

Allsbrook Consulting Engineers

ELECTRONIC SECURITY SYSTEMS ENGINEERING

Capabilities

- *Detection and Assessment for Facilities which necessitate top secret clearance requirements*
- *Physical and Electronic requirements of ICD Intelligence Community Directive 705*
- *Physical and Electronic Security Standards for Sensitive Compartmented Information Facilities, TS/SCI*
- *High Security Intrusion Detection*
- *Closed Circuit Television with IDS for real time and quick response*
- *Multi-layer access Control*



ACE provides design services and engineering of Physical Electronic Security Systems (ESS) for facilities. Our engineers have years of experience evaluating needs and designing the electronic security system that will meet the specific needs of each client. ACE has special experience emphasis on high security and top security physical protection for Governments.

SOUTH KOREA US Army Corps of Engineers Project



Korea Air Component C4I Complex (KACCC) Osan Air Base, South Korea



The Korean Air and Space Operations Center (KAOC) and Korean Combat Operations Intelligence Center (KCOIC), OSAN Air Base Korea, is a 432,090.3 Square Foot War-Fighting and Intelligence Facility to replace the existing archaic and outgrown KAOIC and KCOIC.

Due to the importance of this facility many of the building systems were designed with 2N backup capability. Special systems included multiple UPS, multiple backup emergency generators, secured classified and unclassified voice and networks, raised access flooring, high security, water storage, NBC (Nuclear Biological and Chemical) warfare protection, redundant HVAC. All physical and electronic security aspects of this facility were programmed to meet the requirements of Director of Central Intelligence Directorate DCID 6/9, SCIF Facilities (now ICD705/ICS705-1). The electronic security system included IDS, CCTV, AACS, FOIDS and PDS. The facility will meet Antiterrorism and Force Protection standards and special threat protection. Fire protection included Life Safety Analysis, compartmentalization, sprinkler system, smoke removal system, computer room ultra-sensitive smoke detection system, interstitial space fire detection and addressable fire alarm system.

Concept Design

- 432,000 sq. ft. Secured Facility
- Multi-Level Construction
- Multi-National Facility
- State of the Art Facility and Systems
- Multiple Complex Mechanical and Electrical Backup Systems
- Hardened Facility
- Controlled Entry Facility
- "Green Roof" System
- Adjacent Ancillary Supporting Buildings
- Integrated Domestic Water Storage Tank With Redundant Pumps
- Integrated Fire Suppression Water Storage Tanks With Redundant Electric Powered Fire Pumps
- Estimated Construction Value \$180 Million
- 8 Different Telecommunication Networks unclassified to Classified TS/SCI



MARINE SPECIAL OPERATIONS COMMAND (MARSOC) COMPLEX

This operations facility is located at Marine Corps Base Camp Lejeune, North Carolina. The design/build project encompasses 37 projects in the improvement of 225 acres on a 500 acre site. Utilization of high voltage power distribution systems were incorporated into the design. Estimated project cost is \$150 Million.



Highlights

- **Electrical High Voltage Distribution**
- **Complete Complex Exterior Telecommunications**
- **Heliport and Air Navigation Complete Electrical System Design**



US Army Corps of Engineers Project

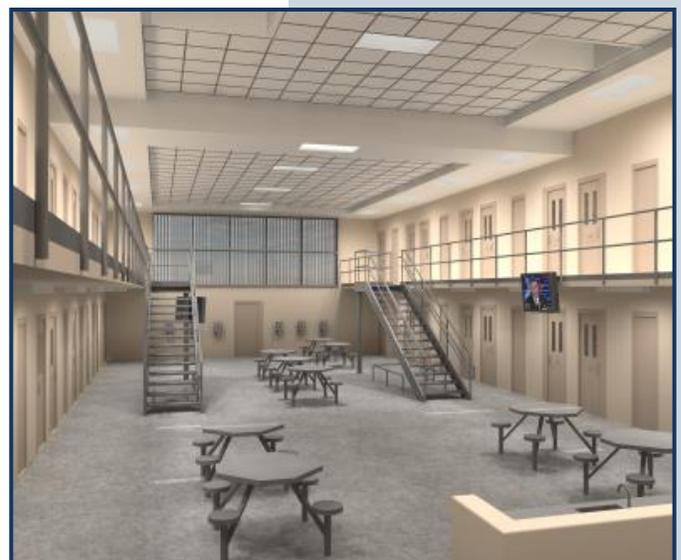


Special Features

- Interior Telecommunications System Infrastructure
- Voice, Data, Network, Audio/Visual and Cable Television
- Inmate Voice Monitoring
- Outside Telecommunications Plant Distribution

Fort Leavenworth Regional Correctional Facility

In 2005, the Defense Base Closure and Realignment Commission (BRAC) required that a regional Level II (medium security) facility be consolidated at Fort Leavenworth, Kansas. The facility has been designed to utilize the latest in electronic security systems and communications technology. It is approximately 238,439 square feet at a cost of \$95 Million.





HH MCGUIRE VA MEDICAL CENTER DIALYSIS WING MODERNIZATION AND EXPANSION

The project included the renovation, remodeling, expansion and addition of the second floor dialysis unit located at Hunter Holmes McGuire Veterans Administration Medical Center, Richmond, Virginia. The existing dialysis unit contained 16 dialysis stations and was expected to grow and require a 100% patient growth over a 5 year period. The new dialysis unit increased the from 8,800 square feet to 17,000 square feet and increased to 30 patient dialysis stations. Treatment spaces for both acute inpatient and chronic outpatient care was be provided, along with a new water treatment facility and support spaces. This project entails both remodeling and reconfiguring of existing space, and construction of new space that will allow for an optimization of clinical care delivery, patient and family-caregiver privacy, collaboration among clinicians, educators and researchers, and increased overall Dialysis efficiencies.



The project goals included: design a new state-of-the-art dialysis unit, optimize clinical service delivery, patient and family/caregiver privacy, collaboration between and among clinicians, educators, researchers, make efficient use of space and systems, incorporating sustainable features, locate the new dialysis unit in a new space, phased construction strategy that allowed the existing unit to remain in full operation until the new space was ready for use, provide back-up water supply/ system for one-day (24 hours) of dialysis treatment, provide emergency power supply system for the dialysis unit.



US Army Corps of Engineers Project



Deployable Ground Systems – 1 (DGS-1)

This is a two-story 147,000 square foot facility designed to support Unmanned Aerial Vehicle (UAV) processing operations. These operations are dependent on excellent, quality design to make the facility work as needed. Located at Langley Air Force Base, it was engineered as a C4ISR capable facility with 240 network cabinets. Estimated cost of this facility is \$47 Million.

Special Features

- High Electric Security Systems Design
- Secured Telecommunications Design
- 5 Different Telecommunications Systems



US Army Corps of Engineers Project



Munitions Storage Area Administration Building

This is a state-of-the-art two-story facility at Langley Air Force Base that accommodates the operations of 11 different administrative groups, supports 248 people, and facilitates compliance with the force protection standards. All designs were made strictly to adhere to DOD criteria. This 25,210 square foot facility is estimated to cost \$9.3 Million.



Special Features

- Electrical Distribution Upgrades
- Life Safety Codes Analysis
- Complete Fire Protection Design
- Convert Overhead System to Reliable Underground 22KV System
- Mechanical Design and Plumbing Design



Design Features

- Fire Protection with Life Safety Analysis, Automatic fire sprinkler system per NFPA 13 and UFC 3-60-01
- Assisted with design build RFPs
- Mechanical Engineering Development
- 6 Plumbing Designs
- Security Systems Design
- Electrical Design
- Telecommunications Design

Millennium Village Mall

At Al Udeid Air Force Base in Qatar, the Millennium Village Master Plan includes: dormitories, distinguished visitors quarters, fire station, fitness center, post office, recreation center, fellowship hall, food court, movie theaters, dry cleaners, internet café, administration offices, and a medical facility. All aspects of the fire protection responsibilities were coordinated with the host nation fire/building code and the Department of Defense criteria. Integration of both DOD and host country criteria were met without difficulty from our experienced staff. We were part of the design team that generated the design build RFPs. We also completed the PME and Fire protection portions of the DB RFPs.



Prototype Design

- Security System Design and Evaluation



Millennium Village Dormitories

The Prototype design for dorms will house enlisted and officers with 24 in total to be constructed at various coalition installations through the Mid-East. Primary design goals included designing the building in response to stringent force protection requirements and improving the military Quality of Life standards. Provision of a facility that mitigates the effects of the extreme desert environment and maximizing the quality of life for airmen and officers stationed at the various installations. Fire Protection engineering responsibilities included building code and life safety analysis, design for Automatic Fire Sprinkler System per NFPA 13 and UFC 3-600-01. Fire extinguishers in accordance with NFPA 10 Fire Alarm and Detection system in accordance with NFPA 72. Other specialized systems included an atrium smoke control system. The fire alarm and detection system will be connected to the base fire alarm reporting system. All aspects of the fire protection responsibilities included coordination between the host nation fire/ building code and the DOD criteria.

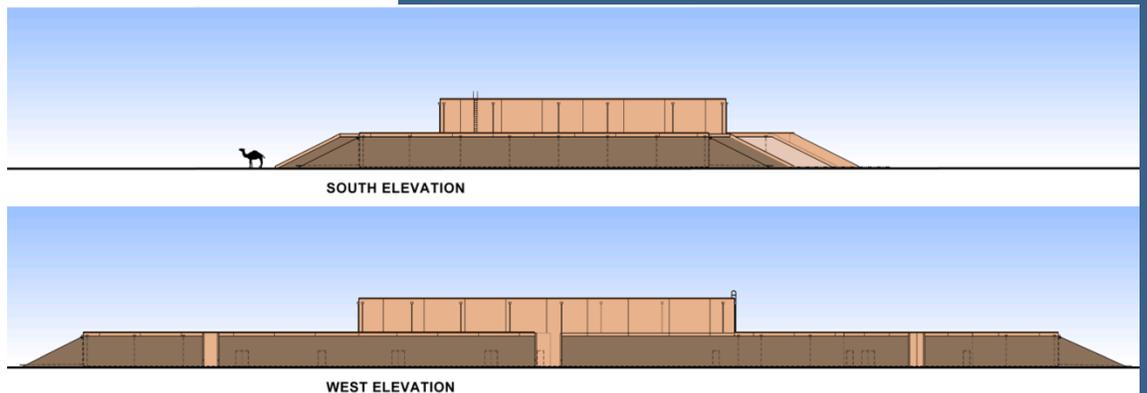


ENHANCED WING OPERATIONS CENTER (EWOC)

The EWOC is a 101,936 square foot Administration Headquarters facility at Al Udeid Air Force Base in Qatar. It is designed to house over 1,000 personnel during surge conditions. There are three distinct functional areas: Headquarters, Combined Air Operations Center (CAOC), and ISR/SCIF (Sensitive Compartmented Information). These areas meet DIA and NSA requirements. There were many other specialized designs done for this facility which make it one of our premier designs. Estimated cost was \$32 Million.

Highlights

- Secure Communications Design
- High Security Electronic System
- Redundant HVAC Design & Nuclear, Biological and Chemical Filtration Systems
- Complete Fire Protection Design
- 12 Different Telecommunications Systems
- NBC Ingress/Egress Cell
- Dual Backup Power Systems



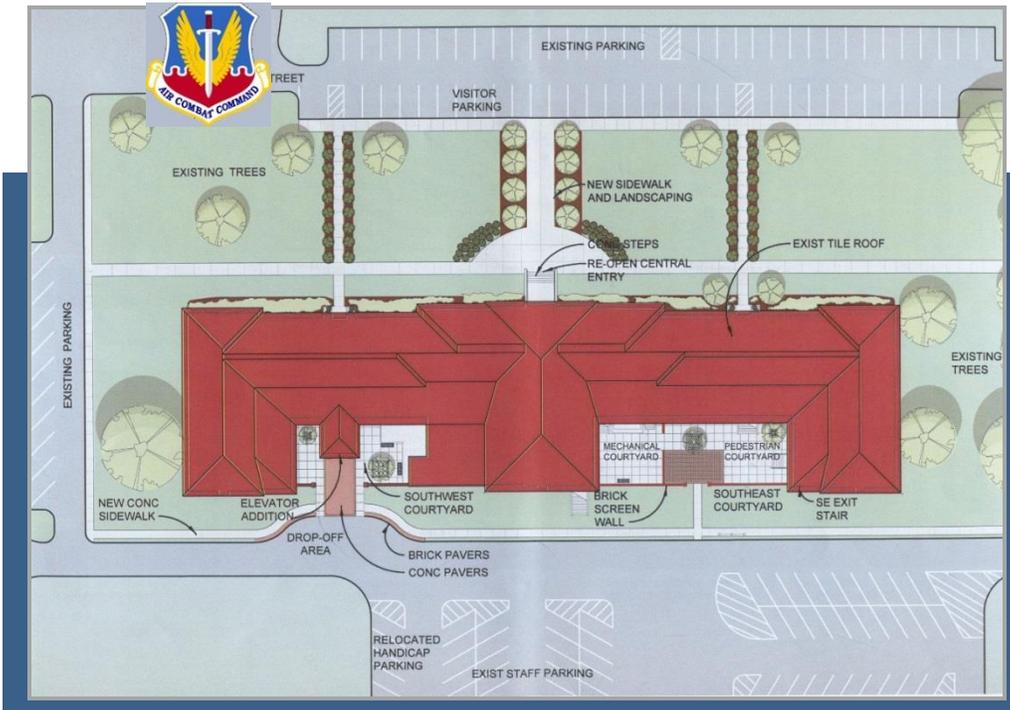
ENHANCED WING OPERATIONS CENTER



BUILDING 442

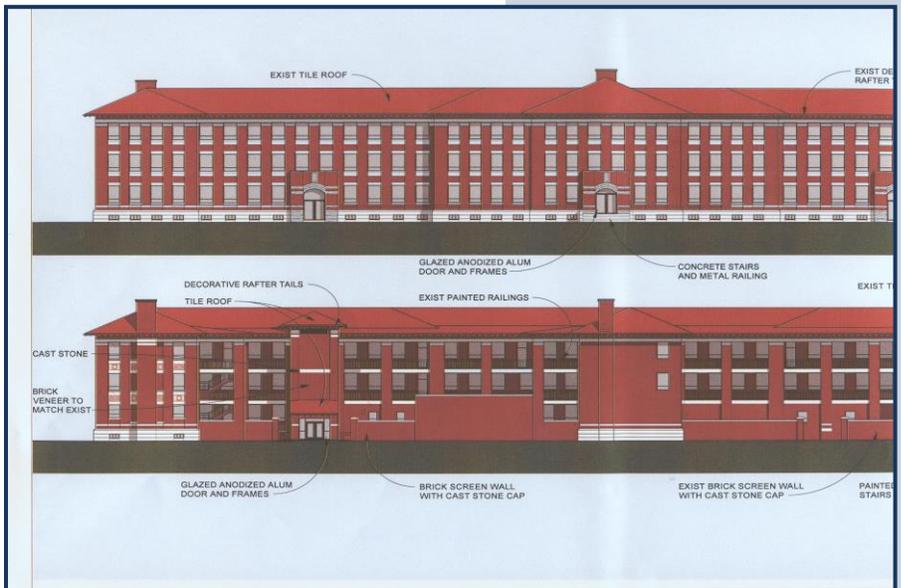
This structure is located at Langley Air Force Base. It features a new Direct Digital Control (DDC) system that communicates with the base wide system. Fire protection design includes an addressable fire alarm and detection system in accordance with NFPA criteria. Electrical designs followed National Electric Code and National Electric Safety Code. This gives these facility state of the art systems throughout the building.





Building 664

The Air Combat Command and Civil Engineering Command are located at Langley Air Force Base. The designs called for a fire protection system that includes an addressable fire alarm and detection system in accordance with NFPA standards. LED lighting technology was utilized throughout the building and the electrical designs followed National Electric Code and National Electric Safety Code. There was the addition of an accessible elevator. The design included the addition of a whole building generator with a 3 day run time.



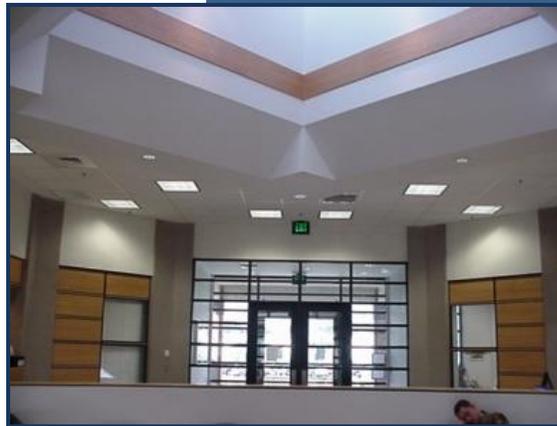
US Army Corps of Engineers Project



FORT EUSTIS ARMY EDUCATION CENTER



A new army education center at Fort Eustis, Virginia is helping to educate the men and women of the armed forces. Each room is outfitted with high speed internet and cable abilities. This facility is designed specifically to provide our military the finest tools to protect our homeland.





Complex and Prototype Design

- Fire Protection Design
- HVAC Design
- Electrical Design



Langley Air Force Base Dormitory

A total of six barracks implementing the ACC requirements for improved quality of life standards for enlisted personnel worldwide is established at Langley Air Force Base. The three story structure is a 48 module, two-airman design. The structure meets anti-terrorism and force protection standards outlined by the Department of Defense. Fire protection systems included a fully sprinkled building in accordance with NFPA 13, Mil-HdBK 1008C and ACC Fire Protection Requirements; stand-alone multi-station smoke detection in accordance with NFPA 72, a fully addressable fire alarm and detection system with a radio transmitter. The HVAC system of chilled water cooling, gas fired boiler heating, fan coil units, dedicated outside Air Handling unit and a DDC control system that interfaced with the existing base wide system. Electrical included high voltage distributing power, lighting, communication and cable television. Estimated cost was \$36 Million.





Design Features

- HVAC Design
- Electrical Design
- Telecommunications Design

Operations Support Center (OSC) aka The Ryan Center

Located at Langley Air Force Base, the OSC is a two-story facility that provides the Air Combat Command a Critical Command and Control and Intelligence Surveillance and Reconnaissance (C2ISR) capability to assist in the worldwide fight against terror. The building HVAC consisted of a Central Station VAV AHU with fan powered VAV boxes. The facility included redundant chilled water systems. New data full service 2886 square foot data center with hot isle/cold isle cooling and UPS/PDO Electrical Distribution System. Special systems included multiple uninterruptible power supplies (UPS), multiple backup emergency generators connected in parallel operation, secured and unclassified communications, secured and unclassified local area network (LAN) systems, and exterior lighting, raised access flooring and electrical and communications distribution. Additional systems included HVAC, exterior electrical and communications. Fire protection included compartmentalization, wet pipe sprinkler system, addressable fire alarm and detection system. Estimated cost is \$12.7 Million.





Broad Creek Renaissance, Norfolk, VA

An initiative of the City of Norfolk and the NRHA, the Broad Creek Renaissance is one of the largest redevelopment projects in history. It represents an almost \$200 million community with amenities including a new YMCA, a library, walking and biking trails, a swimming pool and green open-spaces for community gatherings. Broad Creek offers approximately 234 homes, rental housing, which includes more than 300 units built as single-family detached homes, duplexes, and triplexes, is designed with the same attention to detail and high-quality material and architecture. The Franklin Arms, a 100-unit rental complex for seniors with affordable one- and two bedroom apartments, opened in September 2003 and is fully occupied. The building 3 includes meeting rooms, lobbies on each floor, and an outdoor patio for socializing, bringing residents together and fostering a sense of connection and community.

Design included Modern telecommunications, cable TV, high speed internet, telephone, current code designed electrical and modern electrical and energy efficient (Energy Star) and lighting systems. All equipment was energy star rated. Mechanical included DX split system cooling with gas fired heating, plumbing, bathroom exhaust and kitchen exhaust. Fire protection included code analysis and smoke detectors. We incorporated mechanical, plumbing, electrical and telecommunications for Phase 2 through Phase 5 of this project.

Design Features

- **Modem Telecommunications Design**
- **Energy Efficient Lighting Design**
- **Fire Protection Design**
- **HVAC Design**

US Army Corps of Engineers Project



EXPLOSIVES ORDINANCE DISPOSAL (EOD) RANGE OPERATION CENTER, FORT AP HILL, VIRGINIA



The EOD Range Operation Center is a 20,488 SF pre-engineered metal building including Range Operations Center (ROC) facility for classrooms, administrative offices, and vehicle maintenance and storage. The building air conditioning and heating is accomplished with a geothermal water source heat pump system that provides substantial energy savings and a DDC control system. Fire protection design included completing a life safety code analysis per UFC 3-600-01, wet pipe sprinkler system, combination addressable fire alarm and detection system and mass notification system. The electrical high voltage system consisted of 15 KV class (12.47KV line voltage) of overhead electrical distribution, underground high voltage lateral feeders, gang operated heavy duty pole mounted air switches, and environmentally friendly pad mounted

The OSP system was a complete and included full connectivity from the existing main ADN (Area Distribution Node – Telecommunications Building). A secured OSP Telecommunications Protected Distribution System was designed between selected facilities for classified networks and communications.



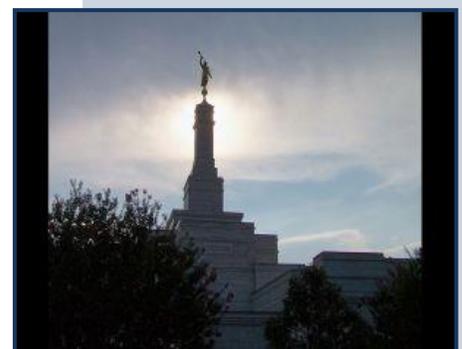


Highlights

- **Special Electrical System Inspection After Dedication**

Raleigh North Carolina LDS Temple

The design and construction of a new Temple for The Church of Jesus Christ of Latter-Day Saints was established in Raleigh, North Carolina. Made of Danby marble with art glass windows, the classic modern design is adorned with the trademark gold statue at its peak. At 10,700 square feet, the structure had an estimated cost of \$2.5 Million. ACE has designed numerous LDS facilities to the churches exacting standards.





BRAC FORT LEE TRAINING AREA-5 (TA-5) COMPLEX



The Training Area-5 (TA-5) Development is a Sustainment Center of Excellence (SCoE) at TA-5, Fort Lee, VA. The 774,195-sq-ft, five-building Central Campus at TA-5 at Fort Lee, Va., provides Army personnel state-of-the-art training and living facilities for maintenance training on vehicles ranging from combat vehicles to battle tanks and houses the largest welding training lab in the U.S. The campus buildings, ranging from three to four stories each, house a 250-seat auditorium; workshops; classrooms; laboratories; a long-span, column-free maintenance bay; multiple voice and data networks; and custom systems for high-voltage power, compressed gas and climate control. Central Campus was designed and built to achieve LEED Silver certification. A new ISF Information System Facility (ADN/ITN) was engineered to provide telecommunication and networking to complete the TA-5 facility. We developed the RFP for this project.

Highlights



- **US Army Video Production**
- **A new 3,000 line PBX switch in the ADN to support voice communications for the complete TA5 complex.**
- **The complete TA-5 Area Site Telecommunications Distribution Infrastructure included copper outside plant OSP and fiber optic OSP, with duct banks and manholes.**

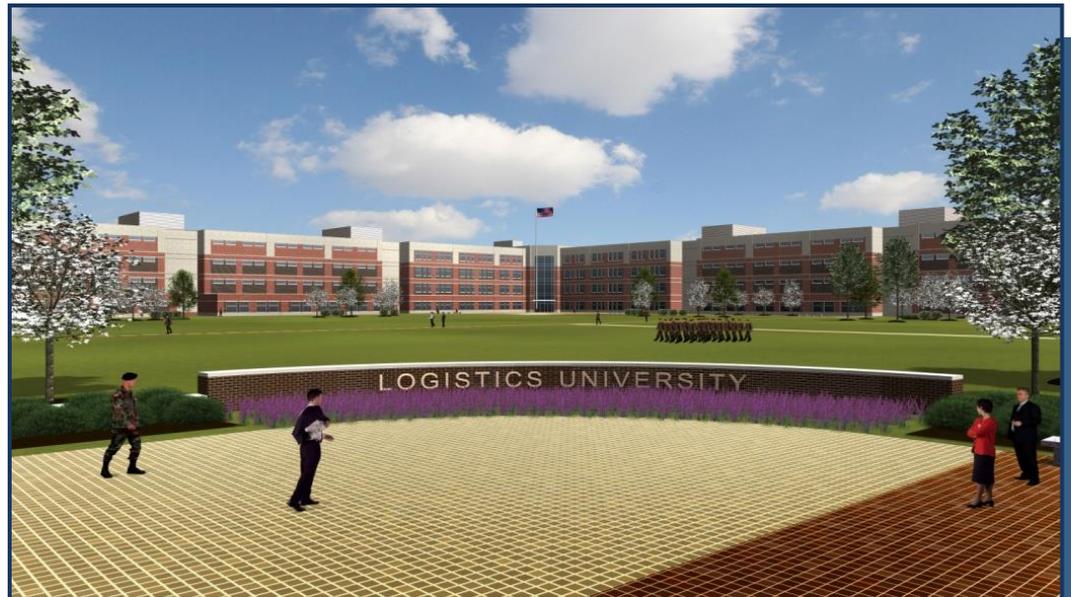
US Army Corps of Engineers Project



LOGISTICS UNIVERSITY



Helping to create modern university buildings for the US Army. Located in Fort Lee, Virginia, the design consists of two major building additions to the Center of Excellence Army COE Logistic University Campus area. It features state-of-the-art secure telecommunications systems along with modern audio visual long distance training rooms. Utilization of the latest technology in facility wide wireless networking will ensure fast and secure internet use. Our military deserve the highest quality of design and construction to meet the needs of the Department of Defense. The size of construction is about 471,000 square feet at a cost of \$89 Million.



Highlights

- **Telecommunications Design**
- **Wireless Networking Design**

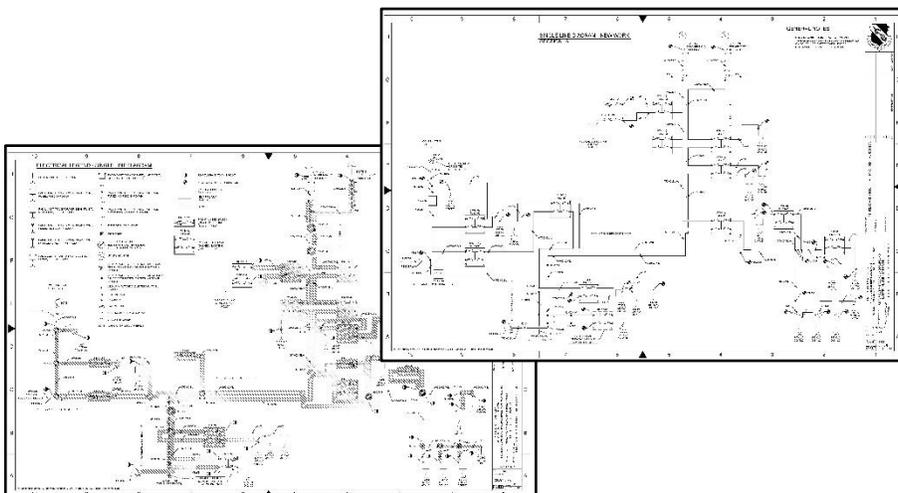


Highlights

- Base Electrical Distribution Upgrades and Conversion
- Complete Fire Protection Design
- Convert Aged Deteriorating Overhead System to Underground 15 KV System
- Significant increase in reliability and maintainability.
- Contracting Officer Remarks: *Even with a stringent schedule the contractor consistently is on time. If there is a deadline issue, communication is quick and the issue is resolved in a timely manner. The contractor has a great deal of expertise designing and managing various aspects involved in electrical design.*

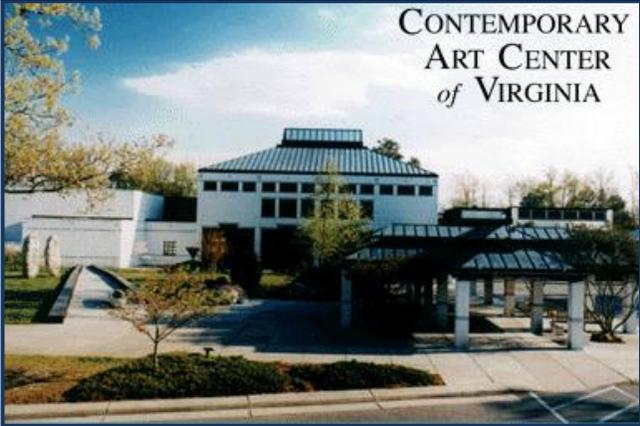
Seymour Johnson Air Force Base, Convert Overhead Electrical Distribution System to Underground

This project included the specialty conversion of approximately 3 miles of base high voltage electrical distribution system from overhead pole type construction to a significant reliable and improved underground distribution with pad mounted high voltage equipment. The equipment was extensive and included over 32 high voltage sectionalizer switches, over 16 pad-mounted transformers, and many miles of 15KV-750 Kcmil copper cabling in ductbanks. These three miles of electrical system conversion is estimated at \$15 Million construction cost.



CONTEMPORARY ART CENTER OF VIRGINIA

This project called for a 4,500 square foot addition to the existing facility that would become the lobby and entranceway. Functional areas include an auditorium, restrooms, a catering kitchen, a coatroom, and a ticket sales booth. The grand lobby's centerpiece is a glass chandelier designed by the world famous glass artist, Dale Chihuly. Our participation on this project shows the diversity of designs we can accomplish.



HIGHWOODS CENTER OFFICE PARK

A new office park was developed in Cary, North Carolina. A complex of five buildings, each was designed to be 100,000 square feet spread over three stories. The facilities were designed to accommodate businesses from lawyers and doctors to higher education training companies. This center houses many important businesses to this day. Estimated cost was \$31 Million.





Design Features

- HVAC Design
- Mechanical Design
- Electrical Design
- Telecommunications Design
- Plumbing Design

Coach Leather Goods

We provided design services for prototype Coach Leather Goods stores. Utilizing the latest in lighting, communications, fire protection, and security technology, We developed a superb ability to combine energy efficiencies with aesthetic designs that provide clients with the very best in electrical, mechanical, plumbing, security, telecommunications, and fire protection engineering. Over 8 years, we incorporated the design in 32 locations across the United States.





Historic Lynnhaven House

In 2006, the Colonial Education Center at the Lynnhaven House in Virginia Beach, Virginia was established. The modern 4,000 square foot building houses the welcome center and ticket sales for the museum as well as a gift shop and a theater where educational videos about Colonial life at Lynnhaven House are shown. Systems design included water source heat pump mechanical system, addressable fire alarm system, wet pipe sprinkler system, security system, voice and data (fire optics and CAT 5) hardwired systems. We are as dedicated to preserving our past as protecting our future.

Design Features

- Fire Protection Design
- Telecommunications Design
- HVAC Design
- Plumbing Design
- Security Systems Design



NEX Navy Exchange



A new 149,000 square foot modern Naval Exchange retail mall was constructed at Little Creek Amphibious Base in Norfolk, Virginia. The design evolved into a two-story structure to maximize the site utilization for its customers, serving both the new exchange and the adjacent commissary. A large food court was provided for fast food franchises and vendors. Special interior systems included electronic point of sales, closed circuit televisions, advertising monitors connected to the security system, intrusion detection alarm system, fully ADA compliant fire alarm and detection system, electronic article surveillance, uninterruptible power supply, central security monitoring office with consoles, computer LAN and modern telephone communications. Additionally, all exterior high voltage electrical systems, communications, cable television, base fire alarm, sanitary and water systems were relocated for the new exchange footprint and parking. Modern exterior parking and roadway lighting systems were provided to safe and secured lighting levels. Estimated cost was \$14 Million.

Design Features

- **Fire Protection Design**
- **Telecommunications Design**
- **HVAC Design**
- **Plumbing Design**
- **Electrical Design**



Women in the Army Museum

Full engineering designs for a new single-story modern museum for 'Women in the Army' located in Fort Lee, Virginia. This was an inspiring project. We here at ACE do our finest efforts to support many areas of the Department of Defense. The design includes complete plumbing, mechanical, electrical, and fire protection/fire alarm engineering. This facility required 13.2KV underground power systems and a communications system expansion. The design is in accordance with criteria from the Department of Defense, uniform federal accessibility standards, and the Americans with Disabilities Act. Estimated cost is \$3 million.

Design Features

- **Fire Protection Design**
- **Telecommunications Design**
- **Plumbing Design**
- **Security Systems Design**

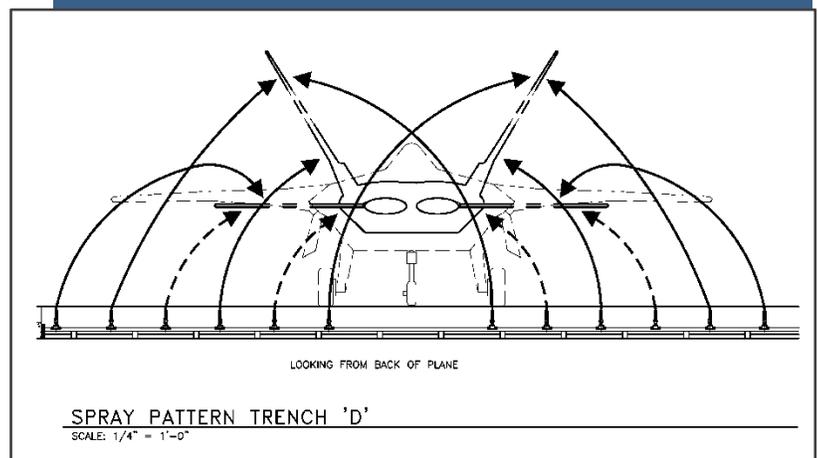
US Army Corps of Engineers Project



F22 RAPTOR CLEARWATER RINSE FACILITY LANGLEY AIR FORCE BASE



An off taxiway “drive through” aircraft clearwater rinse facility, engineered for the F22 Raptor and adaptable for the F15 Eagle. The rinse facility is the first defense of aircraft corrosion protection. The rinse facility provides 100% surface area rinsing to remove airborne salt and other contaminants increasing the longevity of the fighter aircraft.



Air Force Civil Engineering Center



Langley Air Force Base, Replace / Upgrade Airfield Lighting System

The intent of this project is to repair by replacement, the runway and taxiway lights, airfield signage circuits, Runway 08 threshold lights, Wind Direction Indicators (Wind Socks), Precision Approach Path Indicator (PAPI) lights on each runway end (08 and 26), all constant current regulators with new switchgear style CCR system, and the associated lighting circuits, power circuits, cabling, ducts, etc. The Airfield Lighting Electrical Vault Constant Current Regulators (CCR) and interior electrical distribution equipment will also be repaired by replacement. The construction cost \$14.5 Million.



Highlights

- Replace Main Runway 08/26 Runway Lighting System
- Replace Taxiway Edge Lighting Systems
- Replace / Repair Airfield Signage
- Replace Runway 08 Threshold Lighting System
- Replace / Upgrade Airfield Lighting Switchgear and Power Circuits
- Replace 08 & 26 Precision Approach Path Indicator Navigation Lighting Systems
- Replace & Upgrade Airfield Lighting Circuits
- Repair Approach Lighting Sequence Flasher ALSF-1 System

Allsbrook Consulting Engineers

A Few Awards

Allsbrook Consulting Engineers was part of the AE design teams for the following awards:

- ☀ *Logistics Support Center, Langley Air Force Base-2010 Citation Award, Facility Design Air Combat Command Air Force Design Awards,*
- ☀ *Dormitories, Millennium Village, Al Udeid Air Base, Qatar-2004 Concept Design Honor Award, Air Combat Command 2010*
- ☀ *Operations Support Center at Langley Air Force Base, VA-2005 Concept Design Citation Award, Air Combat Command*
- ☀ *F-22 BEDDOWN Area Development Plan, Langley Air Force Base, VA-2004 Planning study and Design Guide Merit Award, Air Combat Command*
- ☀ *Community Mall, Millennium Village, Al Udeid Air Base, Qatar-2004 Concept Design Merit Award, Air Combat Command*

Allsbrook Consulting Engineers

A Few Testimonials

- ☀ **US Army Corps of Engineers, Norfolk District. JTF-CS ACS/CCTV System, Fort Eustis, VA. CPARS Client Evaluation: Exceptional.**
Client Remarks : *[Allsbrook Consulting] were flexible and responsive. They are one of the best Fire Protection, Communications, Mechanical and Electrical Firms to work with on any project.*
- ☀ **Air Force Civil Engineering Center (AFCEC). Seymour Johnson AFB, A&E Services to Repair Overhead and Underground Electrical Lines Base Wide. Quality: Very Good. Contracting Officer Remarks:** *Even with a stringent schedule the contractor consistently is on time. If there is a deadline issue, communication is quick and the issue is resolved in a timely manner. The contractor has a great deal of expertise designing and managing various aspects involved in electrical design.*
- ☀ **ATSC Electronic and Communication Design, Fort Eustis, VA. Design Phase or Engineering Services: Exceptional.**
- ☀ **JTF-CS ACS/CCTV System, Fort Eustis, VA. Design Services: Exceptional**
- ☀ **NAVFAC Midatlantic. Naval Weapons Station Yorktown, VA Building 1794 Electrical Study Report. Project Manager Remarks:** *...the report was great. It seemed to accomplish everything I was hoping it would...the report also gave me a better look at the overall electrical "health" of the facility.*

Allsbrook Consulting Engineers

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