West Virginia
Department of Administration

Wheeling AASF2 Hangar Addition Design

SUBMITTED BY:

CDI-Infrastructure, LLC dba L.R. Kimball

CDI® L.R. Kimball

January 25, 2019

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CDI L.R. Kimball

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January 23, 2019

Ms. Stephanie Gale, Senior Buyer
Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

RE: Wheeling AASF2 Aircraft Hangar Addition Design, Solicitation No. ADJ1900000013

Dear Ms. Gale:

On behalf of CDI-Infrastucture, LLC dba L.R. Kimball (L.R. Kimball), we are pleased to submit our qualifications to provide A/E services for the Design of the Wheeling AASF2 Hangar Addition.

L.R. Kimball is a diversified organization of consulting engineers, architects, planners, environmental scientists and construction managers. With over 60 years of quality service, we are annually ranked in the top 50 engineering / architectural design and construction administration firms in the nation by Engineering News Record. Our firm employs many professional, technical and administrative personnel. Among this staff is our Aviation Services Group that consists of architects, engineers, planners and specialists who work exclusively on aviation related business development, planning, environmental, design and construction projects.

We offer the following for your consideration:

- Our team's depth of experience in Aviation Facilities means that our integrated design approach will deliver a project that meets both your budget and aspirations.
- **Full Service Firm:** L.R. Kimball has full in-house design services to manage your projects from conception to ribbon-cutting. These include: architecture, engineering, mapping, surveying, planning studies, benefit cost analysis, land acquisition, drilling, value engineering, and construction administration. As a result, we can provide in-house aid for virtually any task that may arise.
- Our team regularly and successfully works with a variety of government agencies such as yours, on multiple building types in support of Transportation projects.
- Our team is more than capable of providing services efficiently and cost effectively on projects regardless of scope or scale. We view this type of project as an extension of our client's team and can provide immediate and nimble staffing to suit your immediate needs.
- The scope of our project experience includes site designs, new standalone facilities, facility assessments, renovations, additions, repairs, and ADA upgrades. Our highly integrated project team understands the complexity of working in support of WV State departments and we deliver projects that support the mission of your team . The team has extensive resources across all disciplines with a record for successful projects in West Virginia for more than four decades. Our sub-consultant TRC shares a similar record of excellence and client service in the WV market and our Cost Estimator, Crawford is experienced in aviation support buildings and they have deep experience working on federal projects.
- We understand the challenges of maintaining your physical assets, preserving the efficiency of the WV State Department and the WV ANG and the required supporting facilities. The L.R. Kimball team will be both partners and stewards in the process of expanding your facility in the 21st Century.

For these reasons, we are delighted to submit the attached materials and for your review and consideration. We look forward to discussing any of the contents of this document and trust that your review of our qualifications will afford us the opportunity to do so.

With Kind Regards,

David Rispoli, PE
Director of Architecture and Engineering
CDI-Infrastucture, LLC dba L.R. Kimball

Wesley Hevener, PE
Project Executive / Transportation Practice Leader & Project Manager
CDI-Infrastucture, LLC dba L.R. Kimball

Extraordinary outcomes are the result of exceptional people.

TEAM INTRODUCTION

L.R. KIMBALL

ARCHITECTURE & ENGINEERING DESIGN

L.R. Kimball, a full-service architecture and engineering firm, was founded in 1953 in Ebensburg, Pennsylvania. After college graduation, L. Robert Kimball, our founder, received a commission in the Army Air Corps. During World War II he served as lead navigator in B-17 aircraft with the Bloody 100th Bomb Group stationed in Thorpes-Abbotts, England. Through his flying service, he was awarded the Distinguished Flying Cross and other medals. Upon returning, he started a two-person consulting engineering firm specializing in civil engineering and surveying. In 1962, the Kimball family purchased what was once a historic inn in Ebensburg and moved the headquarters there, where it remains to this day.

Transportation Services for Highways and Airports were among the first services provided by L.R. Kimball. Airport Master Planning and Design projects were completed for various Counties and Authorities throughout NY, PA, NJ, OH, WV, MD, MO and IA. A full range of services were provided for both airside and landside developments including hangars, pavement, earthwork, drainage, lighting, marking, NAVAIDS, terminals, access roads, and parking facilities. Most of these clients are retained to the present day.

L.R. Kimball's Aviation Services Group has completed hundreds of development projects, ranging in size from general aviation, to commuter and corporate jet facilities, and major hub air carrier airports. Our success is due to our extensive knowledge of FAA, state, county and local regulations, and the ability of our project managers to effectively communicate with airport owners and deliver completed projects.

L.R. Kimball has built a solid reputation in airport engineering. Our airports staff is comprised of highly trained professionals who consistently provide clients with a full range of services, including planning, feasibility, environmental, design and permitting, and construction administration. Our expertise runs the gamut of project types from master plans, environmental assessments, design of airfields, terminal facilities, navigational and landing systems, airport support buildings and equipment, construction administration and inspection, grant management and airport management services. We currently have more than 60 active clients in six states.

Aviation is our passion at L.R. Kimball. This starts at the top with our founder, L. Robert Kimball, and his history as a World War II navigator through his vision to create a world-class engineering firm in his hometown and his participation in aviation through our consulting work and aircraft ownership. Our Aviation Services Group continues this passion through our efforts to provide the quality service to our clients.

We provide service to over 60 different Airports throughout the mid-Atlantic region. Our approach is to aid our Airport clients in the identification of their project needs, to develop a solid purpose and need for each project that will be accepted by the funding agencies, to help secure funding for the project and to develop a scope of work and design to utilize the available funding while still addressing the original purpose and need. Our years of experience in working on varied projects at multiple airports allow us to identify cost savings during the design process. In the end, we are always proud to work with each and every one of our clients to achieve their goals and objectives.

The following pages include the services L.R. Kimball provides across our full-service company.

Architecture & Engineering

Architecture

- Master Planning
- Urban Design
- Building Design
- Interior Design
- Sustainable Design
- Facility Assessments

Facilities Engineering

- Mechanical
- Electrical
- Structural
- Fire Protection

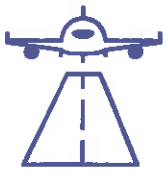
Civil Engineering

- Stormwater Facilities
- Wastewater Engineering
- Brownfield Development
- Dams and Waterways
- Erosion Control
- Solid Waste Consulting
- Demolition Consulting
- Land Development
- Railroad Sidings
- Water Resources

Highways, Bridges, Environmental & Traffic

- Bridge and Structure Design
- Bridge Safety Inspection
- Highway Design
- Traffic Engineering and Design
- Transportation Planning
- Construction Inspection and Management
- Environmental Compliance and Permitting
- Geoscience Support Services (Drilling and Surveying / Mapping)

Airports



- Design
- Management
- Operations
- Business Planning
- Wildlife Hazard Assessment
- Airfield Obstruction Analysis
- Airfield and Landside Design
- Navigational Aid Coordination
- Hangar Building Design

Geosciences

Geotechnical

- Stockpile
- Drilling
- Material Testing

Geosciences

- Survey
- Mapping
- Photogrammetry

Airports

Engines of Economic Development

Airports are more than transportation hubs, they are often the "front door" for a city or a gateway to an entire region.

CDI / L. R. Kimball's Aviation Group is your single source provider for all things aviation related: from developing business and master plans to FAA Compliance assistance and airport design, engineering, construction and management services - we offer busy airport administrators the resources they need to make their facility as efficient and productive as it can be.

With over 50 years of experience in both airside and landside operations, we can help you maximize your revenue generating opportunities while enhancing your passenger experience.

New Garden Township
Runway 6-24 Reconstruction and Safety Area Improvements
New Garden Flying Field, Toughkenamon, PA

Pittsburgh International Airport - Various Projects
Pittsburgh, PA
Photo Credit - Pittsburgh International Airport

Williamsport Municipal Airport Authority
Runway 9-27 Approach Improvements & Rehabilitation
Williamsport Regional Airport, Montoursville, PA

Bi-County Airport Luzerne & Lackawanna Counties
Taxiway B Extension to Runway 22
Wilkes-Barre/Scranton International Airport, Moosic, PA

Central West Virginia Regional Airport Authority
Taxiway Rehabilitation
Yeager Airport, Charleston, WV

US Airways
Operations Control Center
Pittsburgh, PA

"Providing quality, cost effective engineering services and delivering projects on-time for Williamsport Regional Airport has been the hallmark of CDI / L.R. Kimball's activities. **Sound advice, a realistic approach to future planning, combined with viable and creative solutions** to difficult problems, have made Kimball's truly an essential partner in the success we enjoy today."

Thomas J. Hart
Executive Director
Williamsport Regional Airport, Williamsport, PA

Aviation & Commercial Building Experience

65 YEARS YEARS IN BUSINESS

WITH OVER 60 ACTIVE AIRPORT CLIENTS ACROSS 6 STATES

These airports range in size from large "focus" airports like Pittsburgh International, to smaller non-hubs like Wilkes-Barre/Scranton International and Williamsport, to general aviation relievers like Reading Regional and Allegheny County, to small local facilities like Bellefonte, PA

55+ HANGAR RELATED PROJECTS:

- CORPORATE HANGARS
- UNIT HANGARS
- COMMUNITY HANGARS
- MAINTENANCE & SERVICE HANGARS
- FBO HANGARS
- T-HANGARS

40 YEARS OF COMMERCIAL FACILITY DESIGN EXPERIENCE:

- OFFICE BUILDINGS
- TENANT IMPROVEMENTS
- FINANCIAL INSTITUTIONS
- HOTELS & CONFERENCE CENTERS
- INTERMODAL TRANSIT CENTERS
- PARKING STRUCTURES
- RELIGIOUS FACILITIES/CHURCHES
- LIGHT INDUSTRIAL/ MANUFACTURING FACILITIES
- RETAIL

85+ OFFICE SPACE PROJECTS

OVER 2.9 MILLION SQUARE FEET OF OFFICE SPACE DESIGNED

60+ WAREHOUSE / INDUSTRIAL FACILITY PROJECTS

Fuel Farm Experience

The challenge of many airports today is to balance their airport expenses and revenues so they are self-sufficient. However, this proves to be too great a challenge for most airports. One important source of revenue for airports is fuel sales. Earning a percentage on aviation fuel sales is very important. When more fuel is sold, the airport realizes more revenue. There are several things that may contribute to the number of gallons sold. They include: the sale price of the fuel, the effectiveness of the FBO, the size of the fuel facility, the number of based aircraft at the airport, and the number of airport itinerant operations.

L.R. Kimball has designed numerous aviation fuel facilities in accordance with EPA and NFPA regulations. Currently, we are designing fuel facilities at Quakertown and Queen City Airports and we completed a project at the Braden Airport. To coincide with any type of operation, the Spill Control and Prevention Plan should be reviewed and updated where necessary.

Government

Proudly Serving Those Who Serve Us

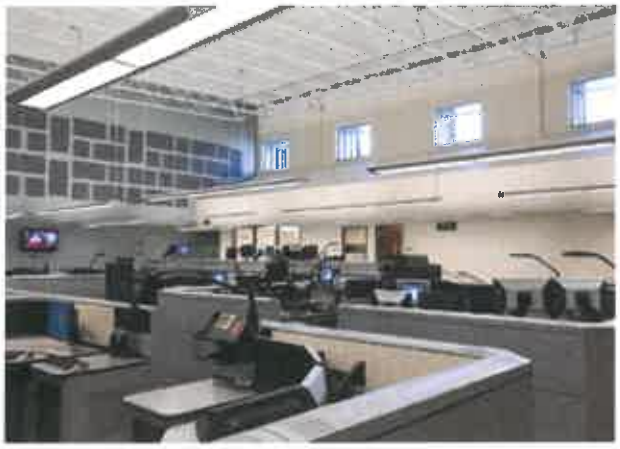
Robert Kennedy once said that even the smallest acts of public service represent a "tiny ripple of hope"

At L R Kimball, we are honored to have provided a range of design, engineering and technical consulting services that have helped government agencies serve their constituents

Our professionals carry high security clearances, allowing us to design and support projects for multiple federal, state and local agencies under a range of delivery methods including design/build, public/ private partnerships and IDIQ contracts.

PA Department of General Services
New Armed Forces Reserve Center & Field Maintenance Shop
Williamsport, PA

Borough of State College
New Municipal Building
State College, PA



York County, PA
Emergency Services / 911 Center
York, PA

Southeast PA Regional Task Force and the
City of Philadelphia, Delaware Valley Intelligence Center
Philadelphia, PA

Clayton G. Graham Public Safety Building
Atlantic City, NJ

United States Coast Guard
New Rescue Swimmer Training Facility (Design/Build)
Elizabeth City, NC

"The PA Department of General Services and the PADMVA have developed trust and confidence in L.R. Kimball. **Working with this team was truly a beneficial partnership.** We would highly recommend them to any agency considering a building project or restoration."

Andrew J DeGregorio,
EIT LTC (RET), EN, PAARNG
Former Director
Bureau of Military Construction & Engineering
Construction & Facilities Management Officer
Office of Facilities and Engineering
PA Department of Military and Veterans' Affairs

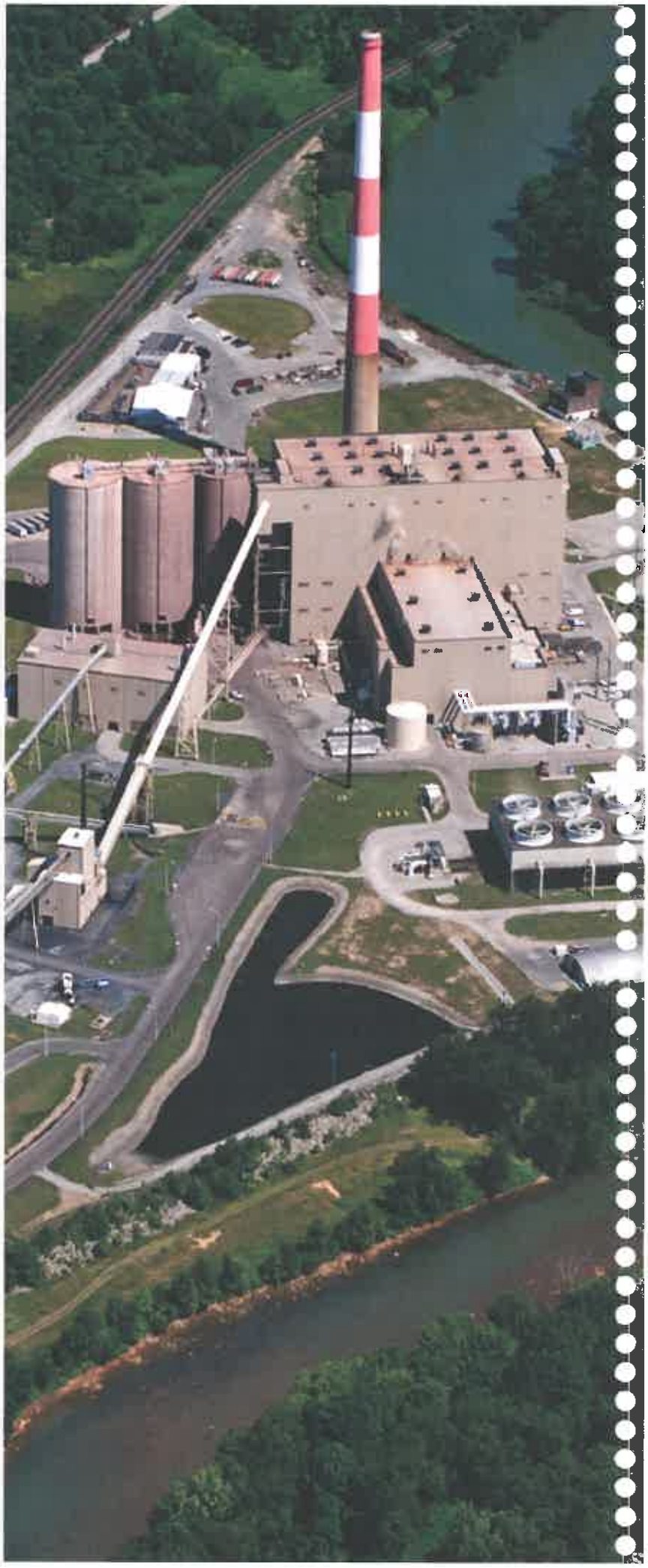
Civil Engineering

Engineered for Efficiency

Infrastructure is key to maintaining safe, efficient, people-friendly cities and towns. It encompasses nearly everything that we depend upon in life to function as a society, a culture and an economy.

At L.R. Kimball, our integrated approach to providing infrastructure engineering services means that our clients – and the communities they serve – can thrive and grow knowing the vital services they need to live are available.

Our team of engineers, planners, surveyors, GIS analysts, geologists, biologists and project managers are helping to improve communities across the country.



Seward Generating Station
Various Projects
Seward, PA

Ebensburg Municipal Authority
Ebensburg WWTP Upgrade
Cambria County, PA

Shawville Power Plant
Ash Disposal Site
Clearfield, PA

Competitive Power Ventures (CPV)
CPV Fairview Energy Center
Vinco, Jackson Township, Cambria County, PA

Horizon Properties
Southpointe II Development
Washington County, PA

Demolition of Three Rivers Stadium
& Engineering Services for Heinz Field
Pittsburgh, PA

"We have been very happy with their work and would like to express our satisfaction with the services of L.R. Kimball. **We highly recommend them."**

Richard McNulty
Council President, Borough of Franklin

TRC

Results you can rely on

TRC
Environmental & Geotechnical Engineering

TRC Engineers, Inc. is a highly progressive engineering, design and consulting firm that offers a diversity of expertise in the areas of infrastructure, energy, oil and gas, and environmental consulting to both public and private-sector clients throughout the United States. Substantiating their strength in the industry, TRC was recently ranked No. 19 among the Top 500 Design Firms as determined by Engineering News-Record magazine. Nationally, their firm employs over 4,700 administrative, engineering and technical personnel in more than 120 offices.

Based locally in Charleston, WV since 1996, TRC's core values of Safety, Quality, Integrity, Creativity, Accountability, Teamwork and Passion are behaviors that each employee works to exemplify with each project. Their staff also works collaboratively across disciplines to leverage their diverse expertise toward developing innovative technical solutions to meet the project goals of their clients. A formal Quality Management Program ensures their achievement of client quality and performance objectives through customized quality programs that are founded on corporate directives and incorporate project-specific quality requirements.

TRC's Environmental Services - with professional staff located in Charleston and other nearby regional offices, TRC is able to pull from over 60 ecological, environmental, landscape architecture, and archaeological professionals to assist on projects throughout the state. TRC has prepared hundreds of NEPA-compliant documents that evaluate potential impacts on the environment; consider various project alternatives; provide recommendations to avoid, minimize, and/or mitigate environmental impacts; and address comments raised by stakeholders, including federal, state, and local regulatory agencies, landowners, and the public at large. Our professionals apply a thorough understanding of federal, state, and local environmental regulations to help guide clients during early project conception, establish baseline surveys of natural resources and other sensitive environmental receptors, navigate the permitting process, verify contractor adherence to project environmental requirements during construction, and perform post-construction monitoring of long-term project impacts and the success of mitigation efforts.

TRC's Geotechnical and Geological Professionals - provide a "window to the underground" that helps clients take a proactive approach to project planning and design. Our experts analyze the physical and structural properties of soil and rock, then formulate an effective plan of action for you to successfully build on and within those materials. We are also equipped with full service drilling and laboratory testing capabilities. Typical services include: foundation investigations, geotechnical site assessments, slope stability studies, and soil and site improvements.

PROFESSIONAL SERVICE CAPABILITIES

- Geotechnical Engineering
- Test Borings
- Soils and Concrete Lab Testing
- Civil Engineering
- Roadway Design
- Bridge Design / Safety Inspections
- Construction Management
- Construction Inspection

PERSONNEL BY DISCIPLINE BREAKDOWN (West Virginia)

Project Managers	2
Geotechnical Engineers	4
Structural Engineers	3
Civil Engineers	3
Administrative	1
Construction Managers	2
Construction Inspectors	30
TOTAL	45

PERSONNEL BY DISCIPLINE BREAKDOWN (FIRM)

Project Managers	160
Geotechnical Engineers	12
Drillers/Helpers	28
Lab Technicians	3
Civil Engineers	139
Transportation Engineers	28
Administrative	1534
Construction Managers	45
Construction Inspectors	550
Others	2,224
TOTAL	4,723

CRAWFORD
CONSULTING SERVICES

CRAWFORD CONSULTING SERVICES

Cost Estimating

Founded in 1993, CRAWFORD – a cost estimating, scheduling, value engineering, and construction management firm – is a leader in construction consulting services focusing on Department of Defense, Department of Energy, Department of Veterans Affairs and private clients. CRAWFORD is a trusted leader in providing world-wide pre-construction and construction-phase services to diverse clients on complex projects, delivering innovative, unbiased, premier-quality solutions. We are a distinguished woman-owned small business that for 25 years has continued to build a dynamic team of professionals who are dedicated to excellence and the pursuit of success.

CRAWFORD has been providing world-wide pre-construction and construction-phase services to diverse clients on complex projects, delivering innovative, unbiased, responsive premier-quality solutions since 1993. We offer our clients a comprehensive list of services that focus on your specific project, including cost management, schedule management, value engineering, construction management, construction inspection, and staff augmentation.

Our strength is critical problem solving: we look not only at your immediate needs, but also at the big picture, helping to plan for what's ahead.

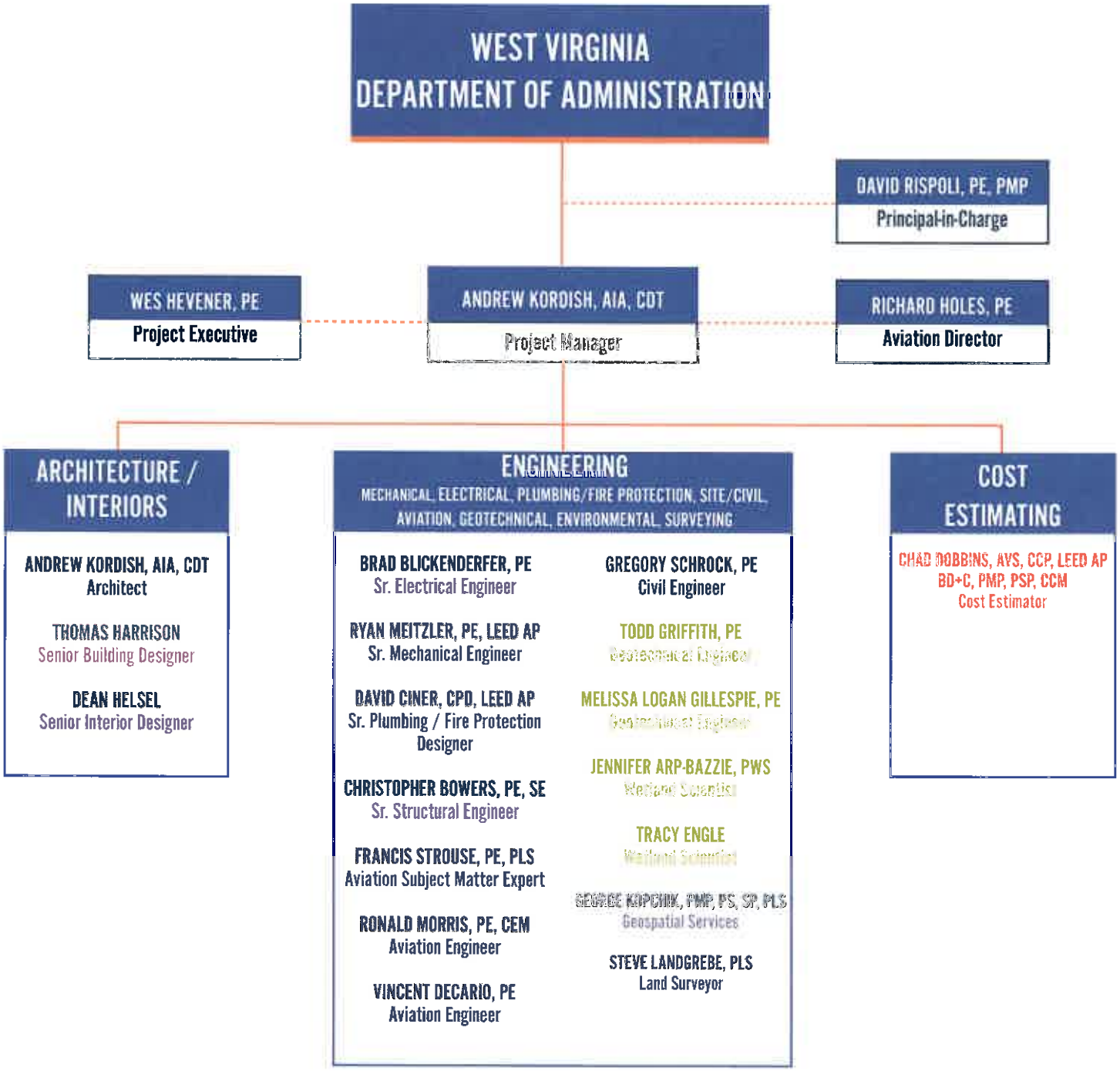
Successful delivery of any contract requires a well-coordinated project team with knowledgeable, responsive staff, proven working relationships, experienced project management and proven quality control procedures. On a CRAWFORD led team we believe communication is the most important component with any project. The success of most projects, whether handled by a dedicated project team or a cross-departmental team, depends upon a set of crucial communication skills and techniques. We strive for open communication throughout the duration of our projects with our staff, team members, and clients to accurately define goals, capture scope, and understand deliverables.

CRAWFORD works across markets and geographies to assist our partners in successful project planning. We have completed projects that range in size from small renovation to over $8 billion master plans. Our "One Team" approach promotes transparency and industry best practices to provide our clients the quality and responsiveness to execute on any type of project. Our customers rely on CRAWFORD to deliver innovative, unbiased, responsive premier-quality solutions.

Since 1998 CRAWFORD has been an integral partner of local, state, and federal construction projects. We maintain a highly-skilled team of construction professionals with expertise on projects of all types and magnitude. We have grown into one of the top Military cost engineering firms in the country. The services we provide help our customers perform, protect, and promote our nation's most critical assets. Whether working with the Department of Energy on the demolition and remediation of Bannister Federal Complex Site in Kansas City or providing Master Planning support services for a new Air Base in Saudi Arabia, CRAWFORD provides the right resources for our governments to ensure mission success.

STAFF QUALIFICATIONS

Organization Chart & Resumes



WESLEY HEVENER, PE

L.R. KIMBALL | PROJECT EXECUTIVE AND ENGINEER

Wesley is a registered professional engineer, with a BS and MS in Civil Engineering along with a Master's in Business Administration from West Virginia University. He brings over 16 years of experience and expertise in the transportation industry through project management, bridge design, and inspection. He has been involved with the management and design of a wide array of transportation projects varying in complexity and delivery methods including large design-build projects. In addition to design, he brings experience and expertise with NBIS bridge inspections having recently served as the Project Manager for the Veteran's Glass City Skyway Bridge in Toledo, OH. Wesley assists our team in the growth of our multi-discipline operations throughout West Virginia. His relevant project experience includes:

West Virginia Division of Highways, Henrietta Bridge – Calhoun County, WV*

- Responsible for the initial layout, preliminary design and quality assurance of calculations for the Span Arrangement study. Additionally, he managed and assisted with the design, plan preparation and report for the Type, Span and Location study.

West Virginia Division of Highways, US Route 35 P3 – Mason County, WV*

- Responsible for the management of the LRFD substructure design for the County Route (CR) 29 and County Route (CR) 40 bridges. The bridges were both two-span structures with lengths of 380' (170'-210') and 350' (195'-155'), respectively. Both bridges consisted of steel I-girders with integral/semi-integral abutments and two-column and cap pier bents. CR29 was on a horizontal alignment while CR40 was located on a curved alignment with a radius of 6,140'. He was responsible for the quality assurance and control of the design calculations and drawings for the piers, deck and overhang systems and integral abutments for each bridge.

West Virginia Division of Highways, Coalfields Expressway P3 – Wyoming County, WV*

- Responsible for the design, details, plan preparation and general notes of the wingwalls and aprons for a 1, wingwalls 400' box culvert as part of a P3 project for a new four lane highway. He was responsible for LRFD design of ranging in length between 11' and 33' founded on spread.

West Virginia Division of Highways, Admiral T.J. Lopez Bridge - Kanawha County, WV*

- Project Manager and Design Engineer responsible for the gusset plate analysis of this 1089' three span continuous through truss bridge including the computation and checking of the gusset plate calculations for each required panel point on the bridge. He also managed and served as the Lead Bridge Inspector performing hands-on inspection of gusset plates to obtain the data required to analysis the plates. In addition, he provided oversight and assisted with the creation of LUSAS models for the bridge for further FEA analysis of all live load configurations. The work was performed in coordination with the FHWA Gusset Plate Evaluation Guidance Report. \

West Virginia Division of Highways, Kanawha Falls Bridge - Fayette County, WV*

- Design Engineer/Lead Bridge Inspector for the hands-on inspection and LFD rehabilitation design of a three span simple through truss (265'-400'-265') over the Kanawha River supported on steel bent columns and concrete pier caps. He performed the finite element modeling in LUSAS of this truss bridge to provide forces necessary for this truss rehabilitation project. In addition, he was responsible for the load rating calculations which included the implementation of section loss for each primary member and the gusset plate rating calculations. He worked on the design and development of various repair types for the truss members based on the deterioration and capacity in order to strengthen the bridge for HS-20 live loading and assisted with the general notes and quantity calculations for the final plan submittal.

*Indicates project experience prior to joining L.R. Kimball

YEARS OF EXPERIENCE

- 16 Years

EDUCATION

- MBA, West Virginia University, 2006
- MS, Civil Engineering, West Virginia University, 2003
- BS, Civil Engineering, West Virginia University, 2001

HIGHLIGHTED EXPERIENCE

- Experience with a variety of projects for various WV government agencies

REGISTRATIONS/ CERTIFICATIONS

- WV, Professional Engineer, 2008
- Registered Professional Engineer in 10 Other States
- eRailsafe System Badge
- SPRAT Level I Certification
- FHWA/NHI LRFD for Highway Bridge Superstructures – Steel, 2009, (#130081C)
- FHWA/NHI Bridge Safety Inspection of In-Service Bridges, 2010 (#130055)
- FHWA/NHI Project No. DTFH61-06-D-00037 Integrated Bridge Project Delivery and Life Cycle Management, 2010
- FHWA/NHI Inspection and Maintenance of Ancillary Highway Structures, 2012 (#130087)
- FHWA/NHI Fracture Critical Techniques for Steel Bridges, 2013 (#130078)
- FHWA/NHI Bridge Safety Inspection Refresher, 2015(#130053)
- ODOT AASHTOWare BrDR Seminar and Training, 2015
- FHWA/NHI Tunnel Safety Inspection, 2016 (#130110)
- FHWA/NHI Fundamentals of LRFR and Applications of LRFR for Bridge Superstructures, 2016 (#130092)

AFFILIATIONS

- American Council of Engineering Consultants (ACEC) - Director for Joint Transportation Committee
- West Virginia Chamber of Commerce
- West Virginians for Better Transportation

DAVID RISPOLI, PE

L.R. KIMBALL | PRINCIPAL-IN-CHARGE

David has over 30 years of experience and expertise in all phases of architecture, engineering, and construction management. Specific responsibilities have included operations; staff supervision; business development; coordination among the architectural, structural, civil, mechanical, and electrical disciplines; project management; budget control; direct client contact; and coordination between field and office during construction. David has managed and supervised several types of projects including transportation, commercial, correctional, judicial, public safety, healthcare, conference/office, manufacturing, and educational facilities. Dave has also been involved in several design-build and fast-track projects of substantial size and scope requiring extensive coordination of large project teams and multiple activities.

A partial listing of David's relevant project experience includes:

Lockheed Martin, Owego, NY
- VH-71 Presidential Helicopter Integration Facility
- Phase IIA Conceptual Development of CSAR-X Facility

Wilkes-Barre/Scranton International Airport, A/E Services for Proposed Hangar Development, Avoca, PA

Allegheny County Airport Authority, Coraopolis, PA
- ARFF Building "E" Rehabilitation,

Bedford County Airport Authority, Bedford, PA
- Architectural/Engineering Services for Proposed Hangar at Bedford County Airport

Confidential Client, New Corporate Hangar, New York

Department of the Air Force, 911th Airlift Wing, Coraopolis, PA
- Repairs/Additions to Security Forces Building 221
- Repair Airfield Lighting - East and West Apron
- Repairs/Alterations/Additions to Building 418

Lehigh-Northampton Airport Authority, Allentown, PA
- Design Services for a New Terminal Building for the Braden Airpark

Federal Aviation Administration - William J. Hughes Technical Center, Atlantic City International Airport, Atlantic City, NJ (Consultant to Maser Consulting P.A. for an Open-Ended Contract)
- Electrical Design Services for Existing Lightning Protection System Replacement at the Central Utilities Plant (Building 303) at FAA WJHTC Airport Operations Area
- Hughes Building 211 Life Safety Study & Improvements
- Hughes Building 300 HVAC Upgrades
- Hughes Building 303 Chiller and Service Upgrade
- Main Electrical Service Substation Enclosure
- Plumbing & Electrical Design Services for New Water Main Extension at the FAA WJHTC Airport Operations Area

YEARS OF EXPERIENCE
- 32 Years

EDUCATION
- Associate, Architectural Engineering, The Pennsylvania State University, 1983
- BS, Const. Mgmt. and Struc. Eng., The Pennsylvania State University, 1985

HIGHLIGHTED EXPERIENCE
- Dave has worked on a variety of projects including hangars and other support & maintenance facilities.

REGISTRATIONS/ CERTIFICATIONS
- WV, Professional Engineer, 1997
- Registered Professional Engineer in 8 Additional States
- Project Management Professional
- NCEES Certified

AFFILIATIONS
- American Institute of Architects, Associate Member
- American Society of Civil Engineers
- National Society of Professional Engineers
- Project Management Institute

ANDREW KORDISH, AIA, CDT

L.R. KIMBALL | PROJECT MANAGER AND ARCHITECT

YEARS OF EXPERIENCE
- 30 Years

EDUCATION
- Associate, Architectural Engineering Technology, The Pennsylvania State University, 1988

MILITARY EXPERIENCE
- **Sergeant E5, Marine Corps, 1987-1993**

HIGHLIGHTED EXPERIENCE
- Andy's recent experience includes a variety of project types including a recent airport hangar assessment and design and a variety of maintenance facilities

REGISTRATIONS/ CERTIFICATIONS
- MD, Registered Architect, 2010
- Construction Documents Technologist, 2012

Andy brings 30 years of experience in architectural design, production, and construction documentation of buildings for a variety of project types. His recent experience includes airport support buildings and offices. Andy utilizes AutoCAD and Revit software for the drafting and production of architectural drawings. He is also a Construction Documents Technologist and has extensive experience writing architectural specifications.

A partial listing of Andy's relevant project experience includes:

Johnstown-Cambria County Airport Authority, Johnstown, PA
- Expansion and Finish of Equipment Storage Building

Washington County Airport, Washington, PA
- 2017 Rehab ABC Hangar and Apron
- 2016 Remove Obstructions

West High Street, Ebensburg, PA
- 201 West High Street, Conversion of Existing Two-Story Retail/Office Building into Office Space for Boy Scouts of America and Apartments
- 219 West High Street - Conversion of Existing Two-Story Hardware Store into Leased Space and Kimball Training Center

NPC, Inc., Feasibility Study for Passport Production Facility, Claysburg, PA

PA Turnpike Commission, Open-End Contract for A&E Services, Various, PA
- New Kegg Maintenance Facility, Manns Choice, PA

PA Department of General Services, Various, PA
- New State Police Headquarters, Garage, and Shooting Range, Erie County, PA

Logan Township Board of Supervisors, Altoona, PA
- Logan Township Municipal Building

West Virginia University, Health Sciences Center Renovation/ Addition, Morgantown, WV*

Department of Veterans Affairs, Various Projects across PA, MD, and WV, including Electrical Upgrades at the Louis A Johnson VA Medical Center in Clarksburg, WV*

State College Water Authority, Nixon-Kocher New Treatment Plant, Gwin Dobson & Foreman , State College, PA

Public Safety Training Academy Class A Burn Building, Westmoreland County Community College, Smithton, PA

Sheetz, Inc., New Corporate Headquarters, Claysburg, PA

*Indicates project experience prior to joining L.R. Kimball

YEARS OF EXPERIENCE
- 32 Years

EDUCATION
- BS, Civil Engineering, The Pennsylvania State University, 1989

HIGHLIGHTED EXPERIENCE
- Rick has nearly 30 years of varied engineering experience. He serves as the Director of Aviation Services, leading a staff of nearly 20 who work strictly on aviation design, planning, environmental and construction projects.

REGISTRATIONS
- WV, Professional Engineer, 1997
- Registered Professional Engineer in three additional states

AFFILIATIONS
- American Society of Highway Engineers, Past President
- Member PA Aviation Advisory Committee 2013
- Chairman PennDOT Waiver Review Committee
- Aviation Council of Pennsylvania (ACP), Board of Directors July 2004 - Present ; Vice President October 2008 - September 2010; President September 2010 - September 2012

RICHARD HOLES, PE
L.R. KIMBALL | DIRECTOR OF AVIATION SERVICES

A member of the L.R. Kimball Team for over 30 years, Rick currently serves as the Director of Aviation Services. As Director, he is responsible for the day-to-day operations of L.R. Kimball's airport planning, environmental, design, and construction staff, QA/QC, business development, and client coordination. Rick also provides expertise in hydrology, stormwater management, erosion and sedimentation plan development, and project management and development.

Additionally, Rick manages some of our largest Airport Design Projects. Within the past two years alone, he has managed projects on the Doylestown, Quakertown, University Park, Williamsport Regional, Wilkes-Barre/Scranton International, Penn Valley, Queen City Municipal and Braden Airports in Pennsylvania and Fairmont Municipal and Yeager Airports in West Virginia and Ocean City Municipal Airport in New Jersey.

Major projects that have been completed under Rick's supervision in the past five years are as follows:

New Garden Flying Field, Toughkenomon, PA
- Rehabilitate West T-Hangar Apron
- East T-Hangars and Taxilanes
- Construct Parallel Taxiway

Williamsport Regional Airport, Montoursville, PA
- Runway 9-27 Approach Improvements
- EA for Runway Approach Improvements
- Runway Approach Improvement Feasibility Study
- Acquire Snow Removal Equipment
- Remove Obstructions on the Runway 9-27 Approaches Rehabilitate General Aviation Apron
- Extend Taxiway D to the Terminal Apron
- Reconfigure Airfield Signage
- Improve Runway Safety Areas
- Extend Runway 9-27 by 350'
- Extend Parallel Taxiway B by 2,500' to Runway 9 End
- Extend Parallel Taxiway B by 2,200' to Runway 27 End

Wilkes-Barre/Scranton International Airport, Avoca, PA
- Extend Taxiway B to the Runway 22 End (Site Preparation and NAVAIDs)
- Expand and Rehabilitate Fuel Farm
- Extend Taxiway B to the Runway 22 End, Phase I (Design and Permitting)
- EA and Preliminary Design for Taxiway B Extension to the Runway 22 End
- Rehabilitate / Extend Hangar Road
- Rehabilitate/Overlay Runway 4-22

Queen City Municipal Airport, Allentown, PA
- Rehabilitate Terminal Apron
- Construct Parallel Taxiway B
- Rehabilitate Runway 7-25
- Complete Airport Master Plan
- Construct T-Hangar Taxilanes and Aprons
- Relocate Taxiway C and Construct Itinerant Aircraft Apron
- Replace Aviation Fuel Farm, Phase I (Preliminary Design)

THOMAS HARRISON

L.R. KIMBALL | SENIOR BUILDING DESIGNER

YEARS OF EXPERIENCE

- 31 Years

EDUCATION

- Associate, Architectural Engineering, The Pennsylvania State University, 1987

HIGHLIGHTED EXPERIENCE

- Tom's recent experience includes a variety of project types including work in WV and experience with government agencies

Tom brings over 30 years experience in architectural design, production, and construction documentation, and construction administration of buildings for a variety of project types. Tom also utilizes AutoCAD and Revit Software in the drafting and production of architectural drawings from the schematic design phase through construction documents. Tom has experience in the design of public safety, commercial, correctional, judicial, municipal, educational, residential, and recreational facilities. These project types encompass both new construction and renovations.

Tom's relevant project experience includes:

Bedford County Airport Authority, Bedford, PA

- Architectural/Engineering Services for Proposed Hangar at Bedford County Airport

Federal Aviation Administration - William J. Hughes Technical Center, Atlantic City International Airport, Atlantic City, NJ (Consultant to Maser Consulting P.A. for an Open-Ended Contract)

- Electrical Design Services for Existing Lightning Protection System Replacement at the Central Utilities Plant (Building 303) at FAA WJHTC Airport Operations Area
- Hughes Building 211 Life Safety Study & Improvements
- Hughes Building 300 HVAC Upgrades
- Hughes Building 303 Chiller and Service Upgrade
- Main Electrical Service Substation Enclosure
- Plumbing & Electrical Design Services for New Water Main Extension at the FAA WJHTC Airport Operations Area

PA Department of General Services, Various, PA

- New Armstrong County Maintenance Facility, Salt & Equipment Storage Buildings, and Site Development (Schematic Design), Kittanning, PA
- New PA State Police Headquarters and Shooting Range, Erie County, PA

PA Turnpike Commission, Open-End Contract for A&E Services, Various, PA

- New Kegg Maintenance Facility, Manns Choice, PA
- Design services for the staff memorial at the entrance plaza of the Central Administration Building, Harrisburg, PA
- Bowmansville Maintenance Feasibility Study, Bowmansville, PA
- Mon-Fayette Expressway, New Jefferson Hills Warehouse, Canonsburg, PA
- Central Archive Facility Work, Middletown, PA
- Mezzanine Load Capacity Structural Analysis at Three Maintenance Facilities in District 3 Various Locations, PA
- Harrisburg West Interchange, Back Up Traffic Operations Facility, Interior renovations to existing 1,000 square feet garage building, Harrisburg, PA

Fairfield County Engineer's Facility, Lancaster, OH

Hancock County, New Office of Emergency Management/9-1-1 Center and Health Department Building Complex, New Cumberland, WV

DEAN HELSEL

L.R. KIMBALL | SENIOR INTERIOR DESIGNER

YEARS OF EXPERIENCE

- 31 Years

EDUCATION

- Associate, Interior Design, The Art Institute of Pittsburgh, 1987

HIGHLIGHTED EXPERIENCE

- Wide range of design experience with renovations, restorations, expansions, adaptive reuse, and new building designs
- Experience working with WV government agencies.
- Expert in BIM systems

With over 30 years of experience in the architectural field, Dean has experienced first-hand the "technological evolution" of CADD. Dean uses his depth of experience in BIM systems as a tool for producing architectural/interior design details. Using Revit and Lumion technology, Dean creates 3D finish schedules and digital color boards to bring our clients' projects to life.

Dean has worked on various building types throughout his career including commercial, industrial, educational, sports, healthcare, public safety, judicial, governmental, correctional, and residential facilities.

Dean's relevant project experience includes:

Lockheed Martin, Owego, NY

- VH-71 Presidential Helicopter Integration Facility
- Phase IIA Conceptual Development of CSAR-X Building and Site

Confidential Client, New Corporate Hangar, New York

Allegheny County Sanitary Authority, Operations and Maintenance Facility, Pittsburgh, PA

Concurrent Technologies Corporation, High Bay Manufacturing Technology Facility, Johnstown, PA

McLanahan Corporation, New Office Building, Hollidaysburg, PA

The Greater Johnstown Technology Park Master Plan, Johnstown, PA

Sheetz Corporate Headquarters and Operations Center, Claysburg, PA

Delaware Valley Intelligence Center and Emergency Operations Center, Philadelphia, PA

New Jersey Air National Guard, Communications/Security Forces Facility, Pomona, NJ

The Greater Johnstown Technology Park Master Plan, Johnstown, PA

Williamsport Bureau of Transportation, McDade Trade and Transit Intermodal Centre, Williamsport, PA

Cabell County Commissioners, Cabell County Emergency Services Center, Huntington, WV

Hancock County, WV, New Office of Emergency Management/911 Center and Health Department Building Complex, New Cumberland, WV

BRAD BLICKENDERFER, PE

L.R. KIMBALL | SENIOR ELECTRICAL ENGINEER

Brad has 20 years of experience in the design of electrical, lighting, telecommunications, and security systems for various types of projects including airport hangars, airfield lighting, office space, tenant fit-outs, and industrial facilities. His responsibilities include site inspections and field surveys, cost estimating, coordination of various building systems with electrical and lighting requirements, preparation of reports and specifications, ensuring compliance with all applicable codes and equipment specifications, shop drawing/submittal processing, review of value engineering and change order requests, and punchlists.

YEARS OF EXPERIENCE

- 20 Years

EDUCATION

- Bachelor of Science, Electrical Engineering, University of Pittsburgh at Johnstown, 1999

HIGHLIGHTED EXPERIENCE

- Brad's recent experience includes various airport projects from engineering design within support buildings to airfield lighting design.

REGISTRATIONS/ CERTIFICATIONS

- WV, Professional Engineer, 2012
- Professional Engineer in Seven Additional States

AFFILIATIONS

- Institute of Electrical and Electronics Engineers

Brad's relevant project experience includes:

Confidential Client, New Corporate Hangar, New York

Department of the Air Force, 911th Airlift Wing, Coraopolis, PA

- Repair Airfield Lighting (East and West Apron)
- Repair/Add to Security Forces Building 221

Federal Aviation Administration (FAA), Atlantic City International Airport, Atlantic City, NJ (Consulting Engineering Services Under an Indefinite Delivery/Indefinite Quantity Contract, as a consultant to Maser Consulting P.A.)

- Electrical Design Services for Existing Lightning Protection System Replacement at the Central Utilities Plant (Building 303) at FAA WJHTC Airport Operations Area
- Hughes Building 211 Life Safety Study & Improvements
- Hughes Building 300 HVAC Upgrades
- **Hughes Building 303 Chiller and Service Upgrade**
- Main Electrical Service Substation Enclosure
- **Plumbing & Electrical Design Services for New Water Main Extension at the FAA WJHTC Airport Operations Area**

Wilkes-Barre/Scranton International Airport, Avoca, PA

- Wilkes-Barre Scranton Airport A/E Services for Proposed Hangar Development
- 2012 Taxiway B Extension (Runway 22 Approach End) Environmental and Preliminary Engineering Design

Allegheny County Airport Authority, Coraopolis, PA

- ARFF Building "E" Rehabilitation
- ACAA AGC Main Parking Lot Rehab
- Clinton Commerce Park

Washington County Airport, Washington, PA

- Design, bidding and construction management services for the relocation of the Automated Weather Observing System (AWOS) sensor group to a site near the runway 27 Glideslope.

Johnstown Cambria County Airport, Improve Hangars, Johnstown, PA

PA Department of General Services

- New PA State Police Headquarters and Shooting Range, Erie County, PA
- New Armstrong County Maintenance Facility, Salt and Equipment Storage Buildings and Site Development (Schematic Design), Kittanning, PA

PA Turnpike Commission, Open-End Contract for A&E Services, Various, PA

- New Kegg Maintenance Facility, Manns Choice, PA
- Bowmansville Maintenance Feasibility Study, Bowmansville, PA

US Air Force, Youngstown Air Force Base – New Soldier Housing, Youngstown, OH*

- Complete Electrical Design of New Housing Unit Complex

*Indicates project experience prior to joining L.R. Kimball

RYAN MEITZLER, PE, LEED AP ID+C

L.R. KIMBALL | SENIOR MECHANICAL ENGINEER

YEARS OF EXPERIENCE

- 13 Years

EDUCATION

- B.S., Mechanical Engineering, The Pennsylvania State University, 2004

HIGHLIGHTED EXPERIENCE

- Ryan's experience involves a variety of project types including complex data centers, hangars and maintenance facilities

REGISTRATIONS/ CERTIFICATIONS

- WV, Professional Engineer, 2017
- Registered Engineer in 8 Additional States
- LEED Accredited Professional Interior Design + Construction (LEED AP ID+C), 2013

AFFILIATIONS

- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

Ryan has over 13 years of experience in the design of complex mechanical and plumbing systems for various types of projects including offices, and industrial facilities, involving both new construction and renovations. Ryan's responsibilities and experience have included serving as the primary point of contact for clients; survey and documentation of existing building systems and conditions; development of construction documents and coordination with architectural and structural elements; and ensuring compliance with ICC codes, ASHRAE standards, and other applicable requirements. Ryan's experience also includes the management and documentation of LEED credits as well as the maintenance and improvement of CAD, Revit, and mechanical department standards. He is proficient in AutoCAD MEP, Revit, MasterSpec, HAP, Trane Trace 700, and the Microsoft Office Suite.

Ryan's relevant project experience includes:

Confidential Client, New Corporate Hangar, New York

PA Turnpike Commission, Open-End Contract for A&E Services, Various, PA

- Bowmansville Maintenance Feasibility Study and Design Services, Bowmansville, PA
- Central Archive Facility Work, Middletown, PA
- Harrisburg West Interchange, Back Up Traffic Operations Facility, Interior renovations to existing 1,000 square feet garage building, Harrisburg, PA
- Mon-Fayette Expressway, New Jefferson Hills Warehouse, Canonsburg, PA

PA Department of General Services, New PA State Police Headquarters and Shooting Range, Erie County, PA

Allegheny County Department of Public Works, South Park District 5 Warehouse Site Analysis, Pittsburgh, PA

State College Water Authority, New Treatment Facility, State College, PA, Gwin Dobson & Foreman

Toms River Regional Schools, Energy Savings Improvement Projects, Maser Consulting, Toms River, NJ

Amazon Web Services, Approximately 125,000 SF across 5-1/2 floors*

- Spaces consisted of open and closed offices, pantries, conference rooms, conferencing center & SCIF space. Multiple glycol-cooled supplemental AC units for various IT spaces.

Scitor HQ – Cyber Lab, Approximately 8,000 SF*

- Spaces consisted of closed offices, pantry, IT lab conference rooms and showcase server room. Coordinated design with vendor and tenant for incorporation of tenant provided IT equipment (IT racks with front and rear containment, in-row cooling, UPS, etc).

New 3-story building, approximately 137,000 SF, Built to Suit for a Government Agency, Sterling, VA*

- Designed as two separate projects, core & shell and tenant interiors, with two different architects. Mechanical design included six 75-Ton VAV RTUs for the typical floors as well as two small RTUs for the entry and loading dock areas.

CNA - Approximately 130,000 SF across 7 floors.*

- Tenant project designed before building construction began. Spaces consisted of open and closed offices, pantries, conferencing and training areas, IT rooms, data center and multiple SCIF spaces. Mechanical design consisted of a variable flow supplemental glycol system, multiple glycol-cooled AC units backed-up by a tenant generator. Acted as primary mechanical engineer and designed project in Revit.

Miles & Stockbridge – Baltimore, MD*

- Approximately 107,000 SF across 7 floors in a 32 story building. Typical law firm with perimeter closed offices and interior open office spaces, conference space and pantries. Coordinated mechanical design with tenant added interconnecting stair between 6 floors. Majority of the mechanical design was to reuse venturi valves connected to a medium pressure duct system. Acted as primary mechanical engineer.

*Indicates project experience prior to joining CDI/L.R. Kimball

DAVID CINER, CPD, LEED AP

L.R. KIMBALL | SENIOR PLUMBING / FIRE PROTECTION DESIGNER

YEARS OF EXPERIENCE
- 40 Years

EDUCATION
- Associate, Drafting/Design Technology, Electronics Institute of Pittsburgh, 1972

HIGHLIGHTED EXPERIENCE
- Dave has worked on a variety of projects for airport authorities, transportation agencies, and industrial and manufacturing clients

CERTIFICATIONS
- Certified Plumbing Designer (CPD)
- LEED Accredited Professional

AFFILIATIONS
- American Society of Plumbing Engineers (ASPE)

With 40 years of experience in plumbing and fire protection design, Dave has been involved in a large variety of project types including airports, offices and industrial facilities. He is involved in the design and preparation of working drawings for all types of plumbing/fire protection systems. His experience includes the preparation of plumbing and fire protection specifications, field surveys, and cost estimating of various building types. Dave's relevant project experience includes:

Wilkes-Barre/Scranton International Airport, A/E Services for Proposed Hangar Development, Avoca, PA

Bedford County Airport Authority, Bedford, PA
- Architectural/Engineering Services for Proposed Hangar at Bedford County Airport

Hamilton-Fairfield Airport, Schematic Design Services for New Terminal Building, Hamilton, OH

Williamsport Municipal Airport Authority, Williamsport Regional Airport - Equipment Storage Building Addition, Montoursville, PA

Johnstown-Cambria County Airport Authority, Johnstown, PA
- Terminal Building Additions
- Expansion and Finish of Equipment Storage Building

Yeager Airport, Charleston, WV
- Terminal Building Renovations/Expansion
- Rental Car Facility and Fueling Terminal

Allegheny County Airport Authority, Coraopolis, PA
- ARFF Building "E" Rehabilitation
- Clinton Commerce Park Engineering Services

New Garden Flying Field, 2015 Hangar Erection, Landenburg, PA

Federal Aviation Administration (FAA), Atlantic City International Airport, Atlantic City, NJ
- **Consulting Engineering Services Under an Indefinite Delivery/Indefinite Quantity Contract, as a consultant to Maser Consulting P.A.**

New Jersey Turnpike Authority, Utility Building Interchange No. 7, Trenton, NJ

Concurrent Technologies Corporation, High Bay Manufacturing Technology Facility, Johnstown, PA

Laurel Technologies, Schematic Design Services for Manufacturing/Office Facility, Johnstown, PA

MeadWestvaco, Expansion of Envelope Manufacturing Facility, Williamsburg, PA

NPC, Inc., Feasibility Study for Passport Production Facility, Claysburg, PA

ORX Railway Corporation, Manufacturing Facility, Tipton, PA

PA Turnpike Commission, Open-End Contract for A&E Services, Various, PA
- New Kegg Maintenance Facility, Manns Choice, PA
- Bowmansville Maintenance Feasibility Study, Bowmansville, PA

PA Department of General Services
- New Armstrong County Maintenance Facility, Salt and Equipment Storage Buildings and Site Development (Schematic Design), Kittanning, PA
- **New PA State Police Headquarters, Garage, and Shooting Range, Erie County, PA**

New Logan Township Municipal Building, with Salt Storage and Vehicle Maintenance Garage, Altoona, PA

CHRISTOPER BOWERS, PE, SE*

L.R. KIMBALL | SENIOR STRUCTURAL ENGINEER

Chris has over 18 years of experience as a Structural Engineer on a variety of projects including hangars and industrial / commercial facilities. He utilizes structural analysis and design software as well as AutoCAD and Revit in the drafting and production of drawings for structural systems for various types of facilities including educational and federal facilities.

Chris is a member of American Institute of Steel Construction; American Society of Civil Engineers; American Concrete Institute; Structural Engineers Association of Pennsylvania - Structural Engineering Emergency Response Committee Member; and PEMA Task Force 2, Company 5, Urban Search and Rescue, Structural Engineer.

A partial listing of Chris' relevant project experience includes:

Lockheed Martin, Owego, NY
- VH-71 Presidential Helicopter Integration Facility

Confidential Client, New Corporate Hangar, New York

PA Department of General Services
- New Armstrong County Maintenance Facility, Salt & Equipment Storage Buildings, and Site Development (Schematic Design), Kittanning, PA
- New Armed Forces Reserve Center and Field Maintenance Shop, Williamsport, PA

United States Gypsum Corporation, Washingtinville, PA
- Synthetic Gypsum Auxiliary Storage Shed

PA Turnpike Commission, Open-End Contract for A&E Services, Various, PA
- Bowmansville Maintenance Facility, Bowmansville, PA
- Central Archive Facility Work, Middletown, PA

Cabell County Commissioners, Huntington, WV
- Cabell County Emergency Services Center

Hancock County, WV, New Office of Emergency Management/911 Center and Health Department Building Complex, New Cumberland, WV

YEARS WITH THE FIRM
- 18 Years

EDUCATION
- BS, Civil Engineering, The Pennsylvania State University, 2000

HIGHLIGHTED EXPERIENCE
- Recent hangar design experiance
- Federal, State, and Local Project Experience

REGISTRATIONS / CERTIFICATIONS
- WV, Professional Engineer, 2006
- Registered Engineer in 13 Additional States
- Illinois, Licensed Structural Engineer, 2010 (*Licensed Structural Engineer (SE) in IL and NE Only)
- Nebraska, Licensed Structural Engineer, 2014 (*Licensed Structural Engineer (SE) in IL and NE Only)
- California, Safety Assessment Program Evaluator, 2014

PROFESSIONAL AFFILIATIONS
- American Institute of Steel Construction
- American Society of Civil Engineers
- Structural Engineers Association of Pennsylvania - Structural Engineering Emergency Response Committee Member
- PEMA Task Force 2, Company 5, Urban Search & Rescue, Structural Engineer

FRANCIS STROUSE, PE, PLS

L.R. KIMBALL | AVIATION SUBJECT MATTER EXPERT

YEARS WITH THE FIRM

- 46 Years

EDUCATION

- BS, Civil Engineering, The Pennsylvania State University, 1968
- MS, Construction Management, The Pennsylvania State University, 1970

MILITARY EXPERIENCE

- **416th Engineering Command, Facilities Management / Deputy Director / Commander, 1999 to 2000**

HIGHLIGHTED EXPERIENCE

- Francis has 40+ years of experience in airport planning, environmental, engineering, and construction management.

REGISTRATIONS / CERTIFICATIONS

- PA, Professional Engineer, 1972
  PA, Professional Land Surveyor, 1982
- NJ, Professional Engineer, 2007
- MD, Professional Engineer, 2010
- DE, Professional Engineer, 2007
- ERLPM Certification

PROFESSIONAL AFFILIATIONS

- Transportation Research Board (TRB), Aviation Committee
- American Association of Airport Executives (AAAE)
- Aviation Council of Pennsylvania (ACP)
- Maryland Airport Managers Association (MAMA)
- New York Aviation Management Association (NYAMA)
- New Jersey Aviation Association
- National Association of Aviation Officials
- Virginia Airport Operators Council (VOAC)
- Mid-Atlantic Aviation Coalition

Francis is in charge of our most challenging projects at New York, Pennsylvania, New Jersey, Maryland, Virginia, and West Virginia airports. He joined L.R. Kimball in 2001, and has 40+ years of vast airport planning, programming, environmental, engineering, and construction management experience. He has assisted the FAA, State Aviation Offices, and NASAO in implementing various innovative solutions to challenging problems.

Francis has served as the primary contact to the clients that have or are pursuing transfer of airport ownership. These include: New Garden Flying Field from private to Municipal Ownership (completed January 2007), Kutztown Airport from private to Joint Airport Authority, Camden County Airport from private to County Development Authority and Washington County from County to County Redevelopment Authority.

Over his career, he has been directly involved in more than 12 other airport feasibility studies and transfer of ownership. As previous Engineering and Development Director for five airports including Harrisburg International and Capital City Airports, he directed a multi-million dollar program for each. Francis had overall responsibility for managing an engineering section of professionals who administered the comprehensive airport improvement program at the state-owned airports. Part of his duties for these airports was working with communities, municipalities, and counties to assure compatibility with their comprehensive plans and acceptance of the airport's capital improvement program. Projects were managed through all stages of planning, programming, design, and construction. During this period, master plans were prepared and later updated for each airport. Under his direction, Harrisburg International was converted from a military base to the third largest airport in Pennsylvania.

Francis also provided essential technical expertise for complex projects such as runway rehabilitation for the Yeager, Leesburg, and Wilkes-Barre/Scranton International Airports, and the Lockheed Martin VH-71 Presidential Helicopter Integration Facility.

He has extensive experience in Construction and Program Management. Several project examples follow where Francis served as Construction Manager in addition to other duties shown. As Construction Manager he was responsible for monitoring Cost and Budget Status Reports; conducted Pre-Construction Conference; reviewed/approved Contractor's Schedules; processed and monitoring Contractor's submittals; preparing construction reports; conducting bi-weekly progress meetings/schedule updates; instituting proactive avoidance for change orders and claims; and conducting punchlist and final inspection.

From 1999 to 2000, Col. Strouse commanded and controlled the Facilities Management Branch of the Facilities Engineer Group and thirty-six Facility Engineer Teams located throughout the continental United States supporting ten general officer reserve support commands (RSC). He provided guidance and technical consultation to team leaders on policy and procedural manners related to managing, programming and budgeting resources for over 1,000 facilities.

Francis' relevent project experience includes:

- **Willow Grove Naval Air Station and Joint Reserve Base (NAS JRB) Feasibility Study to convert the facility to a Commonwealth Owned Joint Interagency Installation**
- **Yeager Airport, Charleston, WV - Rehabilitated the main runway pavement using innovative crack and seat technology. Thus, enabling the runway to be operational during the daytime and closed for construction at night.**
- **Lockheed Martin, Owego, NY, VH-71 Presidential Helicopter Integration Facility, Owego, NY**
- **Commonwealth of PA, Airport Hazard Zoning and Land Use Compatibility Enhancement Study**

FRANCIS STROUSE, PE, PLS (CONTINUED)

- **Rock Airport of Pittsburgh, New General Aviation Airport**
- **Bedford County Airport, Master Plan including Business Plan and Feasibility Study for the Installation of an approach lighting system**
- **Bradford Regional Airport Aviation Business Center Planning Study and Charter Service Enhancement Study**
- **James City County, Demand and Feasibility Study**
- **Wings Field, Blue Bell, PA:** Runway and parallel taxiway were lengthened and existing reconstructed to better accommodate corporate aircraft. A new fleet of snow removal equipment has recently been acquired and bidding is progressing on a new 4-bay snow removal equipment storage building using green architecture principles. This project involves conceptual design for new corporate hangars and T-hangar with 20 units.
- **Eastern West Virginia Regional Airport,** Updating and Revision of Airport Rules and Regulations and Minimum Standards (Triggered by three thru-the-fence operations and major military and corporate aviation growth, Airport Rules and Regulations and Minimum Standards are being updated and revised. Strategies are being developed to bring the Airport into compliance with FAA grant special conditions and assurances)
- **Surry County, VA Airport Feasibility Study**
- **Manassas Regional Airport, Apron Rehabilitation & Hangar Dev.**
- **Leesburg Executive Airport, Runway Rehabilitation**
- **New Garden Flying Field, Landenberg, PA:** Preparation of a new Master Plan using our new state of the art transportation business center concept. This exciting new business model has guided a public entity to initiate acquisition of the airport. Transfer documents were prepared for New Garden Township and included: an Airport Business Plan, Historical Financial Analysis and Proposed Budget, Airport Manager Agreement, FBO Agreement, Property Maps, Facility Inventory and Transfer / Sales Agreement.
- **Washington County Airport, Washington, PA:** Developed an Airport Master Plan to include major runway extension and Business Plan to develop strategies for self-sufficiency, an approach lighting system and an Airport Marketing Plan to attract new business opportunities. All of the above ventures were assembled with targeted economic goals and objectives to encourage private investment in various adjacent and on-Airport business areas.
- **Greene County Airport, Waynesburg, PA:** Various projects consisted of developing the Master Plan, Business Plan, and GPS Instrument Approaches. During the master planning process, L.R. Kimball recognized the importance of economic development to the County Commissioners and worked with them to present an Airport Layout Plan that would assist in that endeavor. A business plan, as well as a systematic capital development program, was developed that emphasized both safety and revenue generation. Every effort was made to present a prioritized program that met the identified needs of the Airport in a fiscally responsible manner.
- **Central Jersey Regional Airport, Bridgewater, NJ:** Project is constructing a new northside aviation development to include an itinerant apron, T-hangar taxiways, 4 T-hangars with 10 units each, access road extension and environmental mitigation. This new investment will create a business image to attract corporate aircraft and significantly increase airport revenues. An EA for the runway reorientation and lengthening is in progress. A successful committee involvement program has resulted in municipal acceptance for the first phase of a multi-year program.
- **Spitfire Aerodrome, Pedricktown, NJ:** Reconstruction of the runway pavement and installation of a new medium intensity runway and taxiway lighting system. Now the airfield fully complies with New Jersey airport licensing criteria. Design is commencing on site preparation for a new T-hangar complex capable of housing 40 units.
- **Bedford County Airport, Bedford, PA:** Construction completion of a 1,000' runway extension to better accommodate business jets. A new Master Plan has been initiated which will include a Business Plan and feasibility study for the installation of an approach lighting system.

RONALD MORRIS, PE, CEM

L.R. KIMBALL | AVIATION ENGINEER

Ronald brings 25 years of experience to the L.R. Kimball team. He has managed and designed a wide range of transportation planning and design projects. These projects ranging in size from small to mega and in breadth from Airports to wastewater treatment. His experience has been in master, action and layout planning, with a focus on air and landside civil design. Through the projects that Ronald has been involved, he is very familiar with the planning and design procedures of the Federal Government and various states. He is well versed in the complete project delivery system from initial project scoping to generation of preliminary design alternatives to development of the final package. His experience also includes construction scheduling, management and inspection services. A select list of Ronald's relevant project experience includes:

YEARS WITH THE FIRM

- 25 Years

EDUCATION

- BS, Structural Design & Construction, The Pennsylvania State University, 1992
- Associate, Architectural Eng. Tech., DelTech, DE, 1990

HIGHLIGHTED EXPERIENCE

- 25 years of airport engineering expertise

REGISTRATIONS / CERTIFICATIONS

- NY, Professional Engineer, 2012
- Professional Engineer in Five Additional States - VA, MD, PA, NJ, DE
- 1994, Certificate of Training, NavAids and Lighting Course, FAA Academy, OK
- 1993, Certificate of Training, Eastern Region Laboratories Procedures Manual Course for Bituminous Pavement Inspection, FAA Hershey Conference
- 2006, Student Pilot / FF-4671650
- 2006, Certified Member, AAAE

PROFESSIONAL AFFILIATIONS

- National Society of Professional Engineers
- PA Society of Professional Engineers (2011 President, 2010 Board of Directors)
- Airport Consultants Counsel
- Aviation Counsel of Pennsylvania (ACP)
- Aircraft Owners and Pilots Association (AOPA)
- American Association of Airport Executives (AAAE)

PLANNING & ENVIRONMENTAL:

Garrett County Airport, Accident, MD
- Airport Master Plan Update
- Environmental Assessment – 5 Year ACIP

Lock Haven Airport, Lock Haven, PA
- Airport Layout Plan Update

Hazleton Municipal Airport, Hazleton, PA
- Airport Layout Plan Update
- Airport Business Plan

Harrisburg Intl Airport, Middletown, PA
- Airport Master Plan Update
- Terminal Complex Master Plan
- Pavement Management System

Jake Arner Memorial Airport, Lehighton, PA
- Airport Layout Plan Update
- Obstruction Mitigation Plan, Runway 8-26

Brandywine Airport, West Chester, PA
- Conduct LPV Feasibility Study

Lincoln Park Airport, Lincoln Park, NJ
- Airport Master Plan Update
- Obstruction Mitigation Plan, Runway1-19

Capital City Airport, New Cumberland, PA
- Airport Master Plan
- Pavement Management System

York Airport, Thomasville, PA
- Airport Layout Plan

Reading Regional Airport, Reading, PA
- ATCT Shadow Study

Ridgely Airpark, Ridgely, MD
- Environmental Assessment

Altoona-Blair County Airport, Martinsburg, PA
- Airport Master Plan Update

Lincoln Park Airport, Lincoln Park, NJ
- Remove Obstructions, Runway 1-19

DESIGN & CONSTRUCTION:

Altoona-Blair Co. Airport, Martinsburg, PA
- Construct Hangar Taxilanes
- Acquire Snow Removal Equipment (SRE) Vehicle
- Acquire Aircraft Rescue & Firefighting Vehicle
- Improve Runway Safety Areas for RW 3-21 and 30
- Expand South Hangar Apron
- Construct Hangar Access Road
- Land Acquisition Assistance

Chester Co/G.O. Carlson, Coatesville, PA
- Construct South Apron
- Preliminary Land Development Plan

Brandywine Airport, West Chester, PA
- Acquire Ground Service Equipment (Tug)
- Rehabilitate Taxiway A & RSA/TSA Grading
- Widen R/W 9-27 for WAAS, Ph 1: Feasibility Study

Lincoln Park Airport, Lincoln Park, NJ
- Rehabilitate T-Hangar Taxiway
- Acquire SRE Equipment
- Obstruction Removal Ph1 – Ph3
- Acquire Land, Ph1

RONALD MORRIS, PE, CEM (CONTINUED)

Washington County Airport, Washington, PA
- Relocate Existing 7-Unit T-Hangar

Wilkes-Barre/Scranton Intl Airport, Avoca, PA
- New Terminal Building and Concourse

Capital City Airport, New Cumberland, PA
- South Apron Expansion and Rehabilitation
- Runway 12-30 Rehabilitation
- Rehabilitation of Taxiways B, C, D, and J
- Snow Removal Equipment Building

Wings Field Airport, Philadelphia, PA
- Construct Itinerant Apron
- Rehabilitate GA Terminal Apron
- Queen City Airport, Allentown, PA
- Replace Fuel Farm

Harrisburg Intl Airport, Middletown, PA
- Parking Structure and Inter-Modal Facility
- Amtrak Station – Preliminary Design
- Building 517 Apron Expansion
- Loading Bridge Replacement at Gate A6
- Taxiway A Rehabilitation
- Taxiway E Rehabilitation
- Air Cargo Apron Rehabilitation
- Terminal South Apron Expansion
- Water Tower/Distribution System Rehabilitation

Hammonton Municipal, Hammonton, NJ
- Rehabilitate Airfield Lighting, Ph1 - Design
- Rehabilitate Airfield Lighting, Ph2 - Construction

New Garden Airport, Toughkenamon, PA
- Reconstruct Runway 6-24; Replace Airfield Lighting; RSA Imp

Reading Regional Airport, Reading, PA
- Reconstruct South Taxilane
- Building 501 Site Improvements
- Acquire Aircraft Rescue & Firefighting Vehicle
- Runway 36 Obstruction Removal
- Construct Airport Security Fence, Ph 1

VINCENT DECARIO, PE

L.R. KIMBALL | AVIATION ENGINEER

YEARS OF EXPERIENCE

- 15 Years

EDUCATION

- BS, Civil Engineering Technology, Construction/Transportation, University of Pittsburgh at Johnstown, 2004

HIGHLIGHTED EXPERIENCE

- Vince's recent experience involves several airport hangars

REGISTRATIONS / CERTIFICATIONS

- PA, Professional Engineer, 2013
- Eastern Regional Laboratory Procedures Manual (ERLPM), June 2006
- Certified-ACI Concrete Field Testing
- North East Technical Services Gauges (NETS), October 2007

AFFILIATIONS

- American Society of Civil Engineers

Vince has served as a design engineer, construction inspector, and project manager for 15 years with L.R. Kimball. He has experience in design of earthwork, drainage, paving and lighting, NAVAIDS, preparation of material quantity takeoffs, cost estimates, drawings and specifications, and engineering reports. Vince is also experienced in the Airport Pavement Management and Micro-PAVER System. He has been trained to use Micro Paver and has worked on several PCI inspections at various airports including Yeager Airport and Harrisburg International Airport. Also, Vince is an experienced construction inspector and has overseen numerous airport improvement projects. Most recently, he has served project manager for all design and construction projects at the Bedford County Airport, Williamsport Regional Airport, the Fairmont Municipal Airport, and the Washington County Airport

A partial list of Vince's recent, relevant projects includes:

Fairmont Municipal Airport, Fairmont, WV

- Expand West General Aviation Apron
- **Construct T-Hangar Building (2)**
- Construct Partial Parallel Taxiway (3 phases)
- Construct West General Aviation Apron

Yeager Airport, Charleston, WV

- Pavement Management Program
- Obstruction Removal Runway 5 End

Bedford County Airport, Bedford, PA

- Rehabilitate AWOS
- Install Ground communication Outlet (GCO)
- Construct West Apron and Taxilane; Parking Lot Expansion; and Detention Pond Modifications
- Construct Apron and Taxilane for Hangars E and F
- **Construct Corporate Unit Hangar**
- Extend Runway 14-32 and Taxiway E

Williamsport Regional Airport, Montoursville, PA

- Improve Runway 9-27 Approaches
- Conduct EA for Runway 9-27 Approach Improvements
- Rehabilitate General Aviation Apron & Taxiway A
- Construct Taxiway D Extension and Modify Taxiway Naming Configuration
- Relocate Waterline and Improve Parking Lot
- Improve Runway 9 Safety Area and Extend Parallel Taxiway B
- Extend Taxiway B to the Runway 27 End

Allegheny County Airport, West Mifflin, PA

- **Hangar #1 Replacement**
- 2010 Rehabilitate Main Terminal Apron
- Taxiways A and C Rehabilitation Projects
- Relocate Taxiway E

Washington County Airport, Washington, PA

- Obstruction Removal for the Runway 9 Approaches
- Rehabilitate Taxiway B and Miscellaneous Pavement Improvements
- Complete Perimeter Fence and Install Deer Guard on Airport Road
- Install Airport Perimeter Fencing

GREGORY SCHROCK, PE, CPESC, CP-SWPPP

L.R. KIMBALL | SENIOR CIVIL ENGINEER

YEARS WITH THE FIRM

- 24 Years

EDUCATION

- BS, Civil Engineering Technology, University of Pittsburgh at Johnstown, 1994

HIGHLIGHTED EXPERIENCE

- Greg's experience involves the design of roadways, parking lots, site layout, stormwater management facilities and analysis, sanitary sewer systems, and water distribution systems; hydrologic and hydraulic analysis; preparation of contract documents; earthwork takeoff calculations; and cost estimates for state agencies and local agencies.

REGISTRATIONS / CERTIFICATIONS

- WV, Professional Engineer, 2006
- Registered Professional Engineer in 3 Additional States
- Qualified Preparer of Stormwater Pollution Prevention Plans, No. [redacted] Expires 1/10/19
- Certified Professional in Erosion and Sediment Control, No. [redacted] Expires 11/27/18

Greg has 24 years serving as a Civil Engineer and Project Manager for L.R. Kimball. He specializes in various aspects of site development and municipal design. On the municipal side, he is involved with the design of waterlines, sanitary sewers, pumping stations, and water systems. As a project engineer/manager, he is responsible for the design, project management, project meetings and coordination, project specifications, client interaction, and permit acquisition for various land development projects. He is involved with the design of roadways, parking lots, site layout, stormwater management facilities and analysis, sanitary sewer systems, water distribution systems, and the preparation of contract documents.

Greg's stormwater management design experience includes hydrologic and hydraulic analysis, detention basin design, stormwater collection and conveyance system design, preparation of construction drawings, preparation of stormwater management reports including pre- and post-development runoff computations, routing of storm flows through proposed detention basins, and basin design computations. He is also involved with the preparation of erosion and sedimentation control plans including designing the construction documents, preparing NPDES permit applications, letters, erosion and sedimentation control reports, preparing construction sequences, and design computations for each erosion and sedimentation control device utilized. With NPDES and stormwater plan submissions, Greg is involved with Best Management Practices and design, water quality devices, stormwater volume calculations, rain garden, and bioretention and infiltration systems that assist with the reduction of stormwater management peak flows and impact to the downstream waterways or systems.

Greg's relevant project experience includes:

PA Turnpike Commission, Open-End Contract for A&E Services, Various, PA

- New Kegg Maintenance Facility, Manns Choice, PA
- Bowmansville Maintenance Feasibility Study, Bowmansville, PA

PA Department of General Services, Various, PA

- New Armstrong County Maintenance Facility, Salt & Equipment Storage Buildings, and Site Development (Schematic Design), Kittanning, PA
- New Headquarters Facility, P&S/Garage and Crime Lab, Erie Headquarters, Summit Twp., Erie County, PA

Allegheny County Department of Public Works, Allehgeny County, PA

- Hemlock County Wedding Pavilion

Robert Kipp & Associates, Fayette County, PA

- Henry Clay Township Community Park Master Plan

Hancock County WV Board of Commissioners, Hancock County, WV

- New Office of Emergency Management/911 Center and Health Department Building Complex(Schematic, Wetland Assessment, Surveying and Mapping)

Wal-Mart Stores, Inc., Bentonville, AK

- Charleston, WV Engineering Services
- Worked on over 47 separate Wal-Mart projects

Jemsite Development, LLC, Lawrence Township, PA

- Lowe's Home Improvement Store - Land Development

ECHO Real Estate Services Company, Various Sites, PA and OH

- Various Development Projects

Todd Griffith, PE

Geotechnical Office Lead

Todd Griffith, PE possesses over 13 years of geotechnical engineering experience on projects involving site and subsurface investigations, slope and excavation stability analyses, reinforced soil slope design, retaining wall and foundation design, engineering during construction, laboratory testing, and stream bank erosion mitigation. He is responsible for managing geotechnical projects for which he plans and develops field explorations and laboratory testing programs, as well as the preparation of project reports, proposals, and cost estimates. Mr. Griffith has extensive knowledge and experience with such field testing as hydraulic conductivity testing of bedrock and deep foundation load testing. Mr. Griffith has performed engineering analyses for a variety of projects in West Virginia, Kentucky, Maryland, Pennsylvania, and Ohio.

Education

- M.S., Civil Engineering, Geotechnical Specialization, Virginia Tech, 2005
- B.S., Civil Engineering, West Virginia University, 2004

Professional Registrations / Certifications / Training

- Professional Engineer: WV [redacted] expires 12/31/2018)

Also registered in PA [redacted], KY [redacted], MD [redacted] and OH [redacted]

- OSHA 30-Hour Occupational Safety and Health Training)

Software Experience

- Seep/W and Slope/W - Seepage and Slope Stability analysis using Geoslope Software.
- SLIDE 7.0 – Slope Stability Analysis
- ReSSA 3.0 - Reinforced soil slope design using ReSSA 3.0 (Reinforced Soil Slope Analysis)
- MSEW 3.0 – Mechanically stabilized earth wall design
- Microstation / AutoCADD - Basic drawing and design functions of computer-aided drafting and design.
- gINT version 8 - Presentation of boring information and laboratory testing information using gINT.
- DigiPro 2 - Analysis and presentation of data obtained from inclinometer readings.
- CRSP – Colorado Rockfall Simulation Program

EXPERIENCE

Professional Summary:

- 13 years of geotechnical engineering experience

Areas of Expertise:

- Foundation engineering studies
- Seepage and slope stability investigations
- Design of repair for failed slopes
- Reinforced soil slope design
- Public-Private Partnership and Design-Build project delivery

KEY PROJECT EXPERIENCE

- **WV Department of Transportation - Division of Highways, Districts 10 and 2, Landslide Repair Projects (Geotechnical Project Manager: 2015 - Present).**
- **West Virginia Division of Highways, US Route 35 Design-Build/P3 Project – Putnam and Mason Counties, WV (Geotechnical Project Manager: 2015 - Present).**
- **Tri-State Airport Taxiway A East Expansion – Huntington, West Virginia (Geotechnical Engineer 2015 - Present).**
- **Tri-State Airport Access Road Retaining Wall / MALSR Road Slope Repair projects (Geotechnical Project Manager 2014 - 2016).**
- **Coalfields Expressway Public Private Partnership – Wyoming County, WV (Geotechnical Project Reviewer: 2014 - 2016).**
- **West Virginia Division of Highways, Kanawha Falls Bridge Rehabilitation - Fayette County, WV (Lead Geotechnical Engineer: 2013 - 2015).**
- **West Virginia Division of Highways, Corridor H, Kerens to Parsons Section 1B Subsurface Investigation - Randolph and Tucker Counties, WV (Lead Geotechnical Engineer: 2014 - 2015).**
- **West Virginia Division of Highways, Bridge Street Bridge Replacement, Taylor County, WV (Geotechnical Project Manager: 2011 - 2013).**
- **West Virginia Division of Highways, Laurel Branch Reinforced Soil Slope Design – West Virginia Route 10 Relocation, Logan County, WV (Geotechnical Engineer: 2012).**
- **West Virginia Division of Highways, Rum Creek Connector Reinforced Soil Slope Design – West Virginia Route 10 Relocation, Logan County, WV (Geotechnical Engineer: 2012).**
- **Crestwood Pipeline Landslides, Doddridge County, WV (Geotechnical Engineer and Project Manager: 2013).**
- **Tri-State Airport Landslide Remediation – Huntington, WV (Geotechnical Engineer: 2012).**
- **Tri-State Airport Taxiway A Stability, Huntington, WV (Geotechnical Engineer: 2010 - 2011).**
- **Parkersburg Riverfront Park, Parkersburg, WV (Lead Geotechnical Engineer: 2009 - 2010).**

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Melissa Logan Gillespie, PE

Geotechnical Engineering Manager

Melissa Logan Gillespie, PE possesses more than 19 years of cumulative experience in the discipline of geotechnical engineering, including field, laboratory, and office-related engineering work. Her primary responsibilities include all phases of a project including client contact, proposal preparation, coordination of personnel, engineering analyses, preparation of reports and specifications, and consultation during construction.

Education

- M.S., Civil Engineering, University of Texas – Austin, 1998
- B.S., Civil Engineering, Drexel University, 1996

Professional Registrations / Certifications / Training

- Professional Engineer: WV [redacted] expires 12/31/2018)

  Also registered in PA [redacted] VA [redacted], CT [redacted] LA [redacted] FL [redacted] and OH [redacted]

EXPERIENCE

Professional Summary:

- 19+ years experience in geotechnical engineering

Areas of Expertise:

- Shallow and deep foundation design
- Earth retaining structures and reinforced soil slope design
- Slope stability evaluation and mitigation measures
- Settlement evaluation and mitigation measures
- Installation and monitoring of geotechnical instrumentation
- Deep foundation load testing
- Construction phase consultation
- Public-Private Partnership and Design-Build project delivery

KEY PROJECT EXPERIENCE

- **WV Department of Transportation, Division of Highways, District 10 Slide Repairs - McDowell County, WV (Project Manager).**
- **West Virginia Division of Highways District 2 Slide Repair Contract (Technical Reviewer).**
- **Tri-State Airport Access Road Landslide, Huntington, WV (Technical Reviewer).**
- **West Virginia Division of Highways, US Route 35 Design-Build/P3 Project, WV 869 to North of County Route 40, Putnam and Mason Counties, WV - Geotechnical Project Manager.**
- **West Virginia Division of Highways, Coalfields Expressway Design-Build/P3 Project: Mullens to E CO 12/1 and Mullens Connector, Wyoming County, WV - Geotechnical Project Manager.**
- **WV Department of Transportation, Division of Highways, Kanawha Falls Bridge Renovation/Replacement Study - Fayette County, WV (Geotechnical Project Manager).**
- **WV Department of Transportation, Division of Highways, West Virginia Corridor H, Scherr to Forman - Grant County, WV (Geotechnical Engineer).**
- **WV Department of Transportation, Division of Highways, Relocation of WV Route 10, Man to Rita - Logan County, WV (Geotechnical Engineer).**
- **Corridor H – Kerens to Parsons Section 1B Subsurface Investigation Program – Randolph and Tucker Counties, West Virginia (Geotechnical Project Manager).**
- **WV Department of Transportation, Division of Highways, Thomas Buford Pugh Memorial Bridge - Fayette County, WV (Geotechnical Project Manager).**
- **WV Department of Transportation, Division of Highways, Shinnston Truss Bridge - Harrison County, WV (Senior Geotechnical Engineer).**
- **Sika Corporation, Gabion Wall and Rock Slope Evaluation – Bergen County, NJ (Senior Geotechnical Engineer).**

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Jennifer Arp-Bazzie, PWS

Ecological Project Manager

Education

- M.S., Biology, University of North Carolina, Wilmington, 2003
- B.S., Biology, Ohio University, 1995

Professional Registrations/Certifications/ Training

- Professional Wetland Scientist[redacted]
- Qualitative Habitat Evaluation Index (QHEI)Training – OEPA, 2004
- Wetland Hydrology Design – Swamp School, 2015
- Wetland Construction and Restoration – Wetland Training Institute, 2009
- River Processes – Fluvial Geomorphology and Channel Processes – School of Engineering and Applied Sciences, University of Buffalo, 2007
- Stream Restoration – Functional Based Hydraulic Structure and Bioengineering Design – School of Engineering and Applied Sciences, University of Buffalo. 2007
- ODOT Ecological Survey Training, 2005, 2010, 2015
- ODOT Waterway Permits Training, 2005, 2010, 2015

Jennifer Arp-Bazzie, PWS is a Professional Wetland Scientist as certified by the Society of Wetland Scientists. She has extensive experience in stream and wetland delineation and assessment, wildlife habitat assessment, threatened and endangered species assessment, ecological survey, and stream and wetland mitigation pre- and post-assessment. Ms. Arp-Bazzie has assisted in mist net bat surveys and bat portal surveys as well as mussel and fish surveys. She has experience preparing various levels of NEPA documents as required for specific projects. She has been involved in the preparation of environmental documentation including Categorical Exclusions, Environmental Assessments and Section 4(f) and 6(f), noise analysis and abatement, ecological surveys, stream and wetland delineations, stream and wetland mitigation/monitoring assessments, and waterway permits. Ms. Arp-Bazzie has completed numerous federal and state permits including 404 Nationwide and Individual Permits, 401 Water Quality Certifications, NPDES Permits, Regional General Permits, and Isolated Wetland Permits. She has worked in both the private and public sector in the completion of environmental documentation and waterway permitting in Ohio, Illinois, Indiana, Iowa, Louisiana, Massachusetts, Nebraska, West Virginia, Wyoming, and Texas.

EXPERIENCE

Professional Summary:

- 17 years of environmental consulting experience

Areas of Expertise:

- Surface Water Delineation
- Stream and Wetland Habitat Assessment
- Clean Water Act Permitting and Compliance
- NEPA Services

KEY PROJECT EXPERIENCE

NEPA Services, WVDOH, Middleway Bridge Replacement, State Project T602-51-9.34 00, Federal Project STP-0051(047)D – Berkley County, WV

Ms. Arp-Bazzie was the deputy project manager and ecological lead for NEPA services for the Middleway Bridge Replacement Project in Berkeley County, West Virginia. The proposed project is a replacement of the existing bridge carrying WV Route 51 over Opequon Creek located approximately one mile north of the town of Middleway, Jefferson County. During preliminary background research, the WVDOH determined there was a high potential for archaeological resources in the immediate vicinity of the bridge due to the reported existence of a potential mound feature at the bridge location. The purpose of the expanded survey area is to assist the bridge design team in identifying areas where there is potential for no or minimal impacts to potentially significant environmental resources. The proposed project consisted of a Categorical Exclusion (CE) for bridge replacement.

FONSI Re-Evaluation, WVDOH, I-64 Six Lane Widening (Crooked Creek to Nitro), State Project U340-64-41.37 00, Federal Project NH-0641(318) – Putnam Co, WV

Ms. Arp-Bazzie was the ecological lead for the FONSI Re-Evaluation for the I-64 Six Lane Widening Project in Putnam County, West Virginia. An Environmental Assessment (EA) determined that impacts from the project were not anticipated to be significant, which led to a Finding of No Significant Impact (FONSI) in November 2016. Since that time, the WVDOH has revised the project, affecting the footprint of approved project. Therefore, the proposed project was re-evaluated to

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determine if the proposed changes would now result in a finding of significant impact. The project is currently being re-evaluated.

NEPA Services, WVDOH, Twin Branch Truss No. 1 and 2 Bridge Project, State Project S244-7-5.32 (2), Federal Project STP-0007(294)D – McDowell Co, WV
TRC has been contracted to prepare the documentation necessary for NEPA compliance for the proposed Twin Branch Truss No. 1 and 2 Bridge projects in McDowell County, West Virginia. The WVDOH has determined that Twin Branch Truss No. 1, Twin Branch Truss No. 2, and the Twin Branch Tunnel are all in need of replacement, rehabilitation, or closure. TRC has initiated the preliminary environmental studies to determine the level of potential impact at the site and required documentation. The proposed project is anticipated to consist of Environmental Assessment (EA) due to potential environmental impacts at the project site.

NEPA Services, WVDOH, WV 10 Operational Improvement, State Project U328-10-0.00 00 – Logan, Wyoming, and Mercer Counties, WV
Ms. Arp-Bazzie was the project manager for NEPA services for Section 4(f) and 6(f) and Hazardous Waste in association with the 69-mile WV 10 Operational Improvements Project. Jennifer's responsibilities included Section 4(f) and 6(f) and Hazardous Waste environmental documentation, coordination with task leaders, stakeholders and prime consultants. The project was on an expedited schedule due to a planned roadway bond sale. The design of the project included roadway rehabilitation/upgrades, bridge replacements/rehabilitations, culvert replacements, new passing lanes, slide repairs, NEPA coordination, and contract plans.

Rickenbacker Advanced Global Logistics Center, Columbus Regional Airport Authority – Columbus, OH
Ms. Arp-Bazzie was a team member for the identification of wetlands and other ecological resources for a proposed 1,300-acre Advanced Logistics Park. Ms. Arp-Bazzie assisted in the field identification and characterization of the aquatic, wetland, and endangered species resources associated with the proposed project as well as the recording of GPS points of wetland boundaries within the project area. In addition, she assisted in the field investigations of potential habitat within the proposed project area for the endangered Indiana bat. Woodlots within the project area were investigated to determine extent and type of suitable habitat. Results were coordinated with the USFWS.

Ecological and Cultural Services, Triad Hunter, LLC, Forni Well Pad Site – Monroe County, OH
Ms. Arp-Bazzie was the project manager for cultural services, including Historic Architectural and Archeological Surveys and the ecological lead for ecological services for the Forni as Well Pad Site located in Monroe County, Ohio. Triad Hunter, LLC proposed to construct a well pad site on private lands as part of its oil and natural gas exploration and production efforts within the Wayne National Forest (WNF). Because the Project involved federal permitting, the undertaking was subject to Section 106 of National Historic Preservation Act as well cultural resources requirements under the National Environmental Policy Act (NEPA).

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Tracy L. Engle
Office Practice Leader, Ecological Services

How will your expertise be utilized for On-Call Environmental Consulting?

For over 22 years, I have gained experience working in conjunction with multi-disciplined professionals to solve complex environmental projects. As a project manager, I strive to pull together the proper personnel provide clients cost effective solutions to meet their project needs.

I have a thorough understanding of the environmental permitting process and I have the practical experience necessary to strategically guide the project implementation and decision making process needed to achieve project goals.

My commitment to conservation issues and professional understanding of business and infrastructure needs has led to my election to the Board of Trustees of the Ohio Academy of Science and appointment to the Geauga County Planning Commission, the Auburn Township Zoning Commission and the Board of Trustees of Grand River Partners, Inc.

I work hard to develop creative, non-traditional solutions to problems, utilizing my experience I am able to anticipate conflicts and implement an effective plan to assure project success.

Tracy Engle is a Professional Wetland Scientist as certified by the Society of Wetland Scientists. He is experienced in all aspects of NEPA project development and management. Mr. Engle managed NEPA projects, which have followed FHWA/ODOT, FTA, FAA, FRA, USCG, USACE, USDOE, USDA, and HUD processes. Through his background as a field biologist, Mr. Engle has extensive involvement in wetland identification and delineation, stream assessment and habitat evaluation, wildlife habitat assessment, ecological surveys, habitat restoration, and permitting. He has extensive experience managing and conducting the full range of social, economic, and environmental investigations required for NEPA documentation, as well as preparing various levels of NEPA documents as required for the specific projects. He has managed and/or conducted required investigations for projects in OH, ME, MI, NY, NJ, WV, PA, WY, TX, NE, and FL.

CREDENTIALS

Education

- M.S., Biology, John Carroll University, Cleveland, Ohio, 2003
- B.S., Natural Resource Management, The Ohio State Univ., Columbus, Ohio, 1994

Professional Registrations/Certifications/Training:

- Professional Wetland Scientist (PWS)
- ODOT Ecological Survey and Waterway Permits Training, October 2014
- ODOT Managing the Environmental Process Training, February 2012
- ODOT Section 4(f) and 6(f) Training, March 2012

Awards/Publications:

- Engle, T.L. 2011. Rare, Threatened and Endangered Species: An Oil and Gas Perspective. Presented at Ohio Oil and Gas Association's Environmental Seminar.
- Engle, T.L., and J.R. Johansen. 2002. Does a Correlation between the Floristic Quality Index and Coefficients of Wetness Exist? Ohio Academy of Science Conference.
- Sherman, D.E., R.W. Kroll, and T. L. Engle. Flora of a diked and an Undiked south western Lake Erie Wetland. Ohio Journal of Science. Honored as Paper of the Year.

EXPERIENCE

Professional Summary:

- 25 years ecological and environmental project experience.
- NEPA project development experience following FHWA/ODOT/WVDOH, FTA, FAA, FRA, USCG, USACE, USDOE, USDA, and HUD environmental processes.
- Experience West Virginia, Ohio, Maine, Michigan, New York, New Jersey, Pennsylvania, Wyoming, Texas, Nebraska, and Florida.

Areas of Expertise:

- National Environmental Policy Act (NEPA) Project Development
- Section 404/401 Permitting
- Wetland and Terrestrial Ecology
- Environmental and Transportation Planning
- Waters of the US Training

PROJECT EXPERIENCE

Akron-Canton Airport, Akron, OH, Environmental Assessment –
To accommodate an increase in capacity, the Akron-Canton Airport selected a team to complete an Environmental Assessment (EA) for their runway extension project. This proposed runway extension and other related actions required the preparation of an EA to conform with the provisions of the National Environmental Policy Act of 1969 (NEPA) and the Federal Aviation Administration (FAA) Airport Environmental Handbook, Order 5050.4A. A needs analysis was completed to provide assurance to the FAA and the public as to the need for the project. The project's purpose and need forms the basis of the alternatives analysis. Evaluation of all alternatives were considered and existing

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published information on each alternative was gathered. Field staff collected data and completed field investigations necessary to identify and describe the background conditions from which environmental impacts of the project were compared. Background information was gathered for various disciplines such as noise, land use, social and socioeconomic conditions, population demographics, historic resources, biotic communities, wetlands, endangered species and hazardous materials. The project also involved the relocation of a local roadway, as well as meetings with the public and local elected officials.

Columbus Regional Airport Authority, General Engineering Services Contract, Categorical Exclusion Document, Ecological Resources Survey, and Impact Permits, Columbus, OH –
For this project, Mr. Engle served as the Environmental Leader for completion and issuance of project approvals and permits. The study area for the proposed project is located in southern Franklin County and northern Pickaway County, near the towns of Lockbourne and Duvall, Ohio. To complete construction of Alum Creek Drive (FRA-Alum Creek Drive, PID#79322) and in association with a proposed Norfolk & Southern Intermodal facility, a Categorical Exclusion (Level 4) document was completed to document project impacts with the involved federal and state agencies. The ecological resources were investigated within a 1,061 acre study area. A permit application to the U.S. Army Corps of Engineers (Section 404 Individual Permit) and the Ohio EPA (Section 401 Water Quality Certification) were required and completed.

WV 10 Operational Improvements, NEPA Documentation, Logan, Wyoming and Mercer Counties, WV –
Led the completion of NEPA services associated with the design of operational improvements along 69 miles of WV. The project was completed on an expedited schedule due to a planned roadway bond sale and was divided into five (5) construction contracts with each contract cleared as a standalone Categorical Exclusion (CE) document. Proposed impacts were deemed minimal throughout most of the project, except at proposed historic bridge replacement areas which are to be coordinated under the Section 4(f) historic bridge replacement programmatic agreement.

Middleway Bridge Replacement, NEPA Documentation, Berkeley County, WV –
Led the preparation of NEPA documentation and associated studies for a replacement of the existing bridge carrying WV Route 51 over Opequon Creek approximately one mile north of the town of Middleway. The effort focuses on identifying the potential for no or minimal impacts to potentially significant environmental resources within a study area that encompasses an acreage of approximately 9.6 acres. The proposed project has been cleared through a Categorical Exclusion (CE) document.

U.S. Coast Guard, Station Rochester, Rochester, NY, Environmental Assessment–
Project Manager for the completion of project permitting and an Environmental Assessment (EA) following National Environmental Policy Act standards and regulations for the dredging of the station and auxiliary moorings at Station Rochester. This U.S. Coast Guard Station, located on the Genesee River at the mouth to Lake Ontario, required dredging activities to improve boat operation. The EA and all Permits were received on schedule, accommodating the need to dredge this boat basin without the loss of operation.

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YEARS OF EXPERIENCE
- 34 Years

EDUCATION
- Associate, Computer Aided Drafting and Design, Pittsburgh Technical Institute

HIGHLIGHTED EXPERIENCE
- 30+ years of experience on hundreds of surveying & mapping projects of varying sizes & complexities

REGISTRATIONS / CERTIFICATIONS
- NC, Professional Land Surveyor, 1999,
- SC, Professional Land Surveyor, 2003,
- VA, Surveyor, 2010
- Photogrammetrist
- Certified Project Management Professional (PMP), #521453, 4/10/18

GEORGE KOPCHIK
L.R. KIMBALL | GEOSPATIAL SERVICES

George's experience and education have provided him with the technical and management skills necessary for completing the most complex mapping projects. Over the past 30+ years, George has had extensive experience in aerial photography, volume computations, digital orthophotos, GIS, and in producing topographic and planimetric maps. He is responsible for QA/QC activities including the checking and verification of planimetric and topographic maps, digital orthophotos, GIS projects, and stockpile inventories for numerous clients. Since joining L.R. Kimball, George has gained valuable knowledge in all phases of surveying, photogrammetic mapping, and GIS. He has been involved in planning, management, production, and delivery of many mapping projects undertaken by the firm. His knowledge, growth and diversity have moved him from his beginnings as a CAD Technician, to Project Manager, and then to Senior Project Manager. He served as an Assistant Operations Manager in the Geospatial Services Group and is currently the Director of Geospatial Services.

In summary, George has served in areas of mapping sciences such as project management, division operations, financial reports, budgets and estimates, technical and cost proposals, marketing, digital orthophotography, ArcInfo, KORK, Atlas, and Intergraph software, GIS applications, planning, and database design concepts, photogrammetry, surveying, data conversion, and stockpile inventories. George is also experienced in Microsoft Office.

George is experienced in managing the geospatial components of aviation related projects that require AGIS program specifications in accordance with Advisory Circulars 150/5300 -16A, -17C, and -18B. A select list of his relevant experience includes:

Fairmont Regional Airport, Fairmont, WV
- Surveying and mapping related efforts for the obstruction mapping and analysis project.

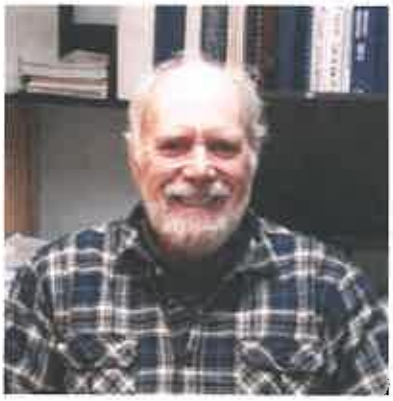
Various Survey and Mapping Projects
- For over 31 years, George has worked on literally hundreds of surveying and mapping projects of various sizes and complexities. He served as the Project Manager for major projects like the Allegheny Energy TrAIL Project that consisted of surveying and mapping for the construction of a transmission line crossing four states. Currently his primary responsibility is to oversee the operations of the Geospatial team but he also manages projects as needed.

PA Department of General Services, Various, PA
- New Headquarters Facility, P&S/Garage and Crime Lab, Erie Headquarters, Summit Twp., Erie County, PA

PA Department of Environmental Protection
- Project Manager for photogrammetric mapping and survey of 35 AMD sites for the PADEP.

Carrie Furnace Redevelopment, Allegheny County, PA

Cambria County Final Design, SR 0022, Section 005, PADEP
- Aerial photography, surveying and mapping activities in support of the engineering necessary for improvements to the existing 2-3 lane section to 4-5 lanes with realignment where necessary



STEPHEN LANDGREBE, PLS

L.R. KIMBALL | LAND SURVEYOR

YEARS WITH THE FIRM

- 31 Years

EDUCATION

- BS, Civil Engineering Technology, University of Pittsburgh at Johnstown, 1994

HIGHLIGHTED EXPERIENCE

- Steve's experience involves a variety of project types including successful experience working for WV governemnt agencies

REGISTRATIONS / CERTIFICATIONS

- WV, Professional Land Surveyor, 2017
- NY, Professional Land Surveyor, 1995
- TN, Professional Land Surveyor, 2009
- PA, Professional Land Surveyor, 2013

Steve serves as a Senior Survey Party Chief with over 30 years of experience. He has been responsible for various aspects of survey field work, data reduction, and production of the required survey deliverables. His years of experience include horizontal and vertical control networks, geometry, boundary and ALTA/ACSM surveys, right of way surveys, erosion and sedimentation control relating to stakeout of silt fence, etc. along with utility surveying and construction inspection. Since joining L.R. Kimball, Mr. Landgrebe has gained valuable knowledge in various phases of surveying relating to architectural, civil design, photogrammetric mapping, stockpile volumes, and GIS projects.

Steve's relevant project experience includes:

WVDOT Statewide Open-End

- Surveying to establish photo control and set monumentation for several aerial photography and surveying projects in West Virginia.

PA Department of General Services, Various, PA

- New Headquarters Facility, P&S/Garage and Crime Lab, Erie Headquarters, Summit Twp., Erie County, PA

Established reference circles and performed field surveying and office processing for the Thorn Run Interchange Improvement Project in Moon Township, Pittsburgh, PA.

CPV Fairview Power Plant, Vinco, PA

- 86 acre ALTA survey, established 5 permanent Class B Rod Marks, various property and boundary and easement surveys all relating to the property transfer and construction of a gas-fired generating station.

PADOT SR70/SR79 Interchange, Washington County, PA

- Surveying to establish photo control for photogrammetric base mapping. Re-established the existing horizontal and vertical geometry.

PA District 9 - SR 6219 Section 020

- As-built surveys and Kimberly Run Stream Relocation field surveying and office processing.

Lehigh-Northampton Airport Authority, Queen City AGIS Mapping (ALP Update; Obstruction Mapping and Removal), Allentown, PA

- Performed horizontal and vertical ground control network, runway centerline and profile surveys, planimetric detail surveying and field verification. Completed in accordance with the current FAA AC150-5300 -18B Airport GIS specifications.

Wal-Mart Stores, Inc., Kilbuck Wal-Mart Engineering Services, Kilbuck, Allegheny County, PA

- Performed field survey monitoring of numerous monuments throughout the site and processed GPS data collected to be updated in the monitoring report spreadsheets. CDI/L.R. Kimball provided design review, site monitoring, data collection, construction, and survey services to Wal-Mart Stores, Inc. following a significant landslide (1.5 million cubic yards) during the site grading of the River Pointe Plaza development. Immediately following the landslide, emergency efforts occurred to reopen SR 65 and the Norfolk and Southern railroad line. An extensive site monitoring program was established that included surface monitoring points, inclinometers, and piezometers. Data collected from the site was evaluated and a multi-phase construction plan was developed to stabilize the construction site.

CHAD C. DOBBINS, AVS, CCP, LEED AP BD+C, PMP, PSP, CCM

CRAWFORD CONSULTING | COST ESTIMATOR

YEARS OF EXPERIENCE

- 22 Years

EDUCATION

- B.A. Economics, University of Pittsburgh
- M.B.A., Clarion University

REGISTRATIONS / CERTIFICATIONS

- Certified Professional Estimator (CPE)
- Associate Value Specialist (AVS)
- Certified Cost Professional (CCP)
- LEED AP (Building Design + Construction)
- Project Management Professional (PMP)
- Planning and Scheduling Professional (PSP)
- Certified Construction Manager (CCM)

Mr. Dobbins has 7 years of experience developing cost estimate packages for new MILCON and Sustainment Restoration and Modernization (SRM) projects ranging from $10,000 through $8 billion master plan estimates. Organizations: Association for the Advancement of Cost Engineering (AACEI), Society of American Military Engineers (SAME), Society of American Value Engineers (SAVE) International. American Society of Professional Estimators (ASPE) Construction Management Association of America (CMAA), Project Management International, and the U. S. Green Building Council Training: MCACES Second Generation (MII), SUCCESS Estimator, WinEstimator, PlanSwift.

NAVFAC Mid-Atlantic - P197 Aircraft Maintenance Hangar - MCAS Cherry Point, NC

- Construct a two-story low rise two squadron module Type 1 maintenance hangar for the F-35B. Lightning II aircraft including a high bay space, crew and equipment space, administrative space, and Special Access Program Facility (SAPF). Size: N/A Cost: N/A Specific Role: Mr. Dobbins is providing MCACES MII cost estimating services for the Hangar.

USACE Louisville District - C-17 Two Bay Corrosion / Fuel Cell Hangar, Pittsburgh ARS, PA

- The two-bay facility was designed to house corrosion control, wash rack operations, fuel system maintenance and general maintenance in both bays. The two-bay hangar will include shallow foundations, metal panel exterior walls, sliding hangar doors, MEP systems, etc. Size: 115,830 SF Cost: $45.5 M Specific Role: Mr. Dobbins was tasked with developing cost estimates for the C-17 Corrosion / Fuel Hangar project that will provide a single, 115,830 square-foot two-bay facility properly sized and configured to house corrosion control, wash rack operations, fuel system maintenance, and general maintenance in both bays.

USACE Louisville District – 751 Hangar Renovation, Patrick Air Force Base, FL

- Project included the maintaining, repair, and modernization and properly configuring of this 72-year-old facility to support the current needs of HH-60 scheduled maintenance activities. Size: 47,068 SF Cost: $14.4M (Construction Award) Specific Role: Responsibilities included developing MCACES MII cost estimates. Mr. Dobbins provided services that included high-level market research to get a feel for the construction climate in the local area. Also, the estimating team interfaced with the A/E team to ensure that all aspects of the project were identified. Mr. Dobbins utilized knowledge of prior projects that were similar to this estimate to capture the most accurate cost possible. Crawford's estimate was within 5% of awarded construction cost.

911th Airlift Wing - Repair Fire Suppression Systems - Hangars 129, 416 and 417, Pittsburgh, PA

- Includes a humidity control device, transient voltage surge suppressors, as well as the fire suppression equipment for the room control panels, extension of the sprinkler piping, installation of additional sprinkler heads, as well as the installation of pressure relief valves for the foam concentrate storage tanks. Size: N/A Cost: $122,794. Specific Role: Mr. Dobbins served as the Project Manager and provided MCACES MII cost estimating services for the Fire Suppression Systems project for the 911th Airlift Wing repair.

USACE Louisville District – Renovate and Alter Hangar 1 (Bldg. 7087), Westover Air Base, MA

- The renovation of 52,045 SF of existing offices will include installing new flooring, paint, drywall, lighting fixtures, ceiling tiles, doors, bathroom fixtures, blast resistant windows, two ADA Compliant personnel elevators, electrical system upgrades, fire protection system upgrades, communication system upgrades, and upgrading the existing HVAC system. Size: 139,664 SF Cost: $19 M Specific Role: Mr. Dobbins provided MCACES MII cost estimating services for this project to renovate 72,157 SF of Building 7087, convert part of the existing open floor area into 15,462 SF of office space to accommodate the 439th Aeromedical Evacuation Squadron (439 AES) from Building 1408.

SIMILAR PROJECTS

AVIATION CLIENTS OVER THE PAST 7 YEARS

The following list represents L.R. Kimball's current or recent clients within the past five years.

- Allegheny County Airport, West Mifflin, PA
- Altoona-Blair County Airport, Altoona, PA
- Bedford County Airport, Bedford, PA
- Bellefonte Airport, Bellefonte, PA
- Bendigo Airport, Tower City, PA
- Bethesda Naval Hospital, NAVFAC Heliport, MD
- Bloomsburg Municipal Airport, Bloomsburg, PA
- Bradford Regional Airport, Lewis Run, PA
- Brandywine Airport, West Chester, PA
- Braxton County Airport, Sutton, WV
- Butler County Airshow Airport, Butler, PA
- Capital City Airport, New Cumberland, PA
- Carlisle Airport, Carlisle, PA
- Deck Airport, Lebanon, PA
- Donegal Springs, Marietta, PA
- Frederick Municipal Airport, MD
- Doylestown Airport, Doylestown, PA
- Ebensburg Airport, Ebensburg, PA
- Essex County Airport, Caldwell, NJ
- Fairmont Municipal Airport, Fairmont, WV
- Garrett County Airport, Accident, MD
- Gettysburg Regional Airport, Gettysburg, PA
- Harrisburg International Airport, Middletown, PA
- Hammonton Municipal Airport, Hammonton, NJ
- Hampton Roads Executive Airport, Chesapeake, VA
- Heritage Field, Pottstown, PA
- Jake Arner Carbon County Airport, Lehighton, PA
- John Murtha Johnstown-Cambria Co. Airport, Johnstown, PA
- Lancaster Airport, Lititz, PA
- Leesburg Executive Airport, Leesburg, VA
- Lincoln Park Airport, Lincoln Park, NJ
- Manassas Regional Airport, Manassas, VA
- Mid-Ohio Valley Regional Airport, WV
- Montgomery County Airpark, Rockville, MD
- Morgantown Municipal Airport, Morgantown, WV
- Nemacolin Woodlands Resort, Eighty Four, PA
- New Garden Flying Field, Toughkenamon, PA
- Ocean City Municipal Airport, Ocean City, NJ
- Penn Valley Airport, Selinsgrove, PA
- Pittsburgh International Airport, Pittsburgh, PA
- Port Meadville Airport, Meadville, PA
- Quakertown Airport, Quakertown, PA
- Reading Regional Airport, Reading, PA
- Somerset County Airport, Friedens, PA
- Southwest General Hospital, Middleburg Heights, OH
- Sussex County Airport, Georgetown, DE
- Syracuse Hancock International Airport, Syracuse, NY
- Tri-State Airport, Huntington, WV
- University Park Airport, University Park, PA
- Washington County Airport, Washington, PA
- Wheeling-Ohio County Airport, WV
- Wilkes-Barre / Scranton Int'l Airport, Avoca, PA
- Williamsport Regional Airport, Montoursville, PA
- Wings Field, Ambler, PA
- Yeager Airport, Charleston, WV
- York Airport, Thomasville, PA
- Zelienople Airport, Zelienople, PA

HANGAR PROJECTS OVER THE PAST 7 YEARS

- **Voyager Jet Center - New FBO/Hangar Construction, Site Design**
- **Allegheny County Airport 2010 - Hangar No. 1 Replacement & Hangar No. 50 Construction**
- **2014 Construct New Helipad and Hangar at Corry-Lawrence Airport Ph 1 Conceptual Design**
- **Bedford County Airport**
  - Construct Corp. Unit Hangar (Building F)
  - MMTF Airport Maint Hangar Development, Site Preparation (Aviation only)
  - A/E Services for Proposed Hangar
- **Fairmont Municipal Airport**
  - 2012 Construct 16-Unit T Hangar Building
  - 2014 16 Unit Hangar (Design, Bidding & Construction)
- **Johnstown Cambria County Airport**
  - 2015 Construct (Improve) Hangars
- **Miller Brothers Construction**
  - 2016 Hangar Site Design & Permitting Services at University Park Airport
  - 2016 PA State Police Hangar Site Design & Permitting Services at Wilkes-Barre Scranton Intl Airport
- **New Garden Flying Field**
  - 2014 Construct Hangars (Hangar procurement, Site preparation, Hangar Construction)
  - 2015 Hangar Erection
  - 2015 Hangar Site Preparation
- **Reading Regional Airport**
  - 2012 Construct Site Improvements to Restore Hangar 501 Site
  - 2015 FAA Required 501 Site Hangar Assistance
  - 2015 Minimum Standards for Hangar Development (EOR 2014-05)
  - 2016 FAA Required Millennium Hangar Assistance - ALP Pen & Ink Update
  - 2017 MAAM Hangar Assistance
- **Somerset County Airport - 2011 Construct Hangars**
- **Warrenton-Fauquier Airport**
  - 2012 Specific Airport Engineering Services RFP# 60-12kh (Hangar Site Dev, Ph 1)
  - 2015 Northside Hangar Development, Phase 1 – EA & Preliminary Design
  - 2016 Acquire Private Hangar
  - 2017 Rehab ABC Hangar and Apron
- **Washington County Airport**
  - Architecture and engineering design services for the rehabilitation of the existing Airport Business Center (ABC) Hangar, offices, and apron which was recently purchased by the Airport
- **Wilkes-Barre Scranton Airport A/E Services for Proposed Hangar Development**

LOCKHEED MARTIN CORPORATION

VH-71 PRESIDENTIAL HELICOPTER INTEGRATION FACILITY, OWEGO, NY

L.R. Kimball was hired to provide the design of the new VH-71 Program Facility in Owego, New York. Services provided by L.R. Kimball included program review, architectural, structural, mechanical, plumbing, electrical, and fire protection design. The building houses administrative offices, electronics laboratory space, and high-bay integration space and support areas. The administrative wing consists of a two-story, 61,000 square foot unit that contains offices and laboratory space for the production team. This portion of the building also houses employee and visitors' entrances, security operations, an auditorium, and locker and shower facilities. The high-bay production space contains 117,000 square feet of flight ready bays for incoming and outgoing testing and flight operations. Finish preparation, painting, and weather testing is conducted within two specially designed chambers with special exhaust and environmental requirements. The facility also houses an anechoic chamber for aircraft communications testing. This portion of the building also provides operational support spaces on the second floor.

L.R. Kimball's scope of work on this project included geotechnical services consisting of preparing a subsurface exploration plan, drilling oversight, laboratory testing, and report preparation. Borings were advanced through soft, saturated silts and glacial till to bedrock at depths of up to 100 feet. The subsurface conditions required an in-depth seismic analysis, including cross-hole shear testing and evaluation of liquefaction potential. L.R. Kimball conducted a shear wave velocity survey at the proposed site of the VH-71 Program Facility. Shear wave data was collected using the cross-hole method in general accordance with ASTM D4428. The survey was completed using three test wells, constructed in a generally Northwest to Southeast line. L.R. Kimball collected the shear wave velocity data with a Geometrics, LTD Smartseis, 12 channel seismograph, and two triaxial geophones. A downhole shear wave source was used to create the shear waves at five-foot increments coming up the holes. Verticality of the test borings was measured using a borehole deviation probe. Results of the shear wave cross-hole survey were used to evaluate the seismic classification of the soil for foundation design and installation.

In 2009, the VH-71 System Development and Demonstration (SDD) program contract was terminted following the Department of Defense's (DoD) decision to cancel the existing presidential helicopter replacement program. The VH-71 was intended to replace both the VH-3D and VH-60N aircraft currently used to conduct presidential support missions.

KEY FEATURES

- Integrated, full-services
- Aviation & commercial office design
- Maintenance Bay
- Fast-tracked construction - early bid packages and procurement packages

PROJECT COMPLETION 2006

TOTAL SQUARE FOOTAGE 178,000 SF

ALLEGHENY COUNTY AIRPORT AUTHORITY

VARIOUS PROJECTS, PITTSBURGH, PA

CONSTRUCT 6-UNIT T-HANGAR

L.R. Kimball provided design services to replace the 6-unit nested t-hangar known as Hangar No.1. The hangar was damaged in winter 2010/11 and had to be demolished. L.R. Kimball completed testing for the demolition of the existing hangar, designed and procured permitting for the new hangar.

ARFF BUILDING E REHABILITATION

The L.R. Kimball team provided architectural and engineering services to the Allegheny County Airport Authority for the rehabilitation of the ARFF Building "E". The architectural scope of the project was limited to reconfiguring the bunk rooms to create individual sleeping rooms instead of the existing open plan layout. The reconfiguration of rooms included dividing the existing male and female bunk rooms into 14 separate rooms. These new rooms do not have male or female designations. The floor plan was refined to indicate circulation patterns and room shapes, sizes, and layouts. The plans were designed for life safety and building code compliance.

CLINTON COMMERCE PARK PHASE 1

Clinton Commerce Park Phase I was an approximate 75-acre development located adjacent to the Pittsburgh International Airport. The Allegheny County Airport Authority is currently developing their property into various uses, including warehouse, commercial, mixed uses, and high, medium, and low-density residential areas.

L.R. Kimball's Phase I services included the design and construction services for the following warehouse site area: 2,000' local access road and multipurpose trail; sanitary, storm, and water services; landscaping; street lights; geotechnical investigation; surveying services; FAA permitting; coal permitting and design for coal mine void removal; erosion and sedimentation controls, stormwater management; planning module for sewage facilities; bidding & construction services, and various management and coordination activities. Additionally, L.R. Kimball designed 2.4 miles of future local access road for the Commerce Park area to connect the Clinton Commerce Park development to another local road. L.R. Kimball has also developed grading plans for future phases of this development.

KEY FEATURES

- A&E services for hangar related projects involving both new construction and renovations to existing buildings

PROJECT COMPLETION Varies by Project

BEDFORD COUNTY AIRPORT

ARCHITECTURE & ENGINEERING SERVICES FOR A CORPORATE HANGAR, BEDFORD, PA

L.R. Kimball provided architectural and engineering services for a proposed hangar at Bedford County Airport.

The hangar will be approximately 100' x 120' in size with a 3,000 square foot office area. The hangar will be a pre-manufactured metal building for example as manufactured by Nucore Building Systems Group.

A small building housing administrative functions, approximately 3,000 square feet in size, will be attached to the hangar and serve as working space for staff.

The Space Allocation Program will be developed and we currently assume it will include access through the administration area to the hangar; offices; open plan work space; Flight Planning Room; parts suite; men's and women's toilet facilities; a shop toilet with shower; a small galley and lounge and other items. This portion of the project will be constructed in a conventional manner and may be developed as a single story or two- story building with shell space to accommodate future growth. Park development to another local road. L.R. Kimball has also developed grading plans for future phases of this development.

KEY FEATURES

- **A&E services for airport / support building projects including a corporate Hangar**
- **New Hangars as well as improvements/upgrades to existing hangars**

PROJECT COMPLETION Design services completed in 2018

SIZE 100' x 120'

DEPARTMENT OF THE AIR FORCE, 911TH AIRLIFT WING

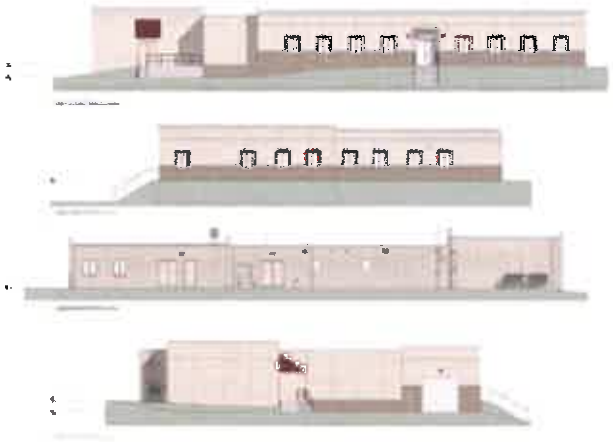
ARCHITECTURE & ENGINEERING DESIGN SERVICES UNDER A 6 YEAR CONTRACT, PITTSBURGH, PA

L.R. Kimball provided architecture and engineering services under an Indefinite Delivery/Indefinite Quantity contract for the Department of the Air Force 911th Airlift Wing starting in 2007. Select projects under this IDIQ have included:

- **Construct Parking Lot, Aircraft Maintenance**
- **Repair Airfield Lighting, East & West Apron:** Design repairs to the airfield lighting for the east and west apron to provide lighting levels in compliance with UFC 3-530-01. Repairs may include replacing the existing fixtures, installing additional high level fixtures on the east side of the apron, or other solution as determined by the A-E. Light must illuminate the apron without shining into the pilot's eyes when taxiing on the apron. Any new installed equipment must not cause an airfield obstruction. Light posts on the west side of the apron will need to be relocated to allow for future expansion of the apron. Coordinate design with the Allegheny County Airport Authority.
- **Renovations and additions to an existing one-story, 6,000 square foot communications facility**
- **Repairs and replacement sections for portions of the existing concrete paving and stormwater piping at the POL area.** Our team also designed a new access road for the POL (Petroleum Oil Lubricants).
- **Design of a new addition at the dining facility** to provide handicap accessibility to the upper and lower level of the building
- **Repair / Maintain NDI Shop B 409:** Design services for interior renovations which included interior finish renovations, minor repairs to existing interior and exterior doors/frames, minor HVAC modifications and the additions of curbs and landscaping.
- **Maintain/Repair Base Supply Building, 312:** Design services for renovations to a concrete slab at a high-density storage area and to office areas and women's restrooms and replacement of exterior windows to meet ATFP requirements.
- **Design of a 1,840 SF addition to the Aircraft Generation Equipment (AGE) Shop.** Renovations included equipment storage space and a high bay space to accommodate a jack stand tester. Also provided an enclosed walkway passage to allow movement between adjacent buildings without going outside.
- **Construct Covered, Non-Heated MXS Storage Facility:** Design of a non-heated storage facility at the site of the previous fire pump station for Aircraft Maintenance. The structure is approximately 4,800 sf and has 4 large overhead doors and is intended to house aircraft maintenance equipment.
- **Repair/Renovations to Visiting Quarters Buildings 219: Full interior and exterior renovation of a 2.5 story approx. 27,000 sf visitor's quarters. Converted the existing 28 units (2 are suites, 10 are private rooms with private baths and the remaining 16 private rooms utilize 4 central latrines) into 26 guest rooms, all with private baths including 2 suites.**

"Great job grasping the concept and bringing it to final design. Definitely an award winner."

Robert Clifford, General Engineer,
Department of the Air Force 911th Airlift Wing
Project: Dining Hall Building 213



- **Repair/Renovations to Visiting Quarters Buildings 219:** Full interior and exterior renovation of a 2.5 story approx. 27,000 sf visitor's quarters. Converted the existing 28 units (2 are suites, 10 are private rooms with private baths and the remaining 16 private rooms utilize 4 central latrines) into 26 guest rooms, all with private baths including 2 suites.

- **Repair/Renovations to Visiting Quarters Buildings 209:** Full interior and exterior renovation of a 2.5 story approx. 27,000 sf visitor's quarters. Converted the existing 28 units (2 are suites, 10 are private rooms with private baths and the remaining 16 private rooms utilize 4 central latrines) into 26 guest rooms, all with private baths including 2 suites.

- **Repair/Renovations to Flight Operations Building 419:** Design included painting all interior walls, removing and replacing suspended ceiling tile panels throughout the building. Replace all carpeting and vinyl cove base. Replace all flooring in hallways with ceramic tile. Add ceramic tile wainscoting to all hallways; adjust affected electrical outlets/ switches and replace cover plates, completely renovate all restrooms including new partitions, fixtures, accessories, mirrors, ceramic tile flooring and wainscoting, drywall ceiling as needed, replace lighting, switches, outlets and cover plates. Replace 50 ton rooftop HVAC condenser and install dehumidifiers for basement. Install new interior signage. Design also included constructing a canopy enclosure at basement entrance/stairway ST2 to create windbreak to keep debris and rain from entering building. A Structural Interior Design (SID) package was included as part of the design.

- **Additional Projects include:**
  - Replace Roofs/Skylights, Building 125
  - Repair/Add to Security Forces Building 221
  - Repair/Replace HVAC System & Controls - Multiple Buildings
  - Repair Grill Exhaust Hood, Picnic Pavilion B5842
  - Conduct Wood Truss Study, Buildings 120 & 312

Photo Credit:
https://www.pittsburgh.afrc.af.mil/News/Photos/igphoto/2001466211/
(U.S. Air Force photo by Staff Sgt. Joshua J. Seybert)

KEY FEATURES

- A&E services for airport / support building projects on an active Air Force Base
- Variety of projects involving repairs, upgrades, renovations, maintenance, new construction
- Design of specialized systems
- Multiple Tasks Orders over a 6 year contract, demonstrating client satisfaction
- Met budget and schedule goals
- Received Exceptional, Very Good, and Satisfactory ACASS Ratings
- Multiple Tasks Orders over a 6 year contract, demonstrating client satisfaction
- Met budget and schedule goals
- Received Exceptional, Very Good, and Satisfactory ACASS Ratings
- Experience with Crawford Consulting Services

PROJECT COMPLETION DATES

2007-2013

PA DEPARTMENT OF GENERAL SERVICES

ARMED FORCES RESERVE CENTER & FIELD MAINTENANCE SHOP, WILLIAMSPORT, PA

L.R. Kimball designed a two-story masonry building of approximately 75,000 square feet located on the existing Williamsport Armory site. Accommodations for the Army Reserve unit and two National Guard units were addressed in the project design solutions. This training facility also houses offices and administrative areas as well as a separate building for vehicle maintenance.

This project received Silver Level Certification under the LEED NC 2.2 rating system.

It required a Special Exception to the City's Zoning Ordinance since the proposed military facility was not an approved use of the property, even though the project site was the location of the existing military facility. We worked closely with the Pennsylvania Department of General Services, the Pennsylvania Department of Military and Veteran Affairs, and the City of Williamsport to have the initial denial of the Special Exception vacated and to get the necessary Special Exception Permit granted by the Zoning Hearing Board.

KEY FEATURES

- Coodination with Local, State and Federal stakeholders
- LEED Silver Certification

PROJECT COMPLETION 2011

TOTAL SQUARE FOOTAGE 75,000 SF


EXHAUST AIR

ORX RAILWAY CORPORATION

BUSINESS & MANUFACTURING ADDITION TIPTON, PA

L.R. Kimball designed a 70,000 square foot office/warehouse addition for ORX Railway Corporation in Tipton, PA. The office area includes locker rooms, conference rooms, lunch room, reception area as well as the offices. These areas are spread out on two f loors at the entrance to the new portion of the building.

The shop/warehouse area includes a receiving area, shop offices, and two overhead cranes for moving the material inside the building. The building was designed to match the existing facility as closely as possible.

"The design of the building and its functionality are everything I hoped they would be, and I am a very, very, very particular person. Everything about its design is just perfect. The architecture itself is a work of art. It is with the very highest rating that I unconditionally recommend them for any such project. Just one warning though, they get things done with lightning speed."

Glenn Brandimarte, President
ORX Railway Corporation

KEY FEATURES

- Warehouse, Manufacturing, Office components
- Addition was designed to match the existing facility
- Completed on time andon budget
- No change orders

PROJECT COMPLETION 2008

TOTAL SQUARE FOOTAGE

60,000 SF (Industrial Space);
10,000 SF (Office space addition)


10 TON


ORX
ORX

TRC PROJECT EXPERIENCE

WEST VIRGINIA DOH - NEPA Services, Middleway Bridge Replacement, State Project T602-51-9.34 00, Federal Project STP-0051(047)D, Berkley County, WV

TRC prepared the NEPA documentation and associated necessary studies for a replacement of the existing bridge carrying WV Route 51 over Opequon Creek approximately one mile north of the town of Middleway. During preliminary background research, the WVDOH determined there was a high potential for archaeological resources in the immediate vicinity of the bridge due to the reported existence of a potential mound feature at the bridge location. The environmental team assisted the bridge design team in identifying areas where there is the potential for no or minimal impacts to potentially significant environmental resources. The proposed project was cleared through a Categorical Exclusion (CE) document. (Contact: Traci Cummings, WVDOH, 304.558.9678

WEST VIRGINIA DOH -NEPA Services, WV 10 Operational Improvements, State Project U328-10-0.00 00 Logan, Wyoming and Mercer Counties, WV

TRC conducted NEPA services associated with the design of operational improvements along 69 miles of WV 10. Associated tasks included Section 4(f) and 6(f) review and evaluation; Cultural Resource surveys, including archaeologic and historic architectural documentation; and Environmental Site Assessment review and recommendations. Under this contract, TRC served as a subconsultant and worked with project designers, review agency personnel, and WVDOH environmental and engineering personnel to communicate project findings and coordinate the results with task leaders, stakeholders and the prime consultant. The project, which was completed on an expedited schedule due to a planned roadway bond sale, was divided into five (5) construction contracts with each contract cleared as a standalone Categorical Exclusion (CE) document. The design of the project included roadway rehabilitation/ upgrades, bridge replacements/ rehabilitations, culvert replacements, new passing lanes, slide repairs, and contract plans. Proposed impacts were deemed minimal throughout most of the project, except at proposed historic bridge replacement areas which are to be coordinated under the Section 4(f) historic bridge replacement programmatic agreement. TRC is currently preparing the required mitigation measures as required by the programmatic agreement. (Contact: Traci Cummings, WVDOH, 304.558.9678)

WEST VIRGINIA DOH - Section 4(f) Documentation and State-Level Recordation of the Twin Pony Truss Bridge and the Duhring Street Bridge, Mercer County, WV

TRC prepared Section 4(f) evaluation of the 1915 Duhring Street Pony Truss Bridge and the ca. 1930 Twin Pony Truss Bridge, both located in Bramwell, Mercer County. Both bridges are located within, and are contributing resources to, the National Register-listed Bramwell Historic District thus necessitating the Section 4(f) evaluations. The separate evaluations for each bridge were conducted as part of the environmental studies carried out by WVDOH before removal of the two deteriorated bridges. TRC's evaluations examined the build alternatives for the two bridges and evaluated them for their ability to avoid the Section 4(f) resources. As part of the proposed mitigation of adverse effects to the bridges, TRC will be preparing State-Level documentation of each bridge for submittal to WVDOH and the WV SHPO.

One of the two archaeological sites identified (46BO509) was a large, deeply buried prehistoric site identified within the Little Coal River floodplain. It yielded a variety of artifacts indicative of a major settlement during the Late Woodland period (ca. A.D. 1000). The artifacts included sand-tempered ceramics, fire-cracked rock, stone tools, and debitage (the byproduct of stone tool manufacturing). The raw material used for the stone tools included chalcedony, siltstone, sandstone, jasper and chert, including a prized local variety known as Kanawha black flint that was once traded extensively in the region.

AES Wind Power Projects, Laurel Mountain and New Creek, WV

TRC performed the comprehensive environmental licensing and permitting and roadway engineering design for two wind energy projects at Laurel Mountain and New Creek in West Virginia. Services included: upland and wetland floristic characterizations; wetland delineations; vernal pool identification; RTE species surveys; and avian and bat monitoring, including mist netting, migratory and breeding season surveys, and raptor nesting studies. These baseline ecological surveys were used to guide the design of access roadways and stormwater management systems to avoid, minimize and mitigate potential impacts to wetlands and RTE species habitats to the maximum extent practicable. License and federal/state permit applications for the Laurel Mountain Project, which is located along a 10-mile long ridge line in Elkins, WV, have been filed with and are now being reviewed by the WV Public Service Commission, WV Division

of Natural Resources (DNR), and USACE. A comprehensive report on TRC's 2007 Laurel Mountain habitat reconnaissance, discovery, mapping, characterization, and census for three new element occurrences (EOs) of the federally endangered, herbaceous plant species, Running Buffalo Clover (RBC; Trifolium stoloniferum), also was filed with the U.S. Fish and Wildlife Service (USFWS) and DNR.

During the 2007 survey, TRC worked very closely with the USFWS and DNR's Natural Heritage Program Botanist to agree on baseline census methods used in 2007 and again in 2008 to document the size/health of the three new RBC populations, and to negotiate an acceptable buffer/setback between the access road and turbine placements and the RBC populations. Habitat assessments and surveys for RTE species of bats and birds also were completed and submitted to these agencies, although no such RTE species were found at Laurel Mountain. Similar, early site ecological characterization efforts were performed at the New Creek site, to similarly guide project design to avoid/minimize natural resource impacts as much as possible. TRC is now performing comprehensive natural resource survey, mapping, and federal/state permitting programs, including Section 401/404 and NPDES stormwater permitting, for several other AES wind power projects in western Pennsylvania.

Phase I Archaeological Survey, Bird Run Bridge Replacement Project, Pocahontas County, WV

TRC conducted a Phase I archaeological survey of the proposed Bird Run Bridge Replacement (State Project S338-84-1.53) that involved a replacement of the existing simple span slab bridge carrying State Route 84 over Bird Run located approximately 1.3 miles east of the village of Frost in eastern Pocahontas County. During our reconnaissance of the project area environment, a stone foundation, likely associated with a former CCC camp, was observed in a wooded area approximately 120 m (400 ft.) south of the APE. A small, abandoned, unpaved access road, a portion (ca. 50-m [165-ft]) of which traverses the APE, was found to lead from SR 84 paralleling the eastern bank of Bird Run to the foundation area (presumably the former camp location). No artifacts were recovered from shovel testing within the APE and no archaeological features were identified. The remnants of a former access road leading to the former CCC camp was also identified and documented. It was recommended that the proposed project will have no effect to archaeological resources and no further investigations within the APE are recommended. The DOH and WV SHPO concurred with these recommendations.

Hazelton and Route 9 Mitigation Projects, Jefferson and Preston Counties, WV

This project was completed as part of a Statewide Natural Resource Service contract with the DOH, TRC conducted wetland delineations and plant surveys of the West Virginia (WV) Route 9 Wetland Mitigation Project in Jefferson County, West Virginia and the Hazelton Stream and Wetland Mitigation Project in Preston County, West Virginia. Both projects resulted in wetland fill requiring the WVDOH to mitigate onsite with the creation of replacement wetland. TRC conducted a wetland delineation and plant survey to evaluate the extent and quality of the created wetland areas. The proposed wetland investigations were conducted in accordance with standards set forth in the 1987 US Army Corps of Engineers (USACE) Wetland Delineation Manual. TRC also completed a plant survey and invasive species inventory in order to evaluate performance standards with respect to cover type and invasive species management. This included an inventory of wetland species observed in each wetland as well as an estimation of wetland cover type percentages and a visual percent cover assessment approach to determine the dominance of invasive species.

Based on the field survey data, a wetland delineation and plant survey report was completed which outlined the field methodologies and results including: the jurisdictional status of the compensatory wetlands delineated including the size of each wetland; USACE data forms for wetland and upland plots including soil profile photographs; representative photographs of the various wetland cover types; and mapping showing the delineated wetland boundaries. (Contact: Traci Cummings, WVDOH, 304.558.9678)

Brooke County Natural Gas Power Site
Brooke County, WV

Proposed Brooke County Power Site – Follansbee, WV . Project involved the construction of a proposed combined cycle gas turbine facility to be constructed on 17-acre site. Facility includes two gas combustion turbine generators, two heat recovery steam generators (HRSG), one steam turbine generator, two linear 8-cell wet cooling towers, a 138kV switchyard, an administration building, and other ancillary equipment. Recommendations focused on general site preparation and suitability for construction, foundation support alternatives and associated design recommendations, and estimated settlements. Subgrade improvements were required to minimize expected settlement within tolerable limits, suitability of on-site material for use as structural fill, groundwater conditions and management thereof, and seismic hazards and site classification.

Wellsburg Bridge Public-Private Partnership
Brooke County, WV

TRC is currently providing geotechnical services on this $130 million P3 project for the WVDOH involving a new Ohio River Crossing (proposed as a 6-span tied arch structure having four (4) piers within the Ohio River); an overpass bridge and associated embankment for a new connection to WV 2 and to Third Street in Brilliant, OH; and approximately 4,000 lineal feet of new retaining wall construction for a proposed alignment shift along WV State Route 2 to allow for roadway widening. TRC's geotechnical scope of work for this project involved planning and execution of a subsurface exploration program in general accordance with AASHTO and WVDOH protocols to supplement the original borings performed for the bid-phase Geotechnical Report provided by the WVDOH; development of a comprehensive soil and rock laboratory testing program to supplement laboratory testing performed for the bid phase; and evaluation of the following based on requirements set forth by the Project Criteria:

- foundation recommendations and recommendation of dynamic/static load testing programs as applicable for the two (2) bridge structures associated with this project, as well as for associated wingwalls;
- analyses and recommendations related to the design of earth retaining structures along the relocated WV2 as well as at the bridge locations, including considerations for global and external stability; and
- evaluation of global stability, lateral squeeze potential, anticipated settlement and associated mitigation measures for the proposed roadway embankments within the Ohio River floodplain, including portions of which are to be constructed within an existing pond.

Evaluations related to the proposed retaining wall system to be used for support of the WV2 realignment require an evaluation for potential past and/or active landslide and/or creep movement within overburden soils, and a determination of appropriate design considerations given this potential movement. To date, five (5) slope inclinometers and five (5) standpipe piezometers have been installed as part of the subsurface investigation activities for this project. Monitoring is currently underway. TRC is overseeing the geotechnical efforts related to this project and is also actively involved with completing and reviewing engineering evaluations and reporting for various aspects of the project. Post award test borings and installation of instrumentation were performed by TRC's in-house drilling division. The majority of the geotechnical laboratory testing was performed/managed in-house by TRC, with a small portion performed by a subcontract laboratory in order to expedite reporting.

US Route 35 P3 from WV 869 to North of Route 40
Mason and Putnam Counties, WV

TRC provided geotechnical engineering services for this project consisting of a new $175 million four-lane section of U.S. Route 35, including four (4) bridges, six (6) access roads, and 52 culverts. TRC's geotechnical scope of work for this project involved: planning, execution and test boring inspection for subsurface exploration program, comprised of test borings in general accordance with AASHTO and WVDOH protocols, to supplement the original borings performed for the bid-phase Geotechnical Report provided by the WVDOH; development of a comprehensive soil and rock laboratory testing program to supplement laboratory testing performed for the bid phase; evaluation and recommendation of design cross sections for all rock cut and fill sections along the main alignment based on requirements set forth by the Project Criteria as supplemented by WVDOH Design Directives 403 and 404; providing foundation recommendations for two (2) of the four (4) bridges associated with this project, as well as for all large diameter culverts, and associated bridge/culvert wingwalls; providing analyses and recommendations related to design of steepened geosynthetic reinforced soil slopes proposed at the bridge locations to be designed by TRC; evaluation of settlements for all mainline embankments and recommendation of mitigation measures as necessary to meet settlement criteria as outlined in the Project Criteria. Approximately 145 supplemental roadway, culvert and bridge borings were performed for this project. The borings ranged in depth from approximately 15 ft to 150 ft, totaling on the order of 6,000 lineal feet of drilling. All test borings were performed by TRC's in-house drilling division. TRC is currently providing construction phase geotechnical engineering services for this project, as required.

Tri-State Airport Access Road Landslide
Huntington, WV

The project entailed the remediation of a relatively large landslide that had developed at the Airport along the eastern edge and just downslope of the existing Airport Access Road. To protect the existing access road from further damage, which would result in the Commercial Terminal becoming inaccessible, the Airport desired that a retaining wall be constructed near the top of the slide.

As part of a team retained to provide geotechnical engineering evaluations and design for improvements and expansion of the airport's infrastructure perform, TRC was tasked with establishing the type, location and design criteria for the wall, as well as providing geotechnical recommendations related to the relocation of a rental car wash facility in the area of the slide.

TRC's geotechnical engineering staff planned and executed a comprehensive subsurface investigation program to establish subsurface conditions at the access road site and determine appropriate engineering properties for use in subsequent evaluations and design. Geotechnical test borings were performed by TRC's in-house drilling division, while laboratory testing of soil and rock was performed by our in-house AASHTO/ ASTM-certified laboratory.

TRC analyzed the feasibility of constructing various types of retaining walls which included cast-in-place concrete, mechanically-stabilized earth (MSE) walls, and soldier pile and lagging walls. Based on site conditions and constraints, it was determined that a soldier pile and lagging wall, socketed into the underlying bedrock, was the most cost-effective means for providing protection of the existing roadway and proposed new construction. Upon selection of the most feasible wall type, detailed models were developed to evaluate slope stability, including consideration for the effects of the proposed soldier pile and lagging wall. A geotechnical report was prepared that detailed the geotechnical investigation and all evaluation work. TRC was retained to perform all construction phase support for this project.

US ARMY CORPS OF ENGINEERS - LOUISVILLE DISTRICT

C-17 TWO BAY CORROSION / FUEL CELL HANGAR AT THE PITTSBURGH AIR RESERVE STATION, PITTSBURGH, PA

CRAWFORD CONSULTING as a sub to Burns & McDonnell provided MCACES Second Generation (MII) & PACES cost estimating services as well as Primavera CPM Scheduling services to the U.S. Army Corps of Engineers Louisville District at the 911th Airlift Wing for the design / construction of a new Cell/Corrosion Hangar in Pittsburgh, PA.

Pittsburgh IAP ARS is the home station of the Air Force Reserve Command's (AFRC) 911th Airlift Wing (911 AW). The 911 AW is part of the 22nd Air Force, and its 758th Airlift Squadron flies the C-130H2 Hercules transport. It includes approximately 1,220 Air Force Reserve members. The unit employs approximately 320 civilians, including more than 180 Air Reserve Technicians (ART) holding dual civilian and military positions. This project is to construct a two-bay hangar at Pittsburgh ARB including supporting site work. The two-bay facility was designed to house corrosion control, wash rack operations, fuel system maintenance and general maintenance in both bays. The two-bay hangar includes shallow foundations, metal panel exterior walls, sliding hangar doors, MEP systems, etc. A lean-to on the structure that will house shops and administrative space.

In 2016 CRAWFORD was tasked with performing Project Management Plan level estimates for the C17 Bed-Down Program at Pittsburgh ARS. Our MCACES MII estimate deliverables were developed at a Draft and Final PMP stage to include the design and Military Construction of six (6) different facilities located on the Air Station including the Corrosion Fuel Cell Hangar.

CRAWFORD traveled with the design team during the Charrette at the Pittsburgh ARS where we provided preliminary MCACES MII cost support that was consistent with a Class 5 estimate. Our Estimating team further developed cost estimate deliverables at the 35%, 65% and most recently 95% Design Phases. The estimate was organized based on the most recent bid schedule.

The bid schedule was organized by base proposal and options. Options are included in the estimate to award additional scope that could possibly fit under the budget constraints. Additionally, some of the options will be paid from a separate funding source. Items that will be paid from a separate funding source include Non-Real-Property items such as air compressors and 400 Hz converters.

KEY FEATURES

- Aircraft Hangar
- MCACES MII & PACES Cost Estimating Services
- New Construction + Supporting Sitework

PROJECT COMPLETION 2017

TOTAL SQUARE FOOTAGE 115,830 SF 2 Bay Facility

L.R. KIMBALL REFERENCES

FAIRMONT-MARION COUNTY REGIONAL AIRPORT, FAIRMONT, WV

"L.R. Kimball has been providing Engineering and Construction Services to the Fairmont Municipal Airport for over 10 years, in which a New Airport Master Plan, Runway Extension – Rehabilitation – Lighting, Obstruction Removal, and Partial Parallel Taxiway Phase 1 projects have been successfully completed. We are also very pleased with the work that you have provided this year to completed West General Aviation Apron and Partial Parallel Taxiway Phase 2 projects. Some unexpected issues arose during construction and your team was able to come up with a cost-effective solution to keep the projects under budget and within the construction timeframe desired. Whether it is airport engineering, construction services, or airport planning, L.R. Kimball has met the Authority's needs. As always, we look forward to working with you on our future projects."

Mr. Thomas Mainella, President
Phone: 304.282.5289

WILLIAMSPORT REGIONAL AIRPORT, WILLIAMSPORT, PA

"L.R. Kimball has been a key component to the growth of the Williamsport Regional Airport into a thriving commercial air service facility featuring air carrier service and a full service FBO.

Many projects such as the development of runways, taxiways, aircraft parking aprons, passenger terminal building expansions and remodels, automotive parking lots, overhaul of all utilities infrastructure, aircraft landing aids, developing the Airport Master Plan, as well as managing professional relationships with federal and state agencies and the local communities, are among the myriad of services Kimball Engineering has provided for the Williamsport Municipal Airport Authority over the past 30 plus years.

Providing quality, cost effective engineering services and delivering projects on-time for Williamsport Regional Airport has been the hallmark of Kimball's activities. Sound advice, a realistic approach to future planning, combined with viable and creative solutions to difficult problems, have made Kimball's truly an essential partner in the success we enjoy today."

Thomas J. Hart, Executive Director
Phone: 570.368.2444

L.R. KIMBALL REFERENCES (continued)

PA Department of General Services
New Armed Forces Reserve Center & Field Maintenance Shop

"The PA Department of General Services contracted with L.R. Kimball to design a two-story, 75,000 square foot masonry building located on the existing Williamsport Armory site for the PA Army National Guard / PA Department of Military and Veterans' Affairs (PADMVA) for which I was the PADMVA's project manager. Construction of the facility was completed in November, 2011. Accommodations for an Army Reserve unit and two National Guard units were addressed in the project design solutions. This training facility houses offices and administrative areas as well as a separate building for vehicle maintenance.

The Armed Forces Reserve Center and Maintenance and Storage Unit are state-of-the-art facilities which have innovative design features to meet the users' needs. They house unique technology and security features and have received Silver Level Certification under the LEED NC 2.2 rating system.

L.R. Kimball met all of our needs and exceeded our expectations. Their expertise and professionalism are only two of the attributes in which they excel. The PA Department of General Services and the PADMVA have developed trust and confidence in L.R. Kimball. Working with this team was truly a beneficial partnership. We would highly recommend them to any agency considering a building project or restoration."

Andrew J DeGregorio, EIT, COR, CFMO
Senior Environmental Protection Specialist
DHS-FEMA/MS/OCAO/Sustainability & Environmental Management (SE) Programs
(Former Director - Bureau of Military Construction & Engineering and Project Manager, Construction & Facilities Management Officer/Office of Facilities and Engineering, PA Department of Military and Veterans' Affairs)
Office: 202-646-2548; e-mail: andrew.degregorio@fema.dhs.gov

ORX RAILWAY CORPORATION

"The design of the building and its functionality are everything I hoped they would be, and I am a very, very, very particular person. Everything about its design is just perfect. The architecture itself is a work of art. It is with the very highest rating that I unconditionally recommend them for any such project. Just one warning though, they get things done with lightning speed."

Glenn Brandimarte, President ORX Railway Corporation
Phone: 814.684.8484

TRC REFERENCE

WV DEPARTMENT OF HIGHWAYS

Traci Cummings
Phone: 304.558.9678
Projects:

- NEPA Services, Middleway Bridge Replacement, State Project T602-51-9.34 00, Federal Project STP-0051[047]D, Berkley County, WV
- NEPA Services, WV 10 Operational Improvements, State Project U328-10-0.00 00 – Logan, Wyoming and Mercer Counties, WV
- Hazelton and Route 9 Mitigation Projects, Jefferson and Preston Counties, WV

CRAWFORD REFERENCE

US ARMY CORPS OF ENGINEERS - LOUISVILLE DISTRICT

"The Jacobs team continues to provide very good cost estimates that are accurate and have a good amount of detail. During our last satisfaction discussion, I suggested that the Jacobs cost estimating sub-consultant add a note when they make any adjustments to the unit costs in the estimating program. I've seen improvement since over the past year and I appreciate the positive response to my suggestion."
- Anthony Maida, USACE Louisville District

Mr. Jason Kling, Project Manager
Crawford Consulting served as a subconsultant to Jacobs Engineering
Phone: 816-333-9400
Project: Renovate and Alter Hangar 1, Bldg. 7087 (Phases I & II), Westover ARB, MA

STAFF CERTIFICATIONS

West Virginia State Board of Registration for Professional Engineers

WESLEY D. HEVENER
WV PE [redacted]

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2020

West Virginia State Board of Registration for Professional Engineers

DAVID A. RISPOLI
WV [redacted]

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2020

West Virginia State Board of Registration for Professional Engineers

RICHARD L. HOLFS
WV PE [redacted]

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2020

West Virginia State Board of Registration for Professional Engineers

RYAN BRETT MEITZLER
WV PE [redacted]

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2020

West Virginia State Board of Registration for Professional Engineers

CHRISTOPHER M. BOWERS
WV PE [redacted]

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2020

West Virginia State Board of Registration for Professional Engineers

GREGORY L. SCHOCK
WV PE [redacted]

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2020

West Virginia State Board of Registration for Professional Engineers

TODD A. GRIFFITH
WV PE [redacted]

This is to certify that the above named PROFESSIONAL ENGINEER has met the requirements of the law, is duly registered and is entitled to practice engineering in the State of West Virginia.

EXPIRES December 31, 2018

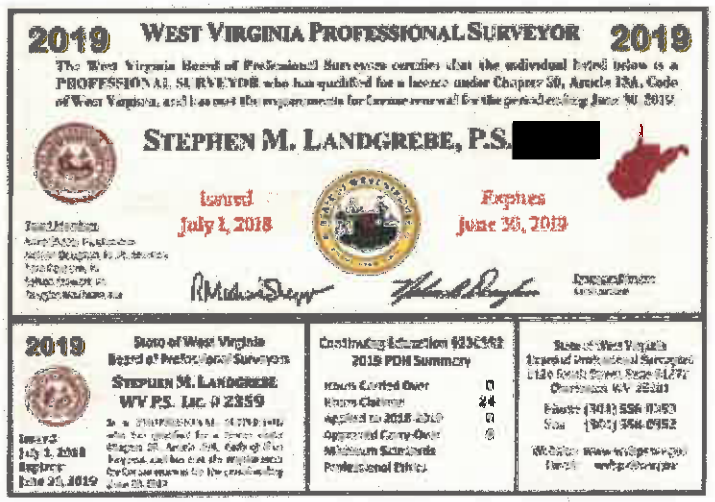
BUREAU OF PROFESSIONAL AND OCCUPATIONAL AFFAIRS

FRANCIS FREDERICK STRUZE

Professional Land Surveyor

[redacted]

Active



2019 WEST VIRGINIA PROFESSIONAL SURVEYOR 2019

The West Virginia Board of Professional Surveyors certifies that the individual listed below is a PROFESSIONAL SURVEYOR who has qualified for a license under Chapter 30, Article 13A, Code of West Virginia, and has met the requirements for License renewal for the period ending June 30, 2019

STEPHEN M. LANDGREBE, P.S. [redacted]

Issued July 1, 2018 Expires June 30, 2019

2019 State of West Virginia Board of Professional Surveyors

STEPHEN M. LANDGREBE WV P.S. Lic. # 2359

Issued: July 1, 2018 Expires: June 30, 2019

Continuing Education #236161 2019 PDH Summary

Hours Carried Over 0
Hours Claimed 24
Applied to 2018-2019 0
Approved Carry-Over 0
Minimum Standards
Professional Ethics

State of West Virginia Licensed Professional Surveyors 1900 Kanawha Blvd. East, Room 339 W Charleston, WV 25305 Phone: (304) 558-3554 Fax: (304) 558-0832 Website: www.wvbpeps.org Email: wvbpeps@wv.gov

SAVE
Adding Value, Enhancing Lives.

ASSOCIATE VALUE SPECIALIST

The Certification Board of SAVE International® Declares that

Chad C. Dobbins

Having met all the requirements of Value Experience and Education required for professional competence is registered as an Associate Value Specialist.

Certification No. [redacted]

BUREAU OF PROFESSIONAL AND OCCUPATIONAL AFFAIRS
P. O. Box 2649
Harrisburg, PA 17105-2649
12/18/2018

License Information

VINCENT JOHN DECARIO
NEW DERRY, Pennsylvania 15671

Board/Commission:	State Registration Board for Professional Engineers, Land Surveyors and Geologists	Status Effective Date:	01/17/2013
LicenseType:	Professional Engineer	Issue Date:	01/17/2013
Specialty Type:		Expiration Date:	09/30/2019
License Number:	[redacted]	Last Renewal:	09/30/2017
Status:	Active		

Disciplinary Action Details

No disciplinary actions were found for this license.

This site is considered a primary source for verification of license credentials provided by the Pennsylvania Department of State.

BUREAU OF PROFESSIONAL AND OCCUPATIONAL AFFAIRS
P. O. Box 2649
Harrisburg, PA 17105-2649
[redacted]

License Information

BRAD STEVEN BLICKENDERFER
Neldaw, Pennsylvania 15762

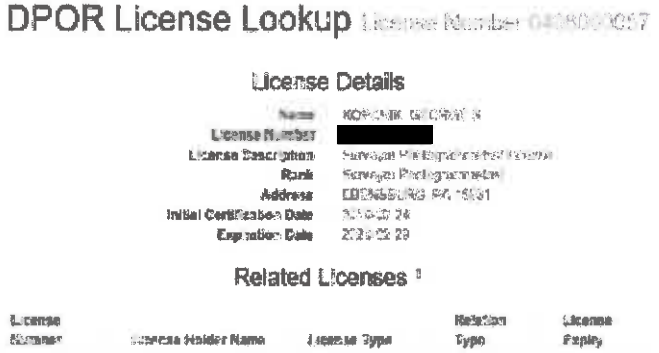
Board/Commission:	State Registration Board for Professional Engineers, Land Surveyors and Geologists	Status Effective Date:	01/05/2016
LicenseType:	Professional Engineer	Issue Date:	07/28/2000
Specialty Type:		Expiration Date:	09/30/2019
License Number:	PE073716	Last Renewal:	09/29/2017
Status:	Active		

Disciplinary Action Details

No disciplinary actions were found for this license.

This site is considered a primary source for verification of license credentials provided by the Pennsylvania Department of State.

AACE INTERNATIONAL CESB



DPOR License Lookup License Number [redacted]

License Details

Name	[redacted]
License Number	[redacted]
License Description	Surveyor-in-Training
Rank	Surveyor-in-Training
Address	[redacted]
Initial Certification Date	[redacted]
Expiration Date	[redacted]

Related Licenses

License Number	Licensee Holder Name	License Type	Relation Type	License Expiry
[redacted]	[redacted]	Business Entity Registration	Land Surveying	[redacted]

This certifies that

Chad Dobbins

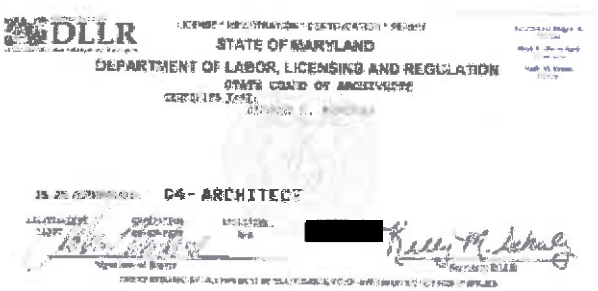
having given satisfactory evidence of qualifications and fitness, is hereby certified as a

Certified Cost Professional

Originally certified: March 3, 2012 Certificate Number: 3961

February 28, 2018
In Witness Whereof Our Hand and Seal
This Certificate Expires: March 31, 2023
AACE ID: 64611

Sagar Kjadka, CCP DRMP PSP
Chair, Certification Board



DLLR
STATE OF MARYLAND
DEPARTMENT OF LABOR, LICENSING AND REGULATION
STATE BOARD OF ARCHITECTS

[redacted]

04 - ARCHITECT

The Construction Manager Certification Institute

CCM

Certified Construction Manager

Chad Dobbins

[redacted]

CERTIFICATE OF *Authorization*

STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS

The West Virginia State Board of Registration for Professional Engineers having verified the person in responsible charge is registered in West Virginia as a professional engineer for the noted firm, hereby certifies

CDI-INFRASTRUCTURE, LLC DBA L. R. KIMBALL
C03828-00

Engineer in Responsible Charge: RICHARD E GENDAY - WV PE [redacted]

has complied with section §30-13-17 of the West Virginia Code governing the issuance of a Certificate of Authorization. The Board hereby notifies you of its certification with issuance of this Certification of Authorization for the period of:

January 1, 2018 - December 31, 2019

providing for the practice of engineering services in the State of West Virginia.

IF YOU ARE REQUIRED TO REGISTER WITH THE SECRETARY OF STATE'S OFFICE, PLEASE SUBMIT THIS CERTIFICATE WITH YOUR APPLICATION.

IN TESTIMONY WHEREOF, THE WEST VIRGINIA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS HAS ISSUED THIS COA UNDER ITS SEAL AND SIGNED BY THE PRESIDENT OF SAID BOARD.

BOARD PRESIDENT

LEED AP BD+C

Chad Dobbins

LEED AP® Building Design + Construction

by demonstrating the knowledge and understanding of green building practices and principles needed to support the use of the LEED green building program.

[redacted]

WEST VIRGINIA BOARD OF PROFESSIONAL SURVEYORS

Certificate of Authorization

CDI-Infrastructure, LLC dba L.R. Kimball

Ebensburg, Pennsylvania

CERTIFICATE OF AUTHORIZATION # 19-5818

This certificate is issued by the West Virginia Board of Professional Surveyors in accordance with *W Va. Code §30-13A-20*
The person or organization identified on this certificate is licensed to conduct professional surveying and mapping services in the State of West Virginia for the period

January 1, 2019 through December 31, 2019

This certificate is not transferrable and must be displayed at the office location for which issued.

In witness whereof, I have put my hand, this 17th day of December 2018

2019

R. Michael Sheppard, P.S., Chairman
James T. Mayburn, P.S., Member
Sefton R. Stewart, P.S., Secretary
Gary D. Fazenyra, P.E. P.S., Member

Douglas C. McElwee, Esq., Public Member

SECTION II - APPROACH AND METHODOLOGY

Project Approach

The L.R. Kimball team has a global view of best practices in Aviation projects, both from the land side (critical facilities such as terminals, hangars, and support buildings) and field side (runways, taxiways, airport master planning). This experience is of significant benefit to clients for two reasons: 1) we make holistic and comprehensive decisions because our team sees the big picture and understands the interconnectivity of every design decision, 2) we deliver our Architecture + Engineering services in a fully integrated process, which means that our non-silo work approach results in a faster design cycle, greater coordination of disciplines, and better construction documents and specifications. These two factors become more important in the Project Definition Phase (PDP) because it supports a thorough and succinct report that is immediately actionable to meet both your planning and delivery milestones.

From the very outset, our Market Segment leaders in Aviation, Architecture and Engineering, guided by a Senior Project Manager will be directing the PDP and engaging the stakeholders in highly structured workshops that identify objectives using industry metrics and evaluation criteria. Our process also considers the number of stakeholders and coordination required to build consensus. As the internal and external teams collect and analyze data, the project leadership team (a combination of L.R. Kimball and the client) will apply their comparative evaluation criteria to this data, making it more meaningful as it relates to reaching a global solution. While the delivery method post PDP is described in other sections of our submittal, we feel that it is important to describe in detail our initial efforts because they will have a profound effect on the overall project.

PROJECT DEFINITION PHASE

The goal of the PDP is to create the Basis of Design - a report that identifies performance criteria, planning standards, a constructability / delivery methodology, and most importantly an alignment with the client's standards and goals. The document is evergreen and can be used throughout the life of this project to measure conformance with approved concept. The PDP is divided into six sections:

1. **Facilities Audit:** A comprehensive analysis by the full A+E / Aviation team of the existing structures, infrastructure (including taxiways & aprons, roads and utilities), and equipment associated with the project.

2. **Programming:** Define space requirements, process flow diagrams, security standards, key operational issues, and aircraft / fleet requirements.

3. **Regulatory Issues:** Identify all local, state, federal agency requirements (FAA, TSA, etc), and third party providers (such as insurance) requirements and develop an action plan for alignment with building delivery schedule.

4. **Performance Standards:** Identify systems and lifecycle requirements for major building systems.

5. **Benchmarking:** Identify similar facilities with applicable metrics to be able to compare required investments and outcome.

6. **Concept Designs:** Develop options that meet the established guidelines developed in preceding items 1 – 4. Options should include functional and cost variations.

Approach to Cost Control

L.R. Kimball's procedures for cost control ensure that sufficient opportunity is provided to accommodate changes in scope prior to the final design/Construction Documents Phase to avoid cost overruns. Construction cost estimates will be an integral part of the design process and carry from conceptual design through bidding. Using a "Real Time Cost Model", our design team will work alongside seasoned preconstruction services to align ideation with budget and project goals. Rather than look at cost estimates at the end of phase, we embrace a totally integrated, daily dialogue between all team members. This regularly scheduled "reality check" produces innovation driven by our clients' specific needs and budget; and ensures an excellent ROI.

The approach to developing project costs is based on a third-party estimator, familiar with the local market and the use of historic data developed by L.R. Kimball professionals involved in the design of 55+ aviation facilities at 60 airports. The keys to successful estimating are the early identification of all components that carry a project cost, the establishment of an adequate project contingency, and confirmation of the workload in the local construction industry. Life cycle costs must be taken into consideration in the selection of final finishes, equipment, and energy conservation measures as well.

There are three significant milestones in this process:

Rough Order of Magnitude (ROM): A conceptual cost exercise (pre-Schematic Design) to establish baseline projections and establish fixed targets for investment. The cost models examine building, program, technology, and overall site infrastructure costs. This holistic analysis looks at true investment versus square foot cost.

100% Design Development (DD): This estimate is the critical measure of the project's alignment with goals and budget. DD documents contain enough specific information to accurately quantify project costs; and more importantly adjust if necessary without impacting schedule.

Constructability Review: At 75% completion of Construction Documents, our Construction Administration team provides a 3rd party review of the documents to ensure that the bid set provides adequate specificity for bidding. Thorough CD's can eliminate as much as a 5% fluctuation in bid prices due to contractors' misinterpretation of intent.

Value Engineering

Our approach to VE is proactive and we see this process as part of a value-added event rather than a cost reduction effort.

The initial planning phase (PDP) needs to be comprehensive and address both the building and infrastructure of the total project. In addition, the planning must quickly move through regulatory and corporate approvals. If the scope or the process are not fully vetted and the scheduling highly controlled, cost containment and delays will adversely affect the budget. Our schedule and work plan are based on driving decisions, building consensus with multiple stakeholders, and maintaining the end delivery date. We feel that having most of the team under one roof, the familiarity of our subconsultants with both the client and the local authorities will greatly reduce the risk of cost overruns due to redesign or permitting delays. Any savings from value engineering related to reducing the quality of building systems or materials will be offset by a poorly executed predesign phase.

Communication Management

Communication and coordination among all parties is critical to assure successful execution of the Project Plan. During the project "kick-off" meeting with our team and client staff, we review the Project Plan, procedures for change control, project specifications, and production methodology to eliminate any misunderstandings and align with expectations. A vital part of this meeting is the discussion of project communications--specifically, what needs to be communicated, by whom, to whom, how often, and by what method. The result of this discussion is a communication plan that will frame the communication requirements for the project. At the center of all successful projects is clear, concise communication.

Time Management

Having identified project scope, our team is able to anticipate the timeline and activity durations. The project schedule is developed with project milestone requirements and other time-sensitive constraints. The project schedule provides L.R. Kimball and the client with a road map to track and coordinate the activities associated with the overall project. In addition, the project schedule will include major client-related tasks and activities that need to be completed to achieve the project milestones. In short, the project schedule enables progress reporting and supports monitoring activity to completion.

Quality Management

L.R. Kimball maintains an in-house team of architects, engineers, and project managers who are experienced in hangar facility design and are responsible for rigorous quality assurance and quality control (QA/QC) of construction documents. These reviewers are typically not assigned to the project that they are reviewing, but they are familiar with the building type, thereby facilitation reviews through a "fresh set of eyes."

Our QA/QC team follows an established policy for drawing review and coordination. These reviews are in addition to the continual reviews undertaken by the Project Manger, Project Architect, and Senior Technical Leaders within each discipline. These formalized QA/QC reviews take place at the SD, DD, 50% and 95% stages of the production of construction documents. Our Project Manager works closely with the QA/QC team during this review process for each project.

L.R. Kimball's QA/QC reviews also include coordination of the architectural drawings with the project documents produced by the mechanical, electrical, plumbing, and structural disciplines. In this regard, we are currently utilizing an interdisciplinary coordination process and construction document review system specifically designed to address points of interface, enabling both production personnel and our QA/QC team to locate discrepancies between disciplines.

Our goal is to deliver a quality product that at a minimum meets and ultimately exceeds the client's expectations. The "fresh set of eyes" can often lead to alternative solutions that may either reduce the cost or enhance the quality of the end product.

Continuity of Staff

L.R. Kimball's continuity of staff experienced in architectural and engineering design of commercial/industrial and government facilities is unique in the following ways: While the project resumes of other firms include numerous projects, many of those who worked on those projects, have likely moved on to other firms. At L.R. Kimball, we have a large design team including those with aviation project experience in West Virginia, who have been with the firm for many years.

Project Design

SCHEMATIC DESIGN PHASE

In the Schematic Design Phase, the emphasis is conceptual in nature. The information discussed in the "kick off" meeting and general ideas are established for the project drawings. Conceptual schedules, cost estimates, and submission requirements are generally discussed at this phase in the project.

DESIGN DEVELOPMENT PHASE

In the Design Development Phase, the emphasis moves from contextual to more detailed concerns. It should be emphasized that while a great number of decisions are made in the Design Development Phase, they should be within the context of conceptual decisions made in the Schematic Design Phase. The Design Development Phase is best characterized by the work product at the completion of the phase. It must be developed to the point that the construction drawings and specifications can be started and cost estimates can be updated based on the progress or more detailed drawings. In many firms, Design Development plans become the base sheets for working drawings.

CONSTRUCTION DOCUMENTS PHASE

During this phase, final drawings and a project manual that includes complete specifications are prepared. All drawings and documents are checked for coordination with associated disciplines and consistency with programmatic goals and objectives. An updated Construction Cost estimate is also developed for the project.

In more simple terms, this phase of the project

includes the following basic activities:

- Completion of the Contract Documents
- Preparation for Bidding of the Construction Contracts
- Preparation for Construction

Coordination and integration of the three activities in the Construction Documents Phase is essential.

The purpose of phased developments of architectural projects is to establish an ordered sequence of decision making prior to the start of the final construction documents. If the process proceeds in the proper sequence, the Construction Documents Phase should be largely dedicated to production. The bidding and construction sequencing or phasing of work and scheduling must be finalized within this phase. Occupancy dates are important. Accordingly, impacts of scheduling become more acute and must be thoroughly discussed relative to their implications with regard to cost and market conditions.

Throughout all phases of the design process, L.R. Kimball considers value engineering a technique that focuses on eliminating items that create added cost to a building program without added value. Each expenditure that relates to the function of the facility is evaluated as to its life cycle cost.

BIDDING & AWARD PHASE

The Architect's role in the Bidding Phase is to advise the Owner on the best course of action and to recommend methods of sequencing and packaging of bids for the project. The Architect will be involved in a pre-bid conference to assure the understanding of the project and scope of individual bid packages by prospective bidders. Certain clarification or changes may be required as a result of questions posed by prospective bidders, necessitating the issue of addenda.

CONSTRUCTION ADMINISTRATION PHASE

Careful administration of the construction contracts is invaluable to a quality product delivered on time. Effective communication among the Owner, Contractor, Construction Manager (if applicable), and Architect is imperative. To that end, communication procedures must be formalized for job conferences, correspondence, schedules, notices, requisitions, etc. and must be channeled along specific routes.

During the Construction Phase, the Architect visits the site at intervals appropriate to the stage of construction. The Architect reviews the contractor's proposals for changes and prepares change orders for the Owner's approval. The Architect is the agent of the Owner and, as such, transmits directives and instructions to the contractor.

Shop drawings and material submissions are reviewed. The Architect assists in obtaining a certificate of occupancy when the contractor issues written notice that all work has been completed. The Architect develops a punchlist of non-conforming work that must be completed or corrected.

Additional Information

CDI-Infrastructure LLC dba L.R. Kimball representatives have reviewed the request for proposal thoroughly. Upon selection, L.R. Kimball requests the opportunity to negotiate mutually beneficial terms and conditions.

SECTION III - FORMS / ADDITIONAL INFORMATION

Purchasing Divison
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Centralized Expression of Interest
02 — Architect/Engr

Proc Folder: 530551

Doc Description: Addendum #1 EOI- Wheeling AASF#2 Aircraft Hangar Addition

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2019-01-18	2019-01-25 13:30:00	CEOI 0603 ADJ1900000013	2

BID RECEIVING LOCATION

BID CLERK
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
2019 WASHINGTON ST E
CHARLESTON WV 25305
US

VENDOR

Vendor Name, Address and Telephone Number:

CDI-Infrastructure, LLC dba L.R. Kimball
615 West Highland Avenue
Ebensburg, PA 15931
814-419-7897

FOR INFORMATION CONTACT THE BUYER

Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X **FEIN #** 27-2620523 **DATE** January 21, 2019

All offers subject to all terms and conditions contained in this solicitation

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CEOI 0603 ADJ1900000013

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[X]	Addendum No. 1	[ ]	Addendum No. 6
[ ]	Addendum No. 2	[ ]	Addendum No. 7
[ ]	Addendum No. 3	[ ]	Addendum No. 8
[ ]	Addendum No. 4	[ ]	Addendum No. 9
[ ]	Addendum No. 5	[ ]	Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

CDI-Infrastructure, LLC dba L.R. Kimball
Company

Authorized Signature

January 21, 2019
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Name, Title)
Megan Polinsky, Contract Administrator
(Printed Name and Title)
615 West Highland Avenue, Ebensburg, PA 15931
(Address)
814-419-7861 814-472-7712
(Phone Number) / (Fax Number)
megan.polinsky@cdicorp.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

CDI-Infrastructure, LLC dba L.R. Kimball
(Company)

(Authorized Signature) (Representative Name, Title)

Richard E. Genday, P.E., Vice President
(Printed Name and Title of Authorized Representative)

January 21, 2019
(Date)

814-419-7873 814-472-7712
(Phone Number) (Fax Number)

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

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

DEFINITIONS:

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

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: CDI-Infrastructure, LLC dba L.R. Kimball

Authorized Signature: _____ Date: 1·21·19

~~State~~ of Commonwealth of Pennsylvania

County of Cambria, to-wit:

Taken, subscribed, and sworn to before me this 21st day of January, 2019.

My Commission expires August 17, 2020.

AFFIX SEAL HERE

NOTARY PUBLIC _____

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Rosemarie E. Brennen, Notary Public
Ebensburg Boro, Cambria County
My Commission Expires Aug. 17, 2020
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

L.R. Kimball

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