

Expression of Interest for



A/E Services - Water Line Replacement at Various State Parks

Solicitation Number: CEOI 0310 DNR1900000005



for the
Replacement of Certain Water Lines
at
**Babcock, Chief Logan, North Bend,
and Watoga State Parks**
Logan, Fayette, Ritchie, and Pocahontas Counties, WV



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WV PURCHASING
DIVISION

submitted to

West Virginia
Division of Natural Resources
Property and Procurement Office

February 2019 ©





Purchasing Division
 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: 545312

Doc Description: A/E Services-Water Line Replacement at Various State Parks

Proc Type: Central Contract - Fixed Amt

Date Issued	Solicitation Closes	Solicitation No	Version
2019-02-01	2019-02-25 13:30:00	CEOI 0310 DNR1900000005	1

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
 Attn: Richard E. Genday, PE, Vice President
 615 West Highland Avenue
 Ebensburg, PA 15931
 814-419-7873

FOR INFORMATION CONTACT THE BUYER

Guy Nisbet
 (304) 558-2596
 guy.l.nisbet@wv.gov

Signature X _____ FEIN # _____ DATE _____
 All offers subject to all terms and conditions contained in this solicitation

ADDITIONAL INFORMATION:

Expression of Interest Request

The West Virginia Purchasing Division is soliciting Expression(s) of Interest for the Agency, The Division of Natural Resources from qualified firms to provide necessary engineering, and other related professional services to design and specify for construction as well as provide construction contract administration for the replacement of certain water lines at Babcock, Chief Logan, North Bend, and Watoga State Parks. The planned improvements may also include any other work necessary for, or related to, the aforementioned facilities, as well as any other necessary ancillary work, all located in Logan, Fayette, Ritchie and Pocahontas Counties, West Virginia.

* Online submissions of Expressions of Interest are Prohibited

INVOICE TO		SHIP TO	
DIVISION OF NATURAL RESOURCES PARKS & RECREATION-PEM SECTION 324 4TH AVE SOUTH CHARLESTON WV25305 US		STATE OF WEST VIRGINIA JOBSITE - SEE SPECIFICATIONS No City WV 99999 US	

Line	Comm Ln Desc	Qty	Unit Issue
1	Civil engineering		

Comm Code	Manufacturer	Specification	Model #
81101500			

Extended Description :

Architectural/engineering services and contract administration for water line replacement at various West Virginia State Parks. Resort State Park.

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ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions



615 West Highland Avenue
Ebensburg, PA 15931
814.472.7700
814.472.7712
www.lrkimball.com

February 20, 2019

Bid Clerk
West Virginia Department of Administration
Purchasing Division
2019 Washington Street East
Charleston, WV 25305

Attn: Mr. Guy Nisbet

Re: Expression of Interest for
WV Division of Natural Resources
A/E Services – Water Line Replacement at Various State Parks
Logan, Fayette, Ritchie and Pocahontas Counties, West Virginia
Solicitation No. CEOI DNR1900000005

Dear Mr. Nisbet:

CDI-Infrastructure, LLC dba L.R. Kimball is pleased to submit two (2) copies of our Expression of Interest in response to your request for professional engineering services to include design, construction drawings, construction specifications, construction administration for the replacement of water lines at the Babcock, Chief Logan, North Bend and Watoga State Parks. This letter of interest addresses the engineering services identified in the request for expression of interest for Architect/Engineering services. L.R. Kimball has extensive experience performing the design of water system improvements, obtaining agency approval, preparing construction drawing & specifications, assisting with bidding, providing engineering services during construction, and full-time construction inspection of similar projects.

L.R. Kimball has an experienced project team with sufficient capacity to perform these services in a cost effective and timely manner. The proposal identifies the project team, presents key staff resumes, reviews the project goals and objectives, provides our general approach, presents our qualifications and experience, provides the communication plan, and addresses delivering projects on time and within budget. Two bound copies of our Expression of Interest and a digital copy are provided per your request.

We understand that firms will be short-listed and be interviewed for this project. We would welcome the opportunity to introduce our team, and present our experience and capabilities. We understand that a detailed scope and cost proposal will be developed upon selection to provide these services. The project is to be awarded on a fixed fee basis. CDI-Infrastructure, LLC dba L.R. Kimball representatives have reviewed the request for proposal thoroughly. Upon selection, CDI requests the opportunity to negotiate mutually agreeable terms and conditions.

We look forward to working with the DNR on the Water Line Replacement at Various State Parks. Please contact us at 814-419-7872 if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink that reads "Cameron R. Mock".

Cameron R. Mock, PE
Sr. Project Manager
(814) 419-7872 / Cameron.Mock@cdicorp.com

CRM/reb

K:\EBG_T_DRIVE\Proposals_Presentations\C_e\Y2019\E45 Water Wastewater\WVDNR\WVDNR Water Line Replacement\PR 20190220 WV DNR Water Proposal.docx

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PROJECT GOALS AND OBJECTIVES

The request for Expression of Interest stated three defined goals/objectives for this project involving the investigation, review of conditions, evaluation, design of improvements to the water systems, and have minimal disruption to the state park operations. The water line replacement project is for the following state parks:

- Babcock State Park – Fayette County
- Chief Logan State Park – Logan County
- North Bend State Park – Ritchie County
- Watoga State Park – Pocahontas County

Goal/Objective 1: Review all existing available information related to the state park water distribution system; review the condition of the water system based on maintenance records, visual inspection, and discussion with state park operations staff regarding issues with the system; understand the operations of the state park based on discussions with state park operations staff; and communicate with the DNR representatives to develop a cost effective and timely plan to address the waterline replacements with minimal impact to the ongoing operation of the state park.

Goal/Objective 2: Provide the necessary professional engineering to: prepare preliminary and final design to meet WV DNR needs, objectives, current laws and codes; prepare permit applications (Permit to Construct Water Line Extensions, Road Crossing, Stream Crossings & WV/NPDES Water Pollution Control Permit for Stormwater Associated with Construction Activities); bid package consisting of construction drawings and construction specifications; construction cost estimates of the replacement of the state park water distribution system; and perform the services in a cost effective, timely manner and within budget.

Goal/Objective 3: Provide Construction support and Contract Administration Services with qualified staff to oversee construction to result in a successfully completed project that complies with the design and required functionality.

Approach

This section provides a general plan of approach for the subject project. Coordination with the DNR will be ongoing through the life of the project. Regular coordination meetings will address the progress, obtain input and obtain approvals for permit submissions, contracts, pay estimates, etc. throughout the project.

1. Kick-off Meeting

The project manager and key staff will meet with DNR staff to review the project scope, available funding, communication plan, and obtain available information related to each state park's operations and water distribution system. Discussions will address current and projected water usage needs as well as planned expansions requiring water service.

2. Field View

Key staff of the L.R. Kimball team will perform a field view of the subject state parks to become familiar with the layout, site constraints, existing water distribution facilities, topographic conditions, and to obtain record information to be used in the design of the proposed improvements. To assist with the field view, DNR operational staff should be present to provide their input in the water distribution system layout, operations of the park, issues that need addressed and desired facilities. Photographs will be taken to assist with the design of the proposed improvements.

3. Development of Plan of Action

Initially, L.R. Kimball will develop a concept plan for the proposed water distribution system improvements utilizing available mapping or orthophotos of the subject state park. The concept plan(s) will be based on the intelligence obtained from the Kick-off meeting, field view, available information, operational needs, facilities to be serviced with water service, and potential expansions. Alternatives may be evaluated and presented. A budget opinion of probable construction cost will be prepared for the concept plan(s). The concept plan(s) will be presented to the DNR for review and discussion. Based on comments, the Plan of Action will be formalized for approval to DNR.

4. Mapping and Surveying

Where required for the design of proposed improvement, L.R. Kimball will prepare either field surveyed or photogrammetric mapping. The mapping will be prepared in conformance with national mapping standards, and will identify the topography of the areas in question, as well as the location of other important features and improvements.

5. Engineering Design

A preliminary design will be prepared using the topographic mapping, consisting of the following steps:

- Contact local utilities/authorities to identify the locations of their existing facilities
- Obtain property limit mapping information for the state park. No title search or plotting of deeds will be performed during the preliminary design.
- Prepare a preliminary layout of proposed water system improvements based on the Plan of Action
- Develop a preliminary construction cost estimate based on the preliminary layout

The preliminary design will be submitted to DNR for review and comment.

Final design will be performed based upon the comments received on the preliminary design. The final design will consist of the following steps:

- Incorporate preliminary design comments
- Prepare construction drawings consisting of:
 - Title Sheet
 - General Notes and Legends
 - Plan Sheet(s)
 - Construction Details
 - Erosion and Sedimentation Control Details
- Prepare construction specifications
- Prepare construction bid package
- Update construction cost estimate
- Notify Utilities.

6. Permit Applications

It is anticipated that the following permits/approvals will be required for modification of the dams.

Permit to Construct Water Line Extensions - L.R. Kimball will prepare the application forms for the Permit to Construct Water Line Extensions for the system improvements. The application will be submitted to the WV Department of Health and Human Resources, Environmental Engineering Division for their review and approval. An Engineer's Report will provide the requested information and supporting engineering computations for the water line replacement along with the construction drawings and specifications.

General WV/NPDES Water Pollution Control Permit for Stormwater Associated with Construction Activities – The design will include the preparation of a sedimentation control plan and construction stormwater pollution prevention plan to meet current requirements. The plans will consist of the narrative report and construction drawings with details and notes.

WV Division of Highways – Highway Encroachment Permit form will be prepared for the proposed construction within the highway right-of-ways in accordance with "Accommodation of Utilities on Highway Right of Way". State highway crossing will require a roadway boring for the proposed waterline.

Stream Activity Permit application – L.R. Kimball will prepare the application form and supplemental information for submission to the WV Division of Natural Resources Office of Land and Streams.

L.R. Kimball will prepare the applications and provide the necessary supporting documents for the permit application submissions. The permit fees will be the responsibility of the DNR.

Easement Plats

L.R. Kimball will prepare easement plats if required to perform the water distribution system improvements.

Bidding and Engineering During Construction

1. Bidding and Negotiating Phase

L.R. Kimball will assist the DNR in performing the bidding of the water system improvements. Work during this phase will include:

- Assist the DNR in advertising for and obtaining bids
- Attend and prepare minutes for Pre-Bid Conferences with prospective contractors
- Assist the DNR in receiving and processing requests for Bidding Documents
- Issue addenda, as appropriate, to interpret, clarify, or expand the bidding documents
- Attend the Bid Opening, prepare bid tabulation sheets, and assist the DNR with evaluating the bids, bonds, and insurance, for awarding the construction contracts
- Issue construction plans and specifications to contractors for bidding.

2. Contract Administration and Construction Inspection

L.R. Kimball will provide engineering services during construction including full-time construction inspection. Construction Phase Services will include:

- Attend a Pre-Construction Meeting
- Attend and lead Progress Meetings with the contractor
- Review shop drawings
- Prepare change orders
- Review contractor progress payments.
- Ensure that the project is being completed in general conformance with the intent of the contract documents
- Provide monthly project status reports
- L.R. Kimball will also conduct a final inspection and prepare a punch list of incomplete work or work that is not in accordance with the Contract documents
- Certificate of Completion
- As-built Drawings
- Prepare minutes of meetings



ENGINEERING TEAM



L.R. Kimball has provided comprehensive engineering consulting services for potable water projects for over 50 years. Projects have included hydraulic analyses, master planning, facilities planning, water source development, dam design, water treatment/distribution design, construction management, operations services, capital budgets, financial assistance, grantsmanship, drought contingency plans, and environmental studies.

L.R. Kimball prides itself as being a firm that extensively communicates and cooperates with the client to meet their needs. We understand the benefit of having a close relationship with our clients in order to meet expectations and provide quality service. We feel this is even more important when dealing with a new client due to the need to get "up to speed" as quickly as possible. L.R. Kimball proposes a highly qualified project team with extensive experience in the evaluation, planning, study, design, construction, and operation of potable water systems.

L.R. Kimball has a proven track record for accomplishing work within the required time constraints. This is evidenced by our high volume of repeat work from municipal authorities and Public Service Districts as well as from our many private clients.

L.R. Kimball's capability to meet a wide range of often-conflicting schedule demands is reflected in the fact that we successfully accomplish hundreds of projects annually, almost all of which are multi-disciplinary.

Team Resources

The strength of any organization is directly proportional to its resources, and our resources consist of our staff and equipment. Our staff has the qualifications, certifications and experience necessary to accomplish the anticipated services within required time and budget constraints.

We employ a formal project management program, which includes the use of formal work plans, in-house contracts with supporting company elements, and project scheduling software. Client needs can be readily accomplished within the capabilities of our proposed project team.

L.R. Kimball's professional qualifications will ensure the Agency appropriate staffing for your projects, including the coordination of multiple disciplines.

Team Personnel and Responsibility

L.R. Kimball proposes a highly qualified staff with extensive experience in the evaluation, planning, study, design, construction, and operation of potable water systems for similar projects. Key personnel will be assigned to project teams based on their demonstrated expertise, abilities, and availability.

Full consideration will be given to the type of services required, the DNR's needs, and each team member's familiarity with the specific aspects of the various projects.

Principal-in-Charge

The Principal-in-Charge is primarily responsible for assisting the Project Manager in allocating sufficient resources to meet project requirements and resolving technical problems and conflicts that cannot be resolved at the Project Manager level.



Mr. Rick L. Holes, PE, will serve as our Principal-in-Charge for this project. Mr. Holes serves as Director of Aviation & Civil Engineering Services for L.R. Kimball. He has over 30 years of experience with L.R. Kimball, including: civil and stormwater facilities planning and design; surveying; stormwater management; highway design; airport design; environmental; land development; comprehensive planning; and other related projects.

Mr. Holes has complete authority to schedule or re-schedule the assignment of necessary personnel and resources to ensure that the Project Manager can complete the assigned work on time and in budget.

Quality Assurance/Quality Control



Mr. **David G. Minnear, PE** will serve as the QA/QC director for this project. Mr. Minnear is a Senior Project Manager in the Civil Engineering Services. He has extensive experience in the water resources, dam design and inspection, industrial water systems, solid waste design and management, grading, drainage, and erosion and sedimentation control engineering with over 39 years of experience.

Project Manager/Primary Point of Contact

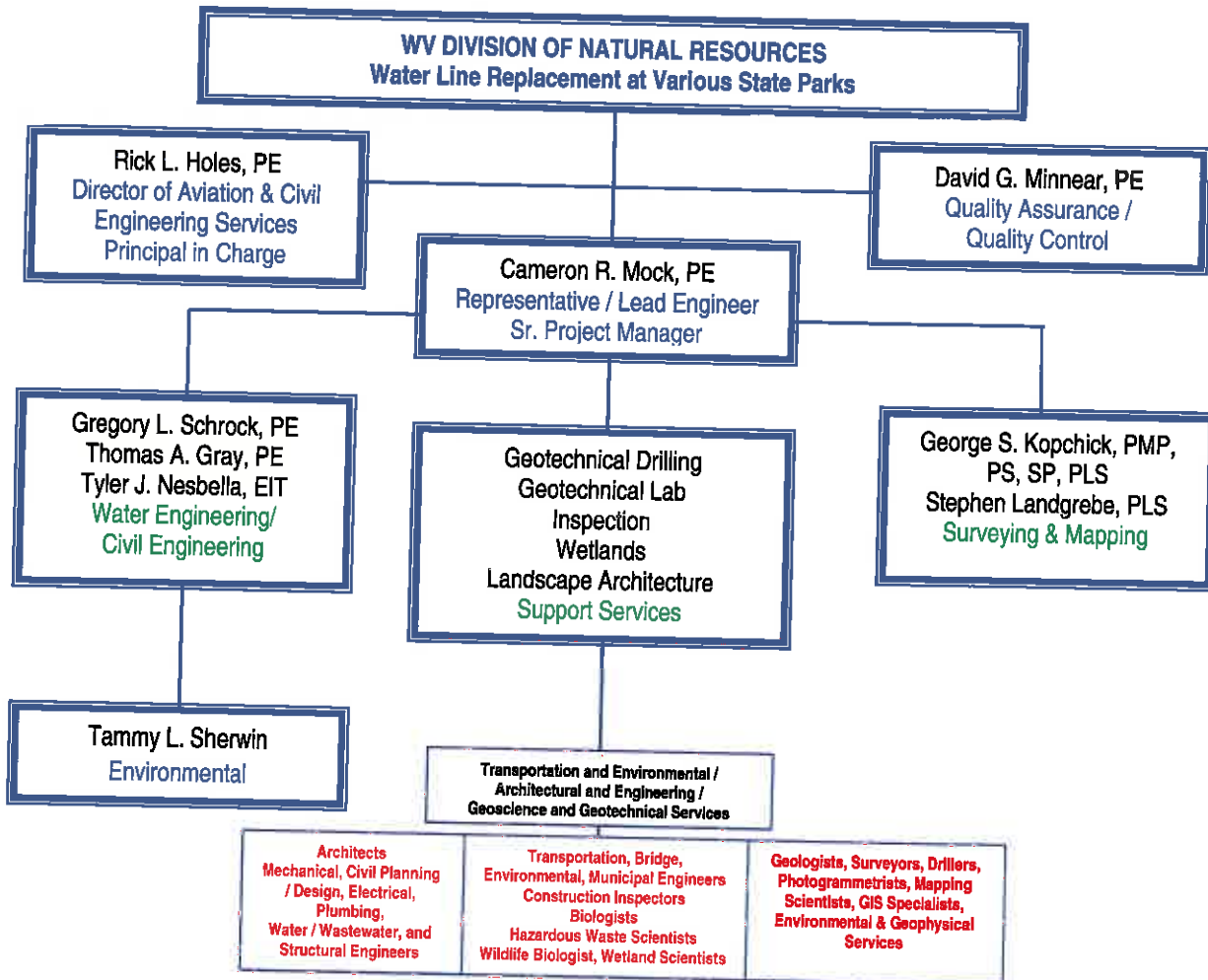
The Project Manager is responsible for the overall timely execution of the project and is the primary source of contact with the client, including attendance at all scheduled meetings. The Project Manager is also responsible for project planning and scheduling, resource allocation, management and coordination of subconsultants, cost and productivity tracking, man-hour tracking, project documentation, and the quality of service. The Project Manager is responsible for ensuring that all personnel assigned to a project are technically proficient, and informed of all client requirements.



Single point of contact - Mr. **Cameron R. Mock, PE**, will serve as the Project Manager and primary point of contact for this project. Mr. Mock has over 41 years of experience in providing consulting engineering services to government and private clients. His expertise is in the areas of water, wastewater, site development, and storm water management. He will lead a team of qualified engineers to perform the investigations, evaluation, design, permitting, bidding, construction oversight, and construction inspection of the water system improvements at the four state parks included in this project. His office is located at L.R. Kimball's Ebensburg Headquarters at 615 W. Highland Avenue, Ebensburg, PA 15931. His contact information is 814-419-7872 (office), 814-421-1608 (cell), and cameron.mock@cdicorp.com (email). He has been responsible for the implementation and construction management for numerous projects at a variety of private and public facilities. He has served as project manager for numerous water, recreational and wastewater projects and has assisted with regulatory negotiations.

Staffing Plan

Organizational Chart



Resumes



Richard L. Holes, PE

Director of Aviation & Civil Engineering Services

A member of the L.R. Kimball Team for over 30 years, Mr. Holes currently serves as the Director for all Aviation and Civil Engineering Services work at L.R. Kimball. As Director, he is responsible for the day-to-day operations of L.R. Kimball's Airport and Civil Engineering planning, environmental, design, and construction staff, QA/QC, business development, and client coordination.

Additionally, Mr. Holes manages some of our largest Airport Design Projects. Within the past two years alone, he has managed projects on the Doylestown, Quakertown, and Wilkes-Barre/Scranton International Airports in Pennsylvania. Yeager Airport in West Virginia and Ocean City Municipal Airport in New Jersey.

Among the major projects that have been completed under Mr. Holes' supervision in the past five years are as follows:

Role on Project: Principle in Charge

Years of Experience: 30

Education:

BS, Civil Engineering, The Pennsylvania State University, 1989

Registrations:

1997, WV, Professional Engineer
1997, NJ, Professional Engineer
1996, PA, Professional Engineer
1997, VA, Professional Engineer

Affiliations:

American Society of Highway Engineers,
Past President
PA Governors Aviation Advisory Committee
(2013 - Present)
Chairman PennDOT BOA Waiver Review
Committee
Aviation Council of Pennsylvania (ACP),
Board of Directors (2004 - Present)
Aviation Council of Pennsylvania (ACP),
Executive Committee (2008 - Present)

Yeager Airport, Charleston, WV

- Acquire Land in the Runway 5 RPZ, Phase 2 (Acquisition)
- Slope Failure Aide and Program Management
- Acquire Land in the Runway 5 RPZ, Phase 1 (EA)
- Improve Airport Drainage
- Rehabilitate Runway 5-23 Access Taxiways, Phase 1 (Design)
- Pavement Management Survey and Plan Development
- Runway 5 EMAS Evaluation
- Remove Runway 5 Ground Obstruction, Phase 2 (Construction)

Fairmont Municipal Airport, Fairmont, WV

- Construct T-Hangars
- Construct West GA Area
- Construct Parallel Taxiway to the Runway 5 End

Wilkes-Barre/Scranton International Airport, Avoca, PA

- Rehabilitate Taxiways B & D, Design
- Extend Taxiway B to the Runway 22 End (Paving and Lighting)
- 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

Quakertown Airport, Quakertown, PA

- Rehabilitate Equipment Storage Building
- Acquire Land in the Runway Protection Zone
- Acquire Aerial Easements and Remove Obstructions
- Reconstruct and Widen Taxiway A
- Reconstruct and Relocate Runway 11-29
- Construct New Fuel Farm Area

Doylestown Airport, Doylestown, PA

- Construct Bypass Taxiways and Pave Grass Tiedown
- Acquire Aerial Easements and Remove Obstructions
- Acquire Land in the Runway Protection Zone and Demolish Structures (2 phases)
- Construct Airport-wide Stormwater Management Systems



David G. Minnear, PE
Sr. Project Manager

Role on Project
Quality Assurance

Years of Experience: 40

Education:
BS, Civil Engineering,
The Pennsylvania State University,
1978

Registrations:
1983, PA, Professional Engineer
2016, KY, Professional Engineer
1997 MD, Professional Engineer
1998, NJ, Professional Engineer
1997, OH, Professional Engineer
1997, VA, Professional Engineer
1985, WV, Professional Engineer

Certifications:
OSHA 40 Hour Hazardous Waste
Operations & Emergency Response
Training
Confined Space Training

Affiliations:
Cambria County Solid Waste Management
Authority
Association of State Dam Safety Officials
National Society of Professional Engineers
Pennsylvania Society of Professional
Engineers
Society of American Military Engineers
Solid Waste Association of North
America
Professional Recyclers of
Pennsylvania

Mr. Minnear serves as a Senior Technical Leader/Project Manager specializing in water resources and solid waste for the Aviation & Civil Engineering Division. He has worked on a wide variety of projects; including the design and inspection of dams, reclamation of abandoned mine lands and the development of regional stormwater management regulations. Mr. Minnear is responsible for providing technical support and quality assurance to the various on-going civil design projects and overseeing the staff of junior engineers, technicians and draftsmen. In addition, he is responsible for providing design direction and review of various civil projects, including fly ash and coal refuse disposal sites, municipal landfills, pipeline designs, mine reclamation, and hydraulic projects.

Mr. Minnear serves as the company's chief hydraulics engineer for projects involving dams, open channel flow, and area-wide stormwater management. Hydrologic/hydraulic engineering projects under his direction and supervision have included the design and assessment of dozens of dams; inspection and preparation of assessment reports as to the status of water supply, recreational and hydroelectric generating dams; review and preparation of FEMA flood insurance studies; studies to modify pre-existing flood insurance studies to allow for development within areas previously designated as being within the floodway boundaries; the assessment of flood protection levees, and the development of area-wide model stormwater management criteria.

Mr. Minnear is very familiar with the use of the U.S. Army Corps of Engineers computer programs, as well as numerous other hydrologic models and methods. He currently serves as Senior Technical Leader for hydraulic design projects involving dams and/or other stormwater management, where he over-see a staff of junior engineers and technicians.

Project Experience of Mr. Minnear includes:

- **Engineering Consultant, Cambria Somerset Authority, Cambria County, PA.** Project Manager for multiple projects associated with the Authority's numerous assets, including 5 water supply dams and 26 miles of industrial water supply pipelines.
- **Fairview Power Plant, Vinco, PA.** Project Manager for the development of a 7.5-mile industrial water delivery line to support cooling operations for the proposed 980 MW gas fired power plant. Project is in progress, but will include a 24" line delivering up to 7 MGD to the site using two pump stations.
- **Whitetail Ski Resort, Whitetail Resort c/o Realty Skiing Development, Inc., Mercersburg, PA.** Principal Hydraulic Designer for the design and permitting of the 100-million gallon water supply reservoir at the resort, including the preparation of construction drawings and specifications, as well as permit documents. Also involved in monitoring construction progress and certification of completeness during construction. After completion of construction, annual dam inspections were performed.
- **Upper and Little Schuylkill River, Schuylkill County Conservation District, Schuylkill County, PA.** Project Engineer for the development of the water quality assessment of two watersheds. Responsibilities included quality assurance for the database development, assistance with the identification of site priorities, and preparation of remediation recommendations for each prioritized site.
- **Shamokin Creek Watershed Assessment, Northumberland County Planning Commission, Northumberland County, PA.** Senior Technical Specialist for the assessment which resulted in the development of a Watershed Restoration Action Strategy guiding future remediation work by the Shamokin Creek Restoration Alliance and Northumberland County Conservation District. Duties included quality control, presentation at public meetings, and project coordination with county personnel.
- **Yellow Creek Watershed, Blacklick Creek Watershed Association, Indiana County, PA.** Principal Designer and Project Manager for multiple facilities consisting of separate treatment "modules". Two of these projects incorporated approximately 2.3 acres of mitigation wetlands as final treatment prior to discharge. The funding

- utilized for these projects was primarily the result of 319 Grants from the Commonwealth of Pennsylvania, along with additional funding from the Heinz Endowment.
- **Ottilio Landfill Remediation Services During Construction at the Ottilio Landfill, NJDEP, Newark, NJ.** Senior Engineer involved with the development of grading plans, hydrologic/hydraulic assessment and design for stormwater handling facilities, and general oversight for the construction drawings. Project involved the closure of an existing construction/demolition debris landfill with hazardous constituents.
 - **McClintic Dam No 23, WV DNR Wildlife Resources Development, Mason County, WV.** This 11-acre lake is located within the McClintic Wildlife Preserve and includes a perimeter wetland construction intended to mitigate additional wetlands damaged in another portion of the site during a Superfund Cleanup Project. Mr. Minnear was the principal designer involved in the hydrologic / hydraulic evaluations of the site, as well as the preparation of construction and permitting packages.
 - **Annual Dam Inspections, Pittston Coal Group, KY, VA, and WV.** Insurance Certification Inspector for annual inspections of up to 15 coal slurry impoundments. Dams were in various levels of use, from initial development to nearing abandonment. Inspection reports were instrumental in the issuance of insurance to allow for continued site operations.
 - **Emergency Action Plans, Cambria Somerset Authority (CSA), Cambria and Somerset Counties, PA.** Sr. Hydraulic Engineer for preparation of the Emergency Action Plans updates for the Quemahoning, Wilmore, and Hinckston Run Dams. Oversaw simulation of dam break analyses by computer modeling to determine downstream inundation limits and identified municipalities located downstream of the dams that would be potentially impacted by a catastrophic failure of the dam. These plans included the development of dam breach hydraulic models and flood inundation maps. Prior to computer modeling to simulate a dam failure, physically surveyed downstream obstructions to determine their effect on the flood wave resulting from the dam break. Based on the determination of the affected downstream municipalities, prepared a step by step procedure to be followed by emergency personnel in the event of such an emergency.
 - **Dam Inspections, Pennsylvania Department of Environmental Protection and Federal Energy Regulatory Commission, PA, NY, NJ, and MD.** Principal Professional Engineer involved in the inspection of PADEP licensed water supply dams and the FERC licensed hydroelectric dams.
 - **Cambria Cogeneration Plant, Air Products & Chemicals, Inc., Ebensburg, PA.** Senior Design Engineer and Project Manager for the development of off-site facilities for the plant. This included the siting, design and construction monitoring of the raw water and wastewater pipelines to the plant, and the sewage and potable waterlines serving the plant. This also included coordination of pipeline locations within the easements and hydraulic design of the ductile iron raw water pipeline and the HDPE wastewater pipeline, as well as the sewage and potable lines.
 - **5-Yr Inspections of the Sturgeon Pool Dam, Central Hudson Gas & Electric, NY** Periodic inspections of this 108' high concrete, hydroelectric generating dam, as well as preparation of responses to the NYDEC regarding H&H and stability comments.
 - **Flyash Disposal Facility, Allegheny Energy Supply, Monongalia County, WV** Project Design Engineer for this residual waste landfill. Responsible for all aspects of the design of the disposal facility, including site grading plans, sediment pond hydraulics, dam permitting and construction inspection, and development of construction drawings.
 - **Modifications to an Existing Flyash Disposal Facility, Allegheny Energy Supply, Preston County, WV**
Design Engineer and Project Manager for this residual waste landfill with an anticipated life of 25 years. Directly responsible for all aspects of the design, as well as overseeing the geotechnical investigation and permitting of the facility. Development of the site included the detailed design, permitting, construction oversight and certification of 3 sediment control dams.



Cameron R. Mock, PE
Sr. Project Manager

Mr. Mock serves as a Senior Project Manager for L.R. Kimball's Architecture and Engineering Division. He specializes in water/wastewater, stormwater management and land development projects. Mr. Mock performs a wide range of services related to water systems, wastewater systems, stormwater management, municipal engineering, site development, hydrology, hydraulics, highway design, erosion and sedimentation control, recreation facilities, construction inspection and construction contract management. Project Experience of Mr. Mock's includes:

Potable Water

Mr. Mock's potable water experience includes water system evaluations; distribution system computer modeling; design and preparation of construction specifications, contract documents and Public Water Supply permit applications for water lines, water supply well pumping systems, water booster stations, water storage tanks, and water treatment facilities.

Water System Improvement Project, Ebensburg Borough Municipal Authority, Ebensburg, PA.

Project Manager / Engineer for mapping, planning, design, permitting, construction documents, bidding, construction engineering and inspection of waterline and valve replacements; clarifier improvements; multimedia filter rehabilitation and under drains, media, air scour and electric actuated valves; DAF clarifier and building; new backwash tank; chlorinator; instrumentation; SCADA system; and radio read water meter system.

Backwash Settling Tanks, The Gallitzin Water Authority, Gallitzin, PA. Project Manager / Engineer for the planning, design and construction of two concrete settling tanks to remove solids from filter backwash and clarifier sludge prior to discharge to the sanitary sewer.

Centre County Prison Water Supply Evaluation, Centre County Commissioners, Centre County, PA. Project Manager / Engineer for the evaluation of alternative means to provide potable and fire water to the new Prison. Performed water system hydraulic analysis, coordination line location with SCI Rockview, and performed design of 8,700 lineal feet of 12-inch waterline.

Water System Improvements, Rockwood Borough Municipal Authority, Somerset County, PA. Project Manager / Engineer for the planning, design, permitting, PENNVEST funding and construction of a water system improvement project that included two new groundwater wells, 2.8 miles of water transmission lines, gas chlorine disinfection, chlorine contact tank piping, chemical feed system and booster station

Valley Green Subdivision Water System, Beth Contracting Inc., Indiana County, PA. Project Manager / Engineer for the extension of the Clymer Borough Municipal Authority water system to the Valley Green Subdivision. Planning, design, permitting and construction of 8,600 feet of 6 and 8-inch water line, 48,000-gallon water storage tank, booster station, and a chlorination station.

Indian Lake Water System Evaluation, Indian Lake Borough, Somerset County, PA. Project Engineer for the Indian Lake Water System modeling, evaluation, recommendations and estimate costs for improvements.

Dam Experience

- Performed dam safety inspections for earth fill dams.
- Experienced in the design of earth fill and mine waste dams.
- Project Engineer for hydrologic and hydraulic evaluations and geotechnical investigations for earth fill dams to improve safety of existing dams.
- Emergency spillway hydrologic and hydraulic design
- Reservoir safe yield analysis
- Dam breach analysis.

Role on Project

Primary Representative and Lead Water Engineer

Years of Experience: 39

Education:

BS, Civil Engineering Technology, University of Pittsburgh at Johnstown, 1977

Registrations:

1985, WV, Professional Engineer
1981, PA, Professional Engineer
2003 NC, Professional Engineer
2003, NJ, Professional Engineer
2003, OH, Professional Engineer
2003, VA, Professional Engineer
2004, MD, Professional Engineer

Affiliations:

American Society of Civil Engineers
National Society of Professional Engineers
Pennsylvania Society of Professional Engineers
American Society of Highway Engineers
American Water Works Association

Wastewater

Mr. Mock's wastewater experience includes sanitary sewer system design, pump station design, head works facility design, permit applications, construction specifications, contract documents, bidding, construction inspection, contract administration, and funding administration. He has performed sanitary sewer condition surveys, flow monitoring, developed corrective action alternatives, prepared opinion of probable construction costs, hydraulic computations, and inflow and infiltration evaluations.

Engineering Consultant, Borough of Franklin, Cambria County, PA. Engineer of Record/Project Manager for a sanitary sewer system evaluation, design, bidding, construction oversight of \$2.8 million of sewer replacement improvements to reduce the sewer wet weather flows to comply with a 2007 PADEP Consent Order and Agreement. Provided PENNVEST funding application and loan/grant administration.

Franklin Phase 2 – Sanitary Sewer Improvement Project, Cambria County, PA. Project Engineer/Manager for Phase 2 of the sanitary sewer improvement project. The \$1.1 million sewer project is to further reduce wet weather flows to meet the requirements of a 2016 PADEP Consent Order and Agreement to reduce flow to the designated design flow. Project scope includes preliminary design, final design, construction drawings, contract documents, permits, bidding, funding application, engineering during construction and project close-out.

Sanitary Sewer System Improvement Projects, Upper Stonycreek Joint Municipal Authority, Somerset County, PA. Project Manager/Engineer for the planning, design, permitting, bidding, construction oversight and construction inspection for a number of sanitary sewers improvement and relocation projects within the Hooversville Borough, Shade Township and Stoystown Borough.

Colver Wastewater Treatment Plant Upgrade, Cambria Township Sewer Authority, Cambria County, PA. Project Manager/Engineer for the planning, design, construction oversight and PENNVEST funding of modification to increase plant capacity using the sequencing batch reactor technology, adding post aeration and UV disinfection to meet discharge limits.

Sanitary Sewer System Improvement Projects, Cambria Township Sewer Authority, Cambria County, PA. Project Manager/Engineer for the planning, design, construction oversight for a number of sanitary sewers replacement projects within the Villages of Mylo Park and Colver to reduce the amount of extraneous water entering the sanitary sewer system.

Sanitary Sewerage Projects, Municipal Authority of the Borough of Ebensburg, Cambria County, PA. Project Engineer/Manager for various projects including upgrading the wastewater treatment facility (WWTP) and rehabilitating the sewer system to reduce excessive flows. The WWTP upgrade included new headworks consisting of a larger influent channel, mechanical bar screen, solids compactor, grit air lift pump, grit washer and building.

Bethlehem CSO-012 Relocation, City of Bethlehem, Northampton County, PA. Project Engineer for the design of a new combined sewer overflow structure to protect the Bethlehem WWTP and eliminate basement flooding. Services included the design and permitting of the CSO-012 structure on the 66" interceptor sewer, control gates, static solids screening and triplex pump station.



Gregory L. Schrock, PE, CPESC, QPSWPPP
Quality Assurance / Quality Control

Mr. Schrock serves as a Project Manager for the Civil and Environmental Division. He participates in various aspects of site development and municipal design. On the municipal side, he is involved with the design and analysis of stormwater management facilities, sanitary sewer systems, water distribution systems, waterlines, pumping stations and water treatment 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 projects. He is also involved with the design of roadways, parking lots, site layout, and preparation of contract documents, and the development of earthwork takeoff calculations and cost estimates.

Mr. Schrock'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 applications, letters, erosion and sedimentation control reports, preparing construction sequences, and design computations for each erosion and sedimentation control device utilized.

Project Experience

- **Water System, St. Francis University, Loretto, PA.** Project Manager for the permitting and design of a new 187,000 GPD water treatment plant, water distribution system, and water storage tanks. Duties included the design of 500,000 gallon and 300,000 gallon water storage tanks, site layout for the tanks, water treatment plant, backwash holding tank, water distribution system, and sand mound. Designed the water distribution system using Hydronet for adequate fire protection flow and pressure throughout campus and the surrounding area. Designed treated water booster pumps, a backwash holding tank, greensand and activated carbon units, chlorine booster pumps, chlorinators, flow meters, and associated piping, plumbing, and telemetry for the water treatment plant. Worked on specification preparation, shop drawings, and some construction inspection.
- **Cherry Run Sewerage System, White Township Municipal Authority, Indiana, PA.** Civil Engineer for the design of a sewage pumping station for a 1.0 MGD average sewage flow. Duties included locating the pumping station site, grading plans, preparing erosion control plans, designed six pumps, a communitor, channels, two wet wells, a sluice gate, flow meters, the plumbing, and force main, layout for the floor plans and acquiring the permits. Performed a hydraulic/hydrologic analysis of the nearby stream (3 sq. mi. watershed) to determine the 100-year floodplain and the impact and required permitting needed for the pumping station construction.
- **Wal-Mart Supercenter, Wal-Mart Stores, Inc., Somerset, PA.** Project Manager for a 184,000 SF supercenter development. Duties included overseeing and preparing the due diligence design, permitting, coordinating site design, and overseeing portion of construction.
- **Richland Town Centre, Wal-Mart Stores, Inc., Johnstown, PA.** Project Manager for a 200,000 SF Wal-Mart supercenter and retail strip center development replacing an existing mall. Duties included site design, coordination, permitting, and overseeing portions of construction.
- **Various Development Projects, ECHO Real Estate Services Company, Various Sites, PA.** Project manager for various GetGo Convenience Store/Gas Station/Car Wash developments. Work involved site layouts, due diligence studies, permitting, site design, and coordination, shop drawing review, request for information, and completion inspections.

Role on Project: Water Engineering

Years of Experience: 24

Education:

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

Registrations:

2006, NJ, Professional Engineer
2003, OH, Professional Engineer
1999, PA, Professional Engineer
2006, WV, Professional Engineer

Certifications:

Qualified Preparer of Stormwater Pollution Prevention Plans, No. [REDACTED]
Expires 1/10/19
Certified Professional in Erosion and Sediment Control, No. [REDACTED]
Expires 11/27/17

Affiliations:

National Society of Professional Engineers
American Military Engineers

- **Lowe's Home Improvement Store, Jemsite Development, LLC, Lawrence Township, PA.** Project Manager. Responsible for the site design, grading, stormwater management, erosion and sedimentation control design, utility coordination, permitting and approvals for a approximately 94,000 sf Lowe's. Also oversaw the Phase I Environmental Assessment, geotechnical investigation study, boundary, topographical and utility survey, wetlands assessment, and traffic study.
- **Site Evaluation Studies, Concept Site Plans and Professional Engineering Services, Wal-Mart Stores, Inc., PA.** Project Manager and main point-of-contact for the Wal-Mart/Sam's Club developments. Responsible for the preparation of conceptual site plans for a number of Wal-Mart and Sam's Club locations. Also provided due diligence services for several sites.
- **Professional Engineering Services for Confidential Site Work at Various Sites, Carter & Burgess, Inc., PA and WV.** Project Manager of new distribution centers across Pennsylvania and West Virginia. Duties included preparing permitting reports, endangered species investigations, coordinating geotechnical investigations, surveying services, environmental investigations, and wetland investigations for various parcels up to 400 acres in size.
- **US Department of the Navy - Northern Division, Lakehurst, NJ.** Project Manager for site design of various projects which included a new hazmat building, a racquetball court building, several building additions and a new fire service to the hazmat building. Duties included attending meetings with the Navy, grading, utilities, erosion and sedimentation control plans, site layout and Navy specification editing.
- **Pleasant Valley Elementary School, Altoona Area School District, Altoona, PA.** Project Manager for the permitting and design of a new 62,000 SF elementary school on a 13.6-acre parcel of land. Duties included attending meetings, stormwater management, and design including basin and channel hydraulics and hydrology, grading, utilities, erosion and sedimentation control, site and parking lot layouts, playing field layouts, sewage planning and historical and archaeological investigation. Also designed the vertical and horizontal alignment for a new access road, a subdivision plan, and prepared plats for all right-of-ways.
- **Hillside Residence Hall, St. Francis College, Loretto, PA.** Project Manager for the coordination and design of a new three-story, 46,660 SF residence hall. Duties included site design, grading plans, utility plans, stormwater management, erosion and sedimentation control, and vertical and horizontal alignment of a new access road. Developed site related specifications and developed punch list items during construction.



THOMAS A. GRAY, PE

Wastewater Engineering Project Engineer

Mr. Gray serves as a Civil Engineer for L.R. Kimball's Architecture and Engineering Division. He has nearly 37 years' experience with a variety of civil engineering services including site development projects, hydraulic analyses of waterways and bridges, flood protection projects, and municipal engineering focused on sanitary sewers. Project Experience of Mr. Gray includes:

Role on Project
Water Engineering

Years of Experience: 37

Education:
BS, Civil Engineering Technology,
University of Pittsburgh at Johnstown,
1982

Registrations:
1986, PA, Professional Engineer
1986, PA, Sewage Enforcement Officer

Certifications:
LEED Accredited Professional

Affiliations:
American Society of Highway
Engineers
Pennsylvania Association of Sewage
Enforcement Officers

Ebensburg Borough Water System Upgrade Project, Ebensburg, PA. Civil Engineer responsible for the design of replacement of water lines, installation of new valves to facilitate greater system isolation control, and installation of new customer water meters with remote read facilities. Duties included cost estimates, acquisition of stream encroachment, and E&S control permitting and specifications.

Fairview Power Plant, Vinco, PA. Project Engineer for the development of a 7.5-mile industrial water delivery line to support cooling operations for the proposed 980 MW gas fired power plant. Project is in progress, but will include a 24" line delivering up to 7 MGD to the site using two pump stations.

Hartslog Court Water Treatment System Evaluation, Porter Township, PA. Civil engineer responsible for evaluation of a groundwater sourced, private water system serving a mobile home park to determine compliance with 4-Log Virus Treatment regulations and develop alternatives to provide the facilities necessary to comply with this requirement. Coordinated system investigation, prepared calculations, conceptual design, summary report, and regulatory response.

Ebensburg Borough, Drought Contingency Plan, Ebensburg, PA. As civil engineer assisted the Borough of Ebensburg in preparing a Drought Contingency Plan for their public water supply system. Analyzed the system water usage, raw water reservoir storage capacities, established action trigger points and the actions to address drought conditions for the water supply. Prepared the plan following PADEP guidance and checklist and submitted to the PADEP for their review and comment.

Hummel Station Power Plant, Shamokin Dam PA. Project Engineer performing various aspects of design for the site development of a gas fired power plant. Services involved water and pressure sewer relocation design to maintain existing industrial facilities while eliminating conflicts with the proposed development.

Johnstown Redevelopment Authority Interceptor Evaluation. Project Engineer responsible for coordinating compliance with Consent Order and Agreement towards eliminating sanitary sewer overflows from the Dornick Point STP's tributary interceptor system and its collection systems that serve 20 municipalities. Services included GIS mapping of the overall system, development of a GIS database for the condition assessments, manhole inspections/surveys; smoke testing, dye testing, and video inspection of interceptor sewers.

City of Johnstown Sanitary Sewer Evaluation. Project Engineer responsible for coordinating I & I investigations of the sanitary sewer system for compliance with a Consent Order and Agreement (CO&A) to eliminate wet weather sanitary sewer overflows. Services included GIS sewer mapping, coordinating manhole inspections, smoke/dye testing of catch basins & private property inflow sources, maintain GIS databases, evaluate findings, and preparation of monthly/quarterly progress reports.

Pegasus Sewer Authority, Johnstown, PA. Project Engineer for the design of a new sanitary sewer collection system expanded to serve existing development served by on-lot sewage systems. System involved over 10 miles of gravity collection system interconnected using five pump stations of varying sizes.

Role on Project
Water Engineering

Years of Experience: 3

Education:
BS Civil Engineering Technology, The University of Pittsburgh at Johnstown, 2015

Registrations:
2014, PA, Engineering in Training

TYLER NESBELLA, EIT
Engineering Technician

Mr. Nesbella serves as an Engineering Technician for L.R. Kimball's Airport and Civil Engineering Division. He has experience with gas line and gas well permitting, erosion and sedimentation control plans, stream crossing permits, drainage design, stormwater management, site development, highway occupancy permit applications, and construction inspection.

Project Experience of Mr. Nesbella includes:

USJMA – N. Walnut Avenue Sanitary Sewer Replacement, Stoystown, PA. Construction Inspector for the installation of an 8" sanitary sewer and manholes to replace a deteriorated cracked and broken terra cotta sanitary sewer line along N. Walnut Avenue in Stoystown, PA. A portion of the replacement was by slip lining methods. He was responsible to observe that the construction was performed in accordance with the construction drawings, construction specifications and approved shop drawings. Daily report of activities and construction quantities plus photographs were prepared to document construction progress. Contractors estimates were reviewed for conformance with actual measured quantities.

USJMA – Oven Run Sanitary Sewer Relocation, Shade Township, Somerset County, PA. Construction Inspector for the relocation of an 8" sanitary sewer and manholes to eliminate a damaged sanitary sewer stream crossing. He was responsible to observe and document that the construction was performed in accordance with the construction drawings, construction specifications and approved shop drawings. Daily reports and photographs were prepared to document construction progress. Contractors estimates were reviewed for conformance with actual measured quantities.

Peoples Natural Gas – Various Projects. Project coordinator for the design and permitting of replacement and extensions of natural gas pipelines within their gas distribution system. He was responsible for preparation and review of gas line layouts, material requirements, permit applications, utility coordination, municipal and highway department coordination for construction within their public right-of-ways. Permits included erosion and sedimentation control permits, stream crossing permits, highway occupancy permits, and local roadway opening permits.

Various Gas Well Companies. Developed contour grading plans for the well pads and design of access roadways to the well pads. Performed drainage design, stormwater management design, erosion and sedimentation control plans including sedimentary ponds. Layout of temporary waterlines for fracking well sites. Prepared permit applications for well pads, stream crossing, highway occupancy permits and municipal roadway permits.



Tammy L. Sherwin,
Environmental Studies

Ms. Sherwin is an environmental scientist responsible for developing NEPA documentation, including Categorical Exclusion Evaluations (CEE), Environmental Assessments (EA), Environmental Impact Statements (EIS), and Section 4(f) Evaluations. She is also responsible for the following types of studies needed to develop the NEPA documentation: wetland delineations, surface water studies, habitat assessments (terrestrial and aquatic), Section 7 consultation, farmland evaluations, floodplain identification, land use studies, and socioeconomic evaluations. Ms. Sherwin also prepares the applicable permit packages and coordinates agency meetings for each project.

Her public involvement experience includes the creation of project newsletter mailing lists, preparation of project newsletters, organization of public meeting agendas and places of meeting, creation of public meeting displays and surveys, presentation of project materials to the public, and preparation of public meeting response summaries. Ms. Sherwin has also coordinated with Community Advisory Committees (CAC) and conducted Consulting Parties Meetings.

Ms. Sherwin's project experience includes:

- **PennDOT District 12-0, S.R. 0519, Washington County, Pennsylvania** - Responsible for preparation of a CEE and the necessary supporting studies (i.e. wetlands, streams, T&E, etc...) using the CE Expert System, as well as, a Section 404/Chapter 105 permit using the online JPA2 Expert System for the project.
- **PennDOT District 5-0, SR 0831 Section 07S – Schaefferstown Road Intersection, Berks County** – Responsible for the oversight of the environmental components of the project including: wetland and surface water identification and delineation studies, Phase I and II ESAs, threatened and endangered species coordination, NHPA Section 106 clearance, Section 4(f) evaluation, water permitting, mitigation and CEE preparation.
- **PennDOT District 9-0, US 219 Improvement Project Meyersdale to Somerset, Pennsylvania** – Conducted wetland functional assessments and assisted with the EIS re-evaluation including the cultural resource and Section 4(f) sections. Prepared the secondary and cumulative impacts assessment and compensatory mitigation plan.
- **PennDOT District 1-0, E01397, Crawford, Mercer, Venango and Warren Counties, Pennsylvania** - Responsible for the coordination and preparation of six DEP general permit 11's for maintenance, testing, repair, rehabilitation, or replacement of water obstructions and encroachments for structure replacements across four counties. All permits were prepared utilizing the online JPA2 Expert System.
- **Greene Township, Kane Hill Road Bridge Replacement Project, Erie County** – Responsible for the oversight of the environmental components of the bridge rehabilitation project including: wetland and stream delineation, and CEE Level 1B preparation. Prepared DEP general permit 11 for the project.
- **PennDOT District 4-0, Sections 450 and 495, Pike County** – Responsible for the NEPA clearance (CEE) and the subsequent studies required (Wetlands, Streams, T&E, Section 4(f), etc...), as well as, the Section 404 / Chapter 105 permitting of waterway impacts.
- **PennDOT District 11-0, McLaughlin Run and Tank Farm Bridge Replacements, Allegheny and Beaver Counties** - Prepared DEP General Permit 11 for Maintenance, Testing, Repair, Rehabilitation, or Replacement of Water Obstructions and Encroachments using the online JPA2 Expert System and prepared CEE's for the McLaughlin Run and Tank Farm Bridge replacement projects.
- **PennDOT District 9-0, SR 4009 (Business Route 220) Bedford Springs Improvement Project, Bedford, Pennsylvania** – Prepared the Level 2 CE and

Role on Project: Environmental

Years of Experience: 21

Education:

BS, Biology, Indiana University of Pennsylvania, 1993

Affiliations:

Pennsylvania Association of Environmental Professionals (PAEP) - Board of Directors 06 & 07, Office of Secretary

Individual Section 4(f) Evaluation for Transportation Projects that have Net Benefit for the roadway improvement project. This Section 4(f) evaluation was the first prepared for net benefit use in Pennsylvania.

- **Redevelopment Authority of Allegheny County, Carrie Furnace Access Road, Pittsburgh, Pennsylvania** – Responsible for the preparation of the Categorical Exclusion Evaluation for the access road project into the Carrie Furnace Site. This project utilized funds from the TIGER III Grant.
- **Allegheny Tunnel Transportation Improvement Project, Pennsylvania Turnpike Commission, Bedford and Somerset Counties, Pennsylvania** – Principal environmental scientist responsible for data collection, field investigations, public involvement coordination, agency meetings and report documentation. Examples of field investigations include wetland delineation, macroinvertebrate sampling, PAMHEP, and reptile and amphibian survey. Responsible for preparing the state equivalent to an EA. Public involvement responsibilities included creation and maintenance of mailing list, preparation of project newsletter, development of displays and project meeting surveys, presentations of project material, and preparation of summary of responses. She also maintained the CAC mailing list, prepared materials for the meetings and acted as the contact for CAC inquiries.
- **City of Erie, McBride Viaduct Feasibility Study, Erie, Pennsylvania** – Responsible for the oversight of the environmental components of the project including: field studies, Phase I ESA, threatened and endangered species coordination, NHPA Section 106 clearance, Section 4(f) evaluation and CEE preparation. Prepared the Environmental Justice Analysis report and CEE for the project.
- **PennDOT District 10-0, Brookville 2nd Street Bridge** – Responsible for the oversight of the environmental components of the bridge rehabilitation project including: wetland and stream delineation, Phase I ESA, and BRPA preparation



George S. Kopchik, PMP, PS, SP, PLS
Surveys & Mapping Manager

Mr. Kopchik's experience and education have provided him with the technical and management skills necessary for completing the most complex mapping projects. Over the past 29 years, Mr. Kopchik 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, Mr. Kopchik has gained valuable knowledge in all phases of photogrammetry 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 allowed him to attain the position of a Senior Project Manager while also serving as the Manager of Geospatial Services. In summary, Mr. Kopchik 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. Mr. Kopchik is also experienced in Microsoft Office.

Mr. Kopchik 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.

Recent projects for which Mr. Kopchik has worked on include:

- **Cambria County Final Design, SR 0022, Section 005, PADEP.** PM for 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.
- **2014 - Washington County Airport Authority; Washington County, PA.** Project manager overseeing all surveying and mapping related efforts for the obstruction mapping and analysis project. Mr. Kopchik and his team were responsible for coordination and completion of the color aerial photography and ground surveys and also for completion of photogrammetric mapping, orthophotography, and OBS/AAA surveys in accordance with FAA Advisory Circulars 150/5300-16A, 17C, and 18B.
- **2013 -- Somerset County Airport, Somerset, PA -- AGIS Update Airport Master Plan.** Project manager overseeing all surveying and mapping related efforts necessary to provide the airport with an updated master plan. Mr. Kopchik and his team were responsible for coordination and completion of the color aerial photography and ground surveys and photogrammetric mapping in accordance with FAA Advisory Circulars 150/5300-16A, 17C, and 18B.
- **2013 -- John Murtha-Johnstown Cambria County Airport, Johnstown, PA.** Taxiway B As-Built Survey - Project manager overseeing all surveying related efforts necessary to provide the airport with an as-built of the Taxiway B Lighting Improvements. Mr. Kopchik and his team were responsible for coordination and completion ground surveys and accordance with FAA Advisory Circular 150/5300 - 18B.
- **2005-2010.** Project Manager for 62 projects over a five period providing the PADEP with photo control, general surveying services, and photogrammetric planimetric/topographic mapping used for remediation engineering of AMD sites. Aerial photography used for mapping was acquired by the PADOT.

Role on Project: Manager, Geospatial Services

Years of Experience: 31

Education:

Associate, Computer Aided Drafting and Design, Pittsburgh Technical Institute, 1984

Registrations:

1999, NC, Professional Land Surveyor
2003, SC, Professional Land Surveyor
2010, VA, Surveyor Photogrammetrist

Certifications:

- Project Management Professional,
4/10/18

Stephen Landgrebe, PLS

Survey Party Chief



Mr. Landgrebe serves as a Senior Survey Party Chief with nearly 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.

Recent projects for which Mr. Landgrebe has worked on include:

Role on Project: Survey Party Chief

Years of Experience: 30

Education:

Associate, Surveying, Paul Smith's College of Arts and Sciences, 1987

Registrations:

2016, WV, Professional Land Surveyor
 1995, NY, Professional Land Surveyor
 2013, PA, Professional Land Surveyor
 2009, TN, Professional Land Surveyor

Affiliations:

Former member of the New York Association of Professional Land Surveyors
 Former member of the Town of Palmyra Planning Board

Certifications:

HAZWOPER (40 hour)

- **Armstrong School District, New Junior-Senior High School, Armstrong County, PA.** Geotechnical Boring Stakeout, Survey Field Verification, and Subdivision Corner Monumentation.
- **Lehigh Northampton Airport Authority** - 2012 Queen City AGIS Mapping (ALP Update, Obstruction Mapping & Removal). Horizontal and vertical ground control network, runway centerline and profile surveys, planimetric detail surveying and field verification was completed in accordance with the current FAA AC150-5300 -18B Airport GIS specifications).
- **Peoples Natural Gas - Pipeline Replacement for Western PA.** Detail planimetric feature surveying was performed for the replacement of existing gas mains within various locations.
- **Wal-Mart - Kilbuck Wal-Mart Engineering Services, 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.
- **Williamsport Regional Airport** - 2012 Conduct Environmental Assessment for Runway 9-27 Approach Improvements. Horizontal and Vertical Ground Control network, runway centerline and profile surveys, planimetric detail surveying and field verification was completed in accordance with the current FAA AC150-5300 -18B Airport GIS.
- **Sports and Exhibition Authority, City of Pittsburgh, PA.** Performed as-built survey of the proposed new road rights-of-way for Chuck Noll Way locating curbs, sidewalks and visible utilities to be included in production of survey plat and legal description

EXPERIENCE AND PROJECTS

Water Engineering

L.R. Kimball has successfully produced or assisted in the evaluation, design, financing, construction, and implementation of hundreds of water facilities projects for over 50 years. L.R. Kimball is capable of completing all elements of a planning and water system improvement project. We have developed work plans involving the application of unique planning and design strategies in response to issues, stringent compliance orders, statutory or regulatory requirements, and financial and institutional issues related to the owner's needs. L.R. Kimball is experienced in working with (and within) multi-jurisdictional authorities and has achieved great success in meeting state and local permitting and other regulatory requirements. We are pro-active with regulatory and financial agencies and maintain routine contact with agency personnel. This approach ensures that project issues and constraints are understood by all parties, facilitates the permit and funding approval process, and minimizes potential delays in project implementation. L.R. Kimball has assembled an experienced project team of dedicated professionals who have established working relationships with federal, state, county, and local agencies.

WATER SERVICES



- Water facility and corrective action planning
- Surface and groundwater source investigations
- Hydrologic and hydrogeologic modeling
- Wellfield designs
- Dam designs and inspection
- Water reservoir safe yield evaluations
- **Water storage and distribution designs**
- Water System Modeling
- Water treatment facility designs
- Project financing, administration, and implementation plans
- Underground utilities
- Wellhead protection studies
- Emergency Action Plans
- Public outreach
- Public Water Supply Permit Applications
- Water Allocation Permit Applications

Project Experience

The Redevelopment Authority of Allegheny County

Contact: Ms. Erin Deasy – Project Manager (412) 350-3586

Carrie Furnace Redevelopment Project – Waterline Loop, Rankin Borough, Allegheny County, PA

Project Manager: Cameron R. Mock, PE

L.R. Kimball prepared the design of an approximate 4,400 lf 10" ductile iron waterline loop to connect to the Wilkinsburg-Penn Joint Water Authority to provide potable water service to the brown field Carrie Furnace site for future light industrial/commercial redevelopment. Services provided included surveying, preliminary design, final design, construction drawings, construction specifications, bid package, two railroad crossing permits, NPDES permit for discharges from construction activities, easement plats, and coordination with Wilkinsburg-Penn Joint Water Authority. Construction is to be performed during 2019 construction season.



Competative Power Ventures (CPV)

Contact: Mr. Mike Resca (781) 848-5692

Fairview Power Plant – Water Supply Pipeline, Jackson Township, Cambria County, PA

Project Manager: David G. Minnear, PE

CPV was developing the 980 MW natural gas fired Fairview Power Plant near Vinco, PA. To provide up to 7 MGD of cooling water, a 7.5-mile 24" industrial water line and two pump stations were constructed to deliver the water from the Cambria Somerset Authority system in Johnstown, PA. The project also included a 12" return line for the discharge of blowdown water from the power plant. Services included coordination with CPV and Cambria Somerset Authority to determine the required plant needs and determine the available capacity of the Cambria Somerset Authority. Surveying, mapping, preliminary design, final design, permit applications, permit drawings, construction inspection, construction oversight were performed for the two pipelines and two pump stations.



Pennsylvania Department of Transportation – District 9

Contact: Jaclyn Himmelwright – Project Manager (814) 696-7171

SR0036 Section 07S Roadway Improvement Project – Waterline Relocation, Bedford County, PA

Project Manager: Cameron R. Mock, PE

The roadway improvement project resulted in the need for the relocation of water distribution lines for the Waterside-Loysburg Water Supply water system. L.R. Kimball coordinated with the roadway design engineer to identify where relocation of the waterline would be required at a bridge, intersection improvement and roadway widening. Services included preliminary design, final design, coordination with the water authority, construction drawings, construction specifications, and shop drawing reviews. The project involved a highway occupancy permit and a stream crossing permit.

The Gallitzin Water Authority

Contact: Mr. Jack Nagle – Chairman (814) 886-8871 x 2

Gallitzin WTP Backwash Settling Tanks, Gallitzin, PA

Project Manager: Cameron R. Mock, PE



The Gallitzin Wastewater Treatment Plant (WWTP) was having treatment issues with the solid in the filter and clarifier backwash wastewater from the Gallitzin Water Treatment Plant. The goal was to provide facilities to remove the solids prior to discharging the wastewater to the sanitary sewer. L.R. Kimball performed an evaluation of the backwash storage at the WTP. The selected alternative was to construct two concrete storage tanks to provide approximately 38,000 gallons of wastewater storage and settling volume prior to discharge to the sanitary sewer. Services included surveying, planning, design, permitting, bidding, engineering during construction, and construction inspection for the addition of these wastewater pretreatment facilities. The settling tanks provide the needed settling storage and detention time for the removal of the solids that were upsetting the Gallitzin WWTP. The \$220,000 project was completed in 2014 within the project schedule and within budget.

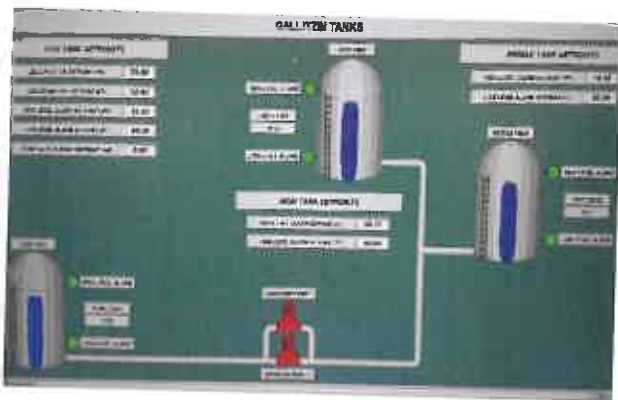
Gallitzin WTP Clarifier and Filter Rehabilitation Evaluation, Gallitzin, PA

Project Manager: George Wright, PE

L.R. Kimball performed an evaluation of the water treatment plant ballasted clarifiers (2) and mixed media sand filters (2). The units are over 25 years old, the steel tanks have coating failures, clarifier media is worn with mineral coating, and the filter media is original. The evaluation compared the cost to rehab the existing clarifier and filter units with valve/actuator replacement; rehab the existing clarifier and filter units, update the control system, add air scour to the filters, and replace valves/actuators; or provide new replacement units. The evaluation resulted in the selection of the rehab and upgrade option. This alternative will include the recoating of the clarifier and filter tanks, new control system, new clarifier ballast media, new filter media, filter air scour system, new control valves and actuators for the treatment equipment. The information and cost estimate was used to seek grant funding for this water treatment plant improvement project.

Gallitzin WTP SCADA Project, Gallitzin, PA

Project Manager: George Wright, PE



The Gallitzin Water Treatment Plant Supervisory Control and Data Acquisition (SCADA) was outdated and beginning to fail. The goal of the project was to replace the system and provide a state-of-the-art system that would provide full functionality of the treatment process as well as monitor and control the two pump stations and three tank level within the water distribution system. Key staff met with the Gallitzin Water Authority plant operators to determine the desired functionality, fully understand the treatment process, and system facilities to be monitored and controlled. Based on that information, L.R. Kimball scoped the proposed hardware requirements, system logic, functionality, and user interface. The system provides both on site and internet connectivity to monitor and control the treatment and distribution pump stations and tanks. L.R. Kimball prepare a bid package for the new SCADA system, assisted with bidding, and provided construction administrative services for the system.

The Ebensburg Municipal Authority

Contact: Mr. Dan Penatzer – Borough Manager (814) 472-8780

Water System Capital Improvement Project, Ebensburg, PA

Project Manager: Cameron R. Mock, PE

L.R. Kimball completed a \$5,050,000 water system project that included improvements to the Ebensburg Water Treatment Plant, replacement of deteriorated waterlines and valves, installation of a radio read water meter system, and a SCADA control system for the

entire water system. The water improvement project was developed within budget and within the projected schedule with completion in 2013.

L.R. Kimball performed planning, project budget estimating, mapping, surveying, preliminary and final design, permit application preparation, geotechnical & foundation reports, construction drawings, construction specifications, waterline easement plats, PENNVEST funding application, PENNVEST loan closing, bidding four separate construction contracts, construction engineering and construction inspection.

Water Treatment Plant Improvement Contract, Ebensburg, PA



This contract includes the refurbishment of two existing clarifiers, installation of one new dissolved air floatation (DAF) clarifier, refurbishment of three gravity filters, new chlorinator, and new backwash water storage tank for the Ebensburg Water Treatment Plant (WTP). The two existing gravity steel clarifiers were cleaned and the launders modified to eliminate short circuiting. The DAF clarifier was added for the removal of algae found in the raw water during the warm months of the year. A 30' x 40' building addition houses the DAF clarifier. The Modifications to the 3 existing multimedia filters include new underdrains, media, electric actuated valves, air scour system and SCADA control system. The existing deteriorated backwash water holding tank was replaced with an 80,000 gallon glass fused bolted steel tank located on the hillside above the water treatment plant. The gas chlorinator was replaced along with various pH, turbidity and flow meters throughout the plant. The DAF clarifier and filter air scour systems improved finished water quality and reduce operation wastewater.

To provide un-interrupted water supply to the water system a backup generator system was added to the pump station that fills the main elevated water tank. This tank services approximately 80% of the water system customers.

Water System Improvement Contract, Ebensburg, PA

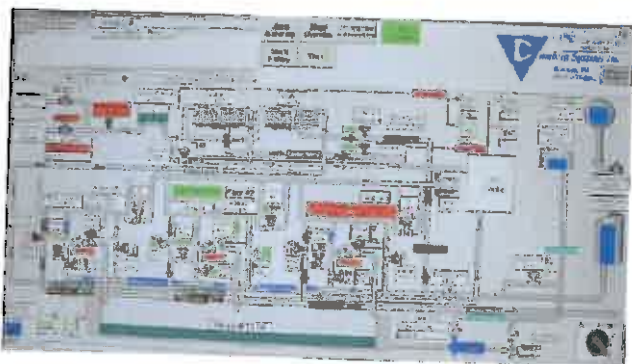


This contract included the replacement of old leaking water piping at select locations within the distribution system, addition of pipe loops to eliminate dead ends and improve water quality, installation of new water valves, and replacement of deteriorated valves. Approximately 9,000 linear feet of 4", 6", and 8" diameter water mains were replaced. The waterline replacement on High Street and Jamesway Road improved the flow characteristics for the commercial area serviced by this portion of the water system. This project provided additional water supply capacity and improved delivery facilities for future generations and planned commercial development in that area. The valve replacements and valve additions allow isolation of smaller segments of the water system to perform maintenance and repairs. This reduces the number of customers affected by service disruptions for maintenance and repairs.

Radio Read Water Meters and Meter Replacements Contract, Ebensburg, PA

To improve the operational efficiency of the system, improve water loss management, and improve water conservation a radio read water meters system was installed throughout the service area. The individual radio frequency transmitter at each water meter allows each meter to be read remotely using a Fixed Base System. Older non-compatible water meters (approx. half of the water meters) were replaced with new meters and the radio read equipment. This upgraded system saves time and provides a means to better/quicker identify water loss and reduce water loss conserving this important resource. When a customer is experiencing a leak, the system will assist to identify a problem many days sooner thereby reducing wasted water. The system has reduced man hours by eliminating the need for field staff performing regular reading of customer meters.

Water Treatment Plant and Water System SCADA System Contract, Ebensburg, PA



To improve the efficiency of the system operations, a state-of-the-art Supervisory Control and Data Acquisition (SCADA) was installed at the WTP. The system operates the water treatment plant and coordinates the operation of all remote pump stations and remote water tanks in the distribution system. This allows control of the entire system from the water treatment plant or remotely via the internet providing closer monitoring and improved control of facilities while reducing manpower requirements and transportation costs. The operation system assists to minimize the manual adjustment and monitoring of the remote pump stations and water tanks. L.R. Kimball prepared a detailed description of the SCADA system requirements, required functionality, equipment locations, facilities to be operated and monitored, means of

communication and power supply.

Water Allocation Permit Application, Ebensburg, PA

L.R. Kimball prepared Ebensburg's Water Allocation Permit application to renew and modify their expiring permit. Along with the renewal, the goal was to increase the daily withdrawal rate to provide additional capacity in the event of excessive water loss as well as potential bulk water sales. Services included preparation of the general information forms, Water Allocation Application forms, overall water system map, population and water use evaluation, wastewater disposal summary, water reservoir safe yield evaluation, projected growth and increased allocation justification.

Consulting Engineering Services, Cambria Somerset Authority



Contact: Mr. Earl Waddell, PE (814) 532-8851

Engineer of Record for Consulting Engineering Services

Project Manager: David G. Minnear, PE

For the past 11 years, L.R. Kimball has provided annual general professional services as required for the Cambria Somerset Authority, for not only the 5 dams, but also the many miles of water supply pipelines owned and operated by the Authority. In addition, L.R. Kimball was involved in several special projects, including the preparation of NPDES permit applications and the design of conservation releases at the Wilmore, Quemahoning, Hinckston, South Fork, and Border Dams.

Emergency Action Plans

L.R. Kimball was retained by the Manufacturer's Water Company, and later by The Cambria Somerset Authority, to develop emergency action plans for the Hinckston, Quemahoning, and Wilmore Dams as required by the Pennsylvania Department of Environmental Protection (DEP) and the Pennsylvania Emergency Management Agency (PEMA).



Emergency Action Plans were required to be prepared by the dam's owner in order to pre-plan the coordination of necessary actions by the dam owner and the responsible local, state and federal emergency organizations for timely notification of a warning and evacuation in the event of an emergency at the dam. As the owner of the Hinckston, Quemahoning, and Wilmore Dams, Cambria Somerset Authority retained L.R. Kimball to simulate dam break analyses by computer modeling to determine downstream inundation limits and identify those municipalities located downstream of the dam that would be potentially impacted by a catastrophic failure of the dam. Prior to computer modeling to simulate a dam failure, L.R. Kimball personnel physically assessed downstream obstructions to determine their effect on the flood wave resulting from the dam break. Based on the determination of the affected downstream municipalities, L.R. Kimball project personnel prepared a step by step procedure to be followed by emergency personnel in such an event. Upon review and approval by the DEP and PEMA, all emergency response team leaders including DEP and PEMA were required to sign the plan indicating concurrence in the event of an emergency. Copies of the signed plans were distributed to emergency response agencies.

Emergency Action Plan Updates

L.R. Kimball prepared updates to the Emergency Action Plans for the Quemahoning, Wilmore, and Hinckston Run Dams. Work included updating the contacts at the emergency and rapid response organizations and review of the inundation area for any significant changes. A new breach analysis was performed for the Quemahoning Dam to address the recent modifications to the Dam and spillway. L.R. Kimball provided the preparation and assembly of the final documents.

L.R. Kimball personnel have provided the following services:

- Concrete rehabilitation inspection (for Quemahoning spillway)
- Stream bank erosion studies (for Que outlet channel and entrance road to Wilmore Dam)
- Material quantities and cost estimates (several projects)
- Field observations and site inspections (inspection of 3 dams plus site-specific inspections)
- Literature searches (for all 5 dams, each up to 100 years old)
- E&S control plans (for Wilmore Dam entrance road project & Wilmore conservation release)
- NPDES application (for conservation release in Minersville)
- Design of processes for discharge compliance (design of conservation releases for 5 locations)



- Studies and documentation to comply with Federal environmental and cultural resource issues (Wilmore Dam access road)
- Surface water sampling and analytical testing (Minersville conservation release)
- Hazardous, toxic & radioactive waste (HTRW) studies (Que and Hinckston intake lead paint investigations)
- Conducting studies and developing reports pertaining to flood control (EAP and breach analyses for 3 dams)
- Ecosystem restoration (access road to Wilmore Dam)
- Risk assessments

Annual Dam Inspections, Borough of Ebensburg, Ebensburg, PA



Contact: Mr. Daniel Penatzer, (814) 472-8780

L.R. Kimball prepared the 2005 Annual Dam Inspections and Reports for the Ebensburg Storage and Howell's Run Dams from 2005 to 2015. This involved the review of previous reports, detailed inspection of the dam embankment and appurtenances, and preparation of a report to the PADEP detailing current status. These inspections are intended to provide assessment of the current status of the structures with respect to slope stability, hydraulic performance, and recent maintenance.

Engineering Services, Water System Improvements Project, Town of Rivesville, Rivesville, WV



This project consists of assisting the Town of Rivesville, West Virginia to define their project, obtain funding, design the improvements, obtain permitting, and provide onsite construction services. In other words, assist Rivesville with all steps necessary to see the project through from inception to completion. The project was designed, permits obtained, application to the West Virginia Infrastructure and Jobs Development Council was completed and submitted for funding, a letter of binding commitment was obtained, and the project was approved to bid by PSC.

To accomplish this, L.R. Kimball performed a preliminary evaluation of the condition of the water system, developed a preliminary distribution system model using WaterCAD software to determine line sizes and storage needs, reviewed maintenance records to identify deteriorated lines, and reviewed planning documents to determine anticipated growth for the region. Cost estimates were prepared to complete the identified upgrades and additions to the system. User rates were projected based on a proposed funding scenario developed which utilized grants and loans from a combination of Federal and State sources.

This proposed project was documented within the IJDC applications and submitted in early 2001 for consideration by the Council. The Town initially sought a \$1.5 million Federal grant from Small Cities and approximately another \$1.5 million in a low interest State loan to fund the project that was estimated at approximately \$3 million total project cost in early 2001. The project received high enough ratings to obtain SCBG funding in 2006 and the Bureau of Public Health required an updated evaluation to be conducted in 2009 to assure the Project scoped in 1997 was still the project required in 2009. Due to the deteriorated condition of water mains the Town was experiencing water loss exceeding 40 percent. The 2009 updated evaluation recommended a \$5 million dollar project to upgrade the system. The funding included \$1.5 million grant from the Small Cities, a \$1 million grant from WVIJDC, and a \$2,585,276, 0% interest, 40-year loan through the WVIJDC.

This updated project included replacing or extending approximately 27,000 feet of transmission mains. The existing system consisted of approximately 64,000 feet of transmission lines. The system operates with three hydraulic grades, each served by the prior zone and each equipped with above ground storage tanks. Storage for the first level consists of two tanks, a 300,000-gallon, glass fused metal tank and a



150,000-gallon, painted metal tank. Improvements to this portion of the storage system include replacement of the painted metal tank with a new glass fused metal tank, demolish of the abandoned water storage tanks, improvements to meet current appropriate regulatory requirements, addition of telemetry and automated controls to both glass-fused steel tanks, and addition of a disinfectant addition system.

The second level is served by a 150,000-gallon, painted metal storage tank. Improvements to this portion of the storage system included replacement with a glass fused steel tank, demolition of the painted metal tank, improvements to meet appropriate regulatory requirements, addition of telemetry and automated controls, addition of a disinfectant booster system to increase disinfectant residual within this zone and replacement of the pumping station.

The third pressure zone is served by an additional pumping station to lift the water and a 10,000-gallon, painted metal storage tank. Improvements include repair of the painted metal tank, improvements to

meet appropriate regulatory requirements, addition of a disinfectant booster system and addition of telemetry and automated controls. Upon PSC approval, bidding efforts proceeded. Construction of the system improvements were completed in 2012.

Letterkenny Industrial Development Authority (LIDA) and Franklin County General Authority (FCGA), Chambersburg, PA

Cumberland Valley Business Park – Water and Wastewater Improvements. L.R. Kimball was retained by Letterkenny Industrial Development Authority to provide professional engineering services to support ongoing water and wastewater operations at the Cumberland Valley Business Park. Letterkenny industrial Development Authority (LIDA) is the developer of approximately 1,500 acres that was formerly part of Letterkenny Army Depot in Franklin County, Pennsylvania. The property is being redeveloped as the Cumberland Valley Business Park. Franklin County General Authority (FCGA), owns and operates the former Army utilities at the property. FCGA provides water and wastewater services to tenants of the Business Park, as well as, to the remaining portion of Letterkenny Army Depot through an Operations Contract with Earth Tech, Inc.

LIDA, Water & Sewer Plant Feasibility Study. LIDA retained the services of L.R. Kimball to develop a feasibility study for the expansion of the water and wastewater treatment plants. The feasibility study included three alternatives for increasing the Water Treatment Plant (WTP) capacity from 1.0 mgd to 1.9 mgd. The three alternatives evaluated were: expand the existing WTP, construct a second WTP to provide the additional capacity, or construct a new water treatment plant to replace the existing plant.

The study also included two alternatives for increasing the WWTP capacity from 0.5 mgd to 1.4 mgd. These two alternatives were: expand the existing WWTP to provide redundancy and upgrade the existing plant, or construct a new WWTP on the same site as the existing WWTP.

In addition, L.R. Kimball reviewed the sludge drying practice and made a recommendation as to the best sludge management practice. The alternative sludge drying practices evaluated included the following: existing sludge drying beds, wedge-wire drying beds, belt filter press(es), and reed beds.

COMMUNICATION PLAN

L.R. Kimball's project management structure is based upon a model that utilizes a strong Project Manager as the initial point-of-contact for our clients. Your project will follow a Project Manager-led structure. Accordingly, Cameron R. Mock, PE, will serve as L.R. Kimball's Project/Program Manager for this project. He will report internally, directly to the Operations Manager and Principal-in-Charge for this project. Mr. Mock has managed a broad range of projects throughout his career that have varied greatly in size and scope and involved new construction as well as rehabilitation and additions to existing facilities. Mr. Mock's project design, production, and management experience includes a wide range of products and he has developed a strong reputation for delivering multiple projects on time and within budget.

L.R. Kimball's project management will include strong and continuous communication with your staff as well as copious record keeping for the project. This project will be assigned an internal project number for clarity of record keeping and tracking through our project management procedures, which focus on three key areas: Schedule Control, Cost Control, and Quality Control. L.R. Kimball's experience and our procedures pertaining to these three key components of project management are described in detail on the following pages.

The communications plan will be reviewed at the initial kick-off meeting. The DNR's primary contact will be identified, as well as other DNR team members and L.R. Kimball team members involved in the project. All communications will be provided electronically to include the entire team. Tools such as email, NewForma, skype meetings, and conference calls will be used to assist with the distribution and communications for the project. When appropriate and/or requested, hard copies will be provided. L.R. Kimball will prepare and distribute meeting notes to document discussions and decisions made.

Monthly written progress reports will be provided to DNR that will summarize what was completed, planned actions for the next month and a review of the schedule. Any issues or concerns will be identified. The report will be provided monthly to the project team based on the date selected by the client for reporting.

DELIVERING PROJECTS ON TIME AND WITHIN BUDGET

Schedule Control

The project schedule will begin with the preparation of a Project Scope and Schedule Description. The challenge in controlling any project's schedule is the early clarification and identification of program, scope, and approach at the outset of the project, with coordination of all parties involved. The project schedule is viewed by L.R. Kimball as critical to the development of any project and will be discussed immediately with your staff. Specific discussion regarding the project timetable will occur at the Kick-Off Meeting.

As the project develops, it will then be our responsibility to help coordinate all communications with you and all members of the project team, to ensure that the schedule is completely understood in terms of its impact on all approval processes and construction start. L.R. Kimball has developed a day-by-day scheduling process in which each approval meeting, deadline, milestone, design meeting, and other appropriate scheduling component is identified.

L.R. Kimball will arrive at the "kick-off" meeting with all of this information preliminarily identified and documented. As part of the kick-off meeting we will work to solidify these requirements and dates. In addition, to facilitate communications, L.R. Kimball will provide a fully developed project team listing to include all participants. This helps in the communications process immediately.

Throughout the duration of the project, this schedule will be reviewed, refined, and discussed among all project team members on a regular basis. The need to expedite client plan reviews for project permitting and funding processes will allow the design of the project to move quickly to the bidding phase, or alternatively to another construction delivery methodology. Planning for a well-integrated construction delivery phase through coordination with the DNR will help to accomplish the construction phase in an accelerated timetable and identify long lead items and possible pre-purchase of equipment or materials.

L.R. Kimball's Project Manager and other team members will monitor the construction schedule to ensure that shop drawings and other contractor submittals are submitted and processed in a timely manner. In the event of delay, L.R. Kimball will act as a facilitator. Document clarification is a routine part of construction phase activities, and L.R. Kimball uses a computerized log to track the dates the clarification is requested, issued, received, and sent back to the Contractor. This log describes the clarification and establishes a due date for the response. It generates a "tickler file" to keep the status current for the Project Manager.

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 provided throughout the project, and by continually addressing the cost implications throughout the early phases of design, the team is able to identify cost issues before unrealistic expectations are created. These estimates will be prepared at increasing levels of detail as the project documentation is developed.

L.R. Kimball's approach to developing preliminary project costs is based on the use of historic data developed by L.R. Kimball professionals involved in the design of similar recent and relevant facilities. Additionally, Dodge Construction reports, trade journals, construction managers, and our independent estimators are consulted to achieve realistic preliminary project costs. 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 marketplace with the local construction industry.

In order to maintain the project budget, it is critical to evaluate the budget at each phase of the project. In the budget development process, we will work closely with your representatives to understand the cost ramifications of various design decisions.

Additionally, we at L.R. Kimball understand the need to select systems that are economical from the day they are purchased throughout the life of the facility. Every major system is evaluated in terms of initial purchase, availability, operating/life cycle costs, and maintenance and replacement costs. Availability of long lead items is also taken into consideration, especially as it relates to project schedule and construction phasing.

As a result of L.R. Kimball's procedures for cost control previously mentioned, we can restate that on major design projects, these procedures will ensure that sufficient opportunity is provided to accommodate changes in scope prior to the final design/construction documents phase in order to avoid excessive cost overruns. Our experience on a multitude of projects varying widely in size, scope, and complexity will enable us to provide accurate, detailed cost estimates at various phases for the project.

During the design and construction documents phases, the quality of the overall construction documents also has an effect on any project's cost control during the construction administration process. Our in-house quality control and cross-discipline review processes will be key components in the control of these costs by L.R. Kimball. Based on this cost control process, our team has a long track record of creating highly efficient and cost-conscious projects within our clients' pre-established budgets.

Quality Control

L.R. Kimball maintains an in-house team of experienced architects, engineers, project managers, and construction-related staff who are responsible for rigorous quality assurance and quality control (QA/QC) of construction documents on all design projects. These reviewers are typically not part of the regular project team that they are assigned to review, but they are familiar with the type of project, thereby facilitating reviews through a "fresh set of eyes".

Our QA/QC (Quality Assurance/Quality Control) team follows an established policy for drawing review and coordination. These reviews are in addition to the continual reviews undertaken by the Project Manager and Senior Technical Leaders within each discipline. These formalized QA/QC reviews take place at the 30%, 60%, and 90% 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 construction drawings with the documents produced by all disciplines involved in the design. In this regard, we utilize 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.

Following the above procedures has improved the consistency of our work product and has helped to control costs and minimize change orders during construction. We do not regularly track the percentage of change orders vs. estimated construction costs, since we find that the majority of construction change orders are from client requests to add or change items based on having available funds to work with.

The following is a list of 3 water and 1 wastewater projects of varying size indicate the percentages of changes that were incurred during construction due to change orders.

Project Name	Contract Value	Final Value	% Change
Ebensburg Water Treatment Plant Upgrade	\$2,242,217.00	\$2,251,338.52	+ 0.4%
Ebensburg Waterlines and Valve Replacements	\$1,675,187.00	\$1,668,870.92	- 0.4%
Ebensburg SCADA Control System	\$ 176,790.00	\$ 176,790.00	0.0%
Mylo Sanitary Sewer Replacement Project	\$ 902,464.92	\$ 912,778.94	+1.1%

L.R. KIMBALL'S NEAREST OFFICE

The location of CDI L.R. Kimball's nearest office to WV DNR is:

**500 Corporate Landing
2nd Floor
Charleston, WV 25311**

From this office, CDI L.R. Kimball can provide the following staff:

- Civil Engineers
- Structural Engineers
- Mechanical Engineers

The identified project team is located at:

**615 West Highland Avenue
Ebensburg, PA 15931**

In addition, L.R. Kimball assures the DNR that, to the fullest extent possible, we will attempt to retain the original personnel assigned to the project throughout its completion. Should unforeseen circumstances arise where a change would be necessary, an equally qualified professional will be made available. In addition, any change in personnel will be discussed with and agreed to by the DNR prior to any changes being implemented.

APPENDICE 1. L.R. KIMBALL OVERVIEW

Company Overview

L.R. Kimball (a CDI Company)



In 1953, L.R. Kimball was founded as a Consulting Engineering Firm. 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 Mr. Kimball's hometown of Ebensburg, PA and moved the headquarters there, where it remains to this day.

L.R. Kimball is a Division of CDI Engineering Solutions. L.R. Kimball is among the nation's leading professional service companies offering its clients architectural and structural, mechanical and electrical design services, security systems design, civil, environmental and transportation engineering expertise. We have served more than 1,500 clients throughout the United States. Over the course of six decades, clients have valued L.R. Kimball's steadfast principles and bedrock reputation which have produced exceptional results for our clients.

Our firm continues to rank among the leading design firms in Engineering News Record (ENR), the publication of record for over 70,000 engineering and construction industry professionals throughout North America. ENR published its Top 500 Engineering Design Firm rankings for 2018, and once again we have ranked among the leading design firms in North America. Our rankings include:



- Top 20 Design Firms for Manufacturing Sector: #13
- Top 100 Pure Designers: #39
- Top 20 Design Firms for Industrial Process/Petroleum Sector: #19
- Top 50 Design Firms in International Markets: #35
- Top 500 Design Firms: #35



*Targeted Results. Expertly Managed
We Stake Our Reputation On It.*

Business Description Information

Name and title of individual submitting the proposal:	Richard E. Genday, PE, Vice President
Name of company:	CDI-Infrastructure, LLC dba L.R. Kimball
Company office address (clearly indicate home office address and local office address if they differ):	See below for specific Office Location
Website address:	www.lrkimball.com
Federal taxpayer identification number or federal employer identification number:	27-2620523
Number of employees:	178
Daytime phone number:	814-419-7873
Fax number:	814-472-7700
Email address:	Rick.Genday@CDIcorp.com

Business Background

CDI-Infrastructure, LLC dba L.R. Kimball was founded in 2010 following the acquisition of L. Robert Kimball & Associates. Our parent company is CDI-Infrastructure Holdings, Inc.

What We Do

L.R. Kimball is headquartered in Ebensburg, Pennsylvania with offices in four states including Charleston, West Virginia. We offer expertise in engineering and architecture to local, regional, state and federal government agencies, as well as school districts, universities, and private businesses. We have extensive experience in these fields:



- Water Resources
- Water
- Wastewater
- Transportation
- Public Safety
- Networks
- Geospatial Services
- Facilities Engineering
- Environmental Services
- Education
- Data Systems
- Civil Engineering
- Aviation
- Architecture



Primary Service Groups

L.R. Kimball is comprised of six (6) divisions that provide nearly every service required to complete virtually any type of project. The staff assigned to your projects can draw upon the experience and knowledge of any of our dedicated personnel. Our five operating divisions include the following:

L.R. Kimball Operating Divisions	
Aviation Services	Civil Engineering Services
Airport Planning Airport Design Airport Construction Management & Inspection	Civil Engineering Inspection Water & Wastewater Engineering Land Development Demolition
Transportation Services	Construction Management and Inspection Services
Highway & Bridge Design Traffic Engineering NEPA Documentation (CEE, EA, EIS) Environmental Planning / Site Assessments	Transportation Construction Management & Inspection
Architecture and Engineering Building Systems Services	Geotechnical and Geospatial Services
Architecture Mechanical Engineering Plumbing Engineering Electrical Engineering Structural Engineering Design Build Services	Drilling Geographic Information Systems (GIS) Geospatial Services Photogrammetry & Mapping Surveying Laboratory Testing Services Environmental & Geophysical Services

Our clients benefit from a wide range of qualified professionals and effective quality control that result in timely, cost-efficient projects. With our integrated services, L.R. Kimball has the ability to fulfill nearly every aspect of most projects. The strength and diversity of our expertise enables us to look at every project holistically, ensuring that each aspect of the project's design and engineering integrates with the others, as well as with the neighboring environment and facilities.

Water Engineering

L.R. Kimball has successfully produced or assisted in the evaluation, design, financing, construction, and implementation of hundreds of water facilities projects for over 50 years. L.R. Kimball is capable of completing all elements of a planning and water system improvement project. We have developed work plans involving the application of unique planning and design strategies in response to issues, stringent compliance orders, statutory or regulatory requirements, and financial and institutional issues related to the owner's needs. L.R. Kimball is experienced in working with (and within) multi-jurisdictional authorities and has achieved great success in meeting state and local permitting and other regulatory requirements. We are pro-active with regulatory and financial agencies and maintain routine contact with agency personnel. This approach ensures that project issues and constraints are understood by all parties, facilitates the permit and funding approval process, and minimizes potential delays in project implementation. L.R. Kimball has assembled an experienced project team of dedicated professionals who have established working relationships with federal, state, county, and local agencies.

WATER SERVICES



- Dam designs and inspection
- Hydrologic and hydrogeologic modeling
- Emergency Action Plans
- Water reservoir safe yield evaluations
- Water Allocation Permit Applications
- Water facility and corrective action planning
- Surface and groundwater source investigations
- Wellfield designs
- Water storage and distribution designs
- Water System Modeling
- Water treatment facility designs
- Project financing, administration, and implementation plans
- Underground utilities
- Wellhead protection studies
- Public outreach
- Public Water Supply Permit Applications



L.R. Kimball's Primary Services



Civil and Environmental. Since the 1950's, we have built an outstanding reputation in civil and environmental consulting services. The wide spectrum of our clients includes industry, institutions, commercial facilities, utilities, private developers, and military and governmental agencies. Starting with the client, our project team conducts assessments and planning, siting, testing, permitting, design and construction monitoring, with the goal of creating innovative solutions to complex, critical issues.

Our clients can expect full civil and environmental support for their projects. Our services also include full engineering support for facility and site designs, site assessments, hazardous materials management, geotechnical investigations and analysis, employee health and safety management and environmental permitting. These projects run the gamut of multimillion-dollar commercial, resort and hotel developments; industrial park and office complex developments; subdivisions; water and wastewater facilities; military facilities; solid and hazardous waste disposal operations; industrial facilities; utilities; and manufacturing facilities. We also assist the client with planning, financing options, grant assistance, cost of service studies, construction monitoring, and operations consulting.



Transportation. Highways, bridges, airports – the infrastructure that supports the movement of people and goods throughout the country. The design, construction, and maintenance of that infrastructure is critical to the economy and to the health and safety of the population. Structural integrity, safety, environmental impact, and design criteria of air and ground transportation facilities require a seasoned, knowledgeable staff who are well-versed in all aspects of integrated planning and context sensitive design. L.R. Kimball's Transportation Division can provide that team.

Using the latest technology, we offer a full complement of planning, project administration, design, environmental permitting, construction inspection, and environmental studies for large and small projects. We take pride in our track record of maintaining successful, long-term relationships with our clients, including state departments of transportation, turnpike commissions, airport authorities, counties, municipalities, and developers.



Mapping Sciences. We offer full-service mapping sciences, including: surveying, aerial photography, analytical aerotriangulation, photogrammetry, planimetric and topographic mapping, digital orthophoto production, cadastral mapping, E9-1-1 addressing, environmental mapping and GIS. Our self-contained mapping operation is supported by an array of technical personnel. Throughout the years, L.R. Kimball has evolved to meet the ever-changing needs of our clients, from traditional land surveys to the most advanced digital mapping, remote sensing and GIS applications. With over 50 mapping experts, we have the capacity, expertise and equipment resources to undertake projects of varying sizes and technical complexity.

Architecture and Engineering Building Systems. Our services include innovative design for new buildings as well as renovation and adaptive reuse of existing buildings. A L.R. Kimball project is designed not only with aesthetics in mind, but also to meet the specific environmental needs of the people who work, learn, or live in that space. We consider the responsible stewardship of natural resources and energy sources in our projects to be a top priority. We have established a reputation as leaders in high-performance sustainable green building design.

A successful architectural project requires an integrated approach from all of our divisions. Every project is assigned to a design team under the direction of a talented project manager, who coordinates the work of all involved.



CE Services

L.R. Kimball provides a wide range of civil and environmental services to industry, institutions, commercial facilities, and utilities, as well as local, state, and federal government. We work with many of our clients on acquiring project financing, grant applications, administration and implementation plans to assist them in reaching their goals. Our approach to civil and environmental projects is to provide cost-effective, value-conscious solutions while reducing the project risk for our clients. These solutions have often demonstrated significant "bottom line" improvements. The following pages illustrate our primary service areas.

Civil and Environmental Services

- Land Development and Site Design
- Demolition Consulting
- Geotechnical Engineering
- Drilling
- Stockpile Inventories
- Hazardous Waste Management
- Environmental Site Assessment and Permitting
- Solid Waste Management
- Electric Utility
- Hazardous Materials Assessment and Air Quality
- Industrial Hygiene and Safety Consulting
- Environmental Management Systems
- Air Quality Compliance and Permitting
- Water and Wastewater Engineering
- Water Resource Management
- Stormwater Management



Land Development and Site Design



L.R. Kimball knows what it takes to get the job done right the first time. From providing land planning, civil and environmental services for small community parks to big box retail, commercial, and industrial facilities, L.R. Kimball knows what is important to you.

L.R. Kimball has completed numerous land development projects including retail, residential, commercial, office, educational, recreational, and brownfields. A wide variety of comprehensive and master plans have been developed for local and county governments; state agencies; regional authorities; and residential, commercial, and industrial developers.



L.R. Kimball's expertise in the acquisition of regulatory approvals for land development projects is unsurpassed. From municipal zoning approvals to state transportation and environmental permits, L.R. Kimball has successfully secured permits for small- and large-scale land development projects.

"Kimball can be proud of the quality of work the staff is producing and be assured that it is noticed and appreciated. I have no reservations in recommending Kimball to any client requiring similar work."

-Jeffrey J. Raymond, President

Services

- | | |
|--|--|
| <ul style="list-style-type: none"> • Pre-development feasibility • Plan processing and regulatory approvals • Stormwater management • Land planning and landscape architecture • Survey and mapping • Site and civil engineering • Environmental site assessments • Brownfields evaluations • Utility transmission line design and coordination • Pavement designs | <ul style="list-style-type: none"> • Right-of-way acquisitions • Subdivision and land development compliance • Erosion and sediment control plans preparation • NPDES permitting • Comprehensive and master planning • Geotechnical evaluations • Wetland investigations • Photo enhancements and renderings • Project siting studies • 3-D visualization services • Zoning approvals |
|--|--|

Demolition Consulting



Whether our clients choose implosion or conventional means, L.R. Kimball's professional staff of engineers and technicians can provide complete demolition services. These range from pre-condition surveys and assessments through demolition, to site development work for new facilities. L.R. Kimball will assure the client that all necessary coordination with governmental regulatory, environmental, public safety and health agencies takes place in a timely and cost-effective manner. L.R. Kimball offers a talented multi-disciplinary team under the direction of an experienced project manager. This approach allows you to access all of the necessary demolition services through a single point of contact, insuring excellent quality control and facilitating all necessary communication and coordination. Our professional staff is ready to support our client with the talent and experience required for a successful project.

Services

- Structural, mechanical, electrical, and plumbing engineering
- Environmental engineering
 - Environmental inspection
 - Abatement design
 - Abatement oversight
- Pre-condition surveys
- Surveying
- AutoCAD
- Detailed bid document preparation
- Cost estimating
- Bidding and construction phase services
- Inspection services
- Civil and site planning and design
- Drilling
- Geotechnical laboratory testing
- Geotechnical investigations



"Kimball has offered novel ways to make the project more cost-efficient."
 Pittsburgh Steelers Sports, Inc.

Geotechnical



Geotechnical engineering is vital to the success of any construction project. Early inclusion of geotechnical engineering professionals into the planning stages of a project is critical in identifying and minimizing potential problems. Geotechnical engineering adds value to projects and saves money.

Our in-house geotechnical laboratory has been accredited by the American Association of State Highway and Transportation Officials (AASHTO) Accreditation Program (AAP) in the fields of soils and Portland cement concrete testing. This accreditation includes the participation in semi-annual reference sample analysis and bi-annual inspections by AASHTO's Materials Reference Laboratory and Cement and Concrete Reference Laboratory. Our laboratory has also been validated by the Army Corp of Engineers to perform concrete and soils testing for their projects.

Services

- Slope stability analysis and design
- Transportation project investigation and design
- Dam design, inspection, and analysis
- Soils, concrete, and aggregate laboratory testing
- Geophysical surveys
- Permitting studies
- Site selection feasibility studies
- Landslides and other soil and rock instability assessments
- Landfill investigation, design, and closure
- Foundation investigation
- Geosynthetic QA/QC
- Material stockpile density determinations (Nuclear Methods)
- Groundwater studies
- Construction inspection and management
- Mine and quarry investigations
- Hazardous mine entry investigations
- Geologic hazards analyses
- Subsidence investigations
- Mine subsidence studies
- Mine and refuse fires assessments
- Ground improvement engineering
- Earth retention systems
- Project reviews



"The geotechnical engineering services...have been professional and responsive. With Kimball input, we have developed a drilled shaft foundation solution that will save costs for our customer, the Pennsylvania Turnpike Commission."
William J. Rohleder, Jr.
 Figg Bridge Engineers, Inc.

Drilling



L.R. Kimball has been providing comprehensive drilling services for over 30 years. We have experienced crews that provide services on a full-time, year-round basis with modern drilling equipment. We maintain four drill rigs, including an all-terrain rig for use on engineering and environmental projects.

Our drillers have an average of over 10 years of experience, qualifying us to perform drilling services in very diverse subsurface conditions and terrain. Crews are experienced using 4.25, 6.25, and 8.25 inch I.D. hollow-stem augers; HQ, NX, and NQ2" rock and concrete coring; continuous split-spoon sampling using 2-inch and 3-inch spoons; CME continuous sampling; thin-wall tube sampling; and geotechnical in-situ testing. Drilling and sampling operations are conducted in accordance with ASTM standards. Our drillers are OSHA HAZWOPER trained.

Services

- Geotechnical borings
- NQ2" and HQ wire line rock and concrete coring
- Angle and horizontal borings
- Monitoring wells
- Unconsolidated material coring
- Slope indicator installation and instrumentation
- Down hole nuclear density testing
- Concrete coring and analysis
- 40-Hour OSHA trained and medically qualified crews
- Standard split-spoon and undisturbed sample collection
- Underground storage tank investigations, inspection, and analyses



"L. Robert Kimball is very customer service oriented and performs a valuable professional service. The department thanks you for current service and is looking forward to this continued service in the future."

David J. Whitlatch, PE
PennDOT

Stockpile Inventories



An accurate and reliable physical inventory is vital in an increasingly competitive and deregulated environment. Fuel is a large cost associated with any utility, and correct and timely physical inventories are paramount. L.R. Kimball has been supplying inventory services to its clients since it was founded in 1953.

L.R. Kimball provides more in-house stockpile inventory services than any other engineering firm. L.R. Kimball's professional staff of engineers, geologists, photogrammetrists, and technicians is experienced and ready to support clients with the analysis, testing, drilling, density testing, aerial photography, volume computations, tonnage reports, and tonnage reconciliations for physical inventories. The trust we have developed with our clients has been our hallmark. We provide our clients with a straight story that adheres to our commitments.

photography, volume computations, tonnage reports, and tonnage reconciliations for physical inventories. The trust we have developed with our clients has been our hallmark. We provide our clients with a straight story that adheres to our commitments.

Services

- Drilling and sampling
- Stockpile base location
- Continuous Auger Sampling Tube (CAST) investigation methods
- Nuclear density testing
- Shelby tube density investigation methods
- On-site and laboratory density investigation methods
- Aerial photography
- Volume determinations
- Surveying (base locations, ground control, volume computations)
- Mobile mapping
- Coal quality survey and inventories
- Technical reviews and reconciliation
- Pre-bid and testing specifications preparation



"Kimball's report has lots of data that we didn't necessarily ask for, but it is very useful to us. They even customized the report...at a lower price than other firms."
 Hans Hasnay
 Southern Energy New York

Environmental Site Assessments and Permitting

A landowner can be held liable for cleaning up a property, regardless of prior contamination or contamination by others. An environmental site assessment (ESA) provides the appropriate inquiry into the property and identifies possible liabilities associated with RCRA, TSCA, the Clean Air Act, the Clean Water Act, and other laws. L.R. Kimball's staff of environmental scientists provides an integrated approach to ESAs in three phases.



Phase I - Identify readily detectable and significant environmental risks

Phase II - Evaluate potential or actual contamination found

Phase III - Identify specific remediation and clean-up measures

Site assessments can be completed according to ASTM guidelines, or tailored to meet our client's specific needs. With the increasingly complex nature of the local, state, and federal environmental regulatory context, knowledge of permitting for any type of development project is imperative. The advent of new legislation has

provided future owners of former industrial properties opportunities for the release of liability from existing environmental conditions and return of the property to active use. Several heavy industrial areas in the east are impacted by these new regulations, and act as a stimulus to local economies by providing a new place of employment and tax revenue for local communities. L.R. Kimball acquires permits for all development activities by processing them through local municipal boards, planning commissions, boards of supervisors, borough councils, and other government agencies.

Services

- NPDES erosion and sedimentation control permits
- Erosion control approvals from local SCS conservation districts
- Stream encroachment permit preparation
- Wetland encroachment permit preparation
- Wetland delineations
- Wetland findings report preparation
- Wetland mitigation designs
- Dam permit preparation
- Sanitary sewerage planning module preparation
- Rezoning, subdivision, land development submissions
- State, county and local highway occupancy permits for roadway revisions, driveways and utility crossings



Solid Waste Management



L.R. Kimball maintains a staff of civil and geotechnical engineers, geologists, hydrogeologists, and construction QA technicians with many years of experience in the design and assessment of residual, municipal, and hazardous waste collection and disposal systems. Our design and assessment staff is familiar with all aspects of waste management, from waste minimization studies to capping of abandoned landfills. Field QA personnel are not only familiar with a variety of construction techniques, but most are certified nuclear gauge operators and ACI field testing technicians. Many hold current OSHA HAZWOPER training certificates. Key personnel have received formal training, and have experience in the placement and testing of geomembranes and geotextile materials.



Our experience with landfill construction and certification has proven to be of immeasurable importance in the assessment of abandoned landfills, as well as the design and permitting of new or expanded facilities.

Services

- | | |
|--|--|
| <ul style="list-style-type: none"> • Waste collection studies and analyses • Waste inventories and characterization • Waste minimization studies • Beneficial use studies • Regulatory compliance plans • Siting, permitting, and design of landfills • Site assessments and environmental impact studies • Repermitting and facility upgrades • Design of leachate collection and treatment systems • Environmental monitoring plans • Transfer station designs • Landfill closure designs • Refuse disposal designs | <ul style="list-style-type: none"> • Drilling and sampling • Installation of monitoring wells • Groundwater monitoring plans • Geology and hydrogeology • Soil sampling and testing • Air emission control plans • Geotechnical engineering • Hazardous waste remediation • Wetlands investigation permitting and mitigation • Geosynthetic liner component designs and analyses • Construction quality assurance and certification • Annual waste disposal reports • Quarterly and annual groundwater monitoring |
|--|--|

"We have experienced, first-hand, your firm's dedication to engineering excellence and commend your affirmative commitment to Total Quality Management."

R. Craig Shuman, Jr.
 Manager, Solid Waste Division
 A. Morton Thomas and Associates, Inc.

Electric Utility



L.R. Kimball has been supplying consulting services associated with power plant fuel supplies, residual waste disposal, construction quality assurance, and miscellaneous mapping, engineering, and environmental issues to the electric utility industry for nearly 50 years.

L.R. Kimball offers a complete professional staff of civil engineers, geologists, hydrologists, geotechnical engineers, hydrogeologists, air quality specialists, construction quality assurance technicians, biologists, surveyors, photogrammetrists, and environmental health and safety scientists.

We provide siting, permitting, geotechnical, and land development services necessary for the development of new or expanded generating stations. L.R. Kimball supplies surveying, aerial photography, and solid waste services for existing facilities; and permitting, construction, and demolition QA/QC services associated with plant closure. We have staff ready to address needs throughout the life of any power generating station.

Services

- | | |
|--|--|
| <ul style="list-style-type: none"> • AMD remediations • Aerial photography/mapping • Air quality • Annual solid waste volume reports • Coal and coal refuse quality (BTU, ash content, etc.) investigation • Coal stockpile design services and alternative renderings • Coal stockpile inventories • Construction PE certifications for liner installations • Construction QA/QC • Dam inspections for hydro, water supply, and E&S control dams • E&S control dam designs and planning • Environmental health and safety auditing, training, and consulting • Environmental site assessments • Geotechnical investigations • GPR investigations • Groundwater monitoring well installations and monitoring • Hydrogeologic investigations | <ul style="list-style-type: none"> • Industrial raw water and wastewater pipeline designs and routing • Land development designs and permitting • Lead and asbestos inventories • Liquid fuels inventories • Potable water and wastewater handling designs and permitting • Generating station and associated development siting studies • Right-of-way acquisitions • Risk management planning • Solid waste management permitting and designs • By-product material testing and permitting (for beneficial use) • Storage tank removal QA • Stormwater management facilities designs • Structure demolition QA • Transportation designs • Wetland delineations, mitigation permitting designs, and monitoring |
|--|--|

"Their competencies were evident during the entire project. My feedback from my generating station was always positive in regards to how these gentlemen handled themselves."

Marjo Janaitis
Public Service Electric & Gas Company

Water and Wastewater Engineering



L.R. Kimball has successfully produced and/or assisted in the evaluation, design, financing, construction and implementation of hundreds of water and wastewater facilities projects for the past 50 years. L.R. Kimball is capable of completing all elements of the planning project. We have developed work plans involving the application of unique planning and design strategies developed in response to stringent compliance orders, statutory or regulatory requirements, and financial and institutional issues related to authority needs. L.R. Kimball is experienced in working with (and within) multi-jurisdictional authorities and has achieved great success in meeting state and/or local permitting and other regulatory requirements. We are pro-active with regulatory and financial agencies and maintain routine contact with agency personnel. This approach ensures that project issues and constraints are understood by all parties, facilitates the permit and funding approval process, and minimizes potential delays in project implementation. L.R. Kimball has assembled an experienced project team of dedicated professionals who have established working relationships with federal, state, county, and local agencies.

Water Services

- Water facility and corrective action planning
- Surface and groundwater source investigations
- Hydrologic and hydrogeologic modeling
- Wellfield designs
- Dam designs and inspection
- Water storage and distribution designs
- Water treatment facility designs
- Project financing, administration, and implementation plans
- Underground utilities
- Wellhead protection studies

Wastewater Services

- Wastewater collections
- Treatment plant designs
- Industrial pre-treatment
- Sludge disposal planning and permitting
- Corrective Action Plans
- Combined Sewer Overflow (CSO) studies and permitting
- Flow monitoring studies
- Smoke and dye testing
- Project financing, administration, and implementation plans
- Video inspection of sewer lines
- Construction inspection
- Surveying and mapping
- Funding assistance/grantsmanship
- Geographic Information Systems (GIS)
 - Data management services
- Operations and maintenance programs
- Permitting
- Subsurface geotechnical investigations and designs



"We wish to extend our sincere compliments regarding the manner in which you handled our wastewater treatment plant upgrade project. Your input beyond the treatment project on various problems of the system has been proven to be productive."
 Sandra L. Teeter, General Manager
 North & South Shenango Joint Municipal Authority

Water Resource Management



L.R. Kimball has been supplying consulting services associated with water control, supply, treatment and protection to homeowners; industry; watershed organizations; and local, state, and federal government agencies since 1953. L.R. Kimball's professional staff of civil engineers, geologists, hydrologists, geotechnical engineers and hydrogeologists are experienced in the preparation of water resources projects for private development, industrial site expansion, and government-funded restoration and reclamation. We can provide professional services necessary for the development of these projects, from environmental site assessments and geotechnical investigations, through the preparation of necessary permits, to final construction quality assurance. We have also participated in water resources public meetings to address local concerns, and have prepared educational materials for presentation of stormwater management and water allocation issues to municipal leaders.

Services

- High- and low-hazard dam safety inspections and assessments
- Coal mine tailings dam insurance certifications
- Emergency action plan preparation for permitted dams
- Dam break analyses and inundation mapping
- Federal Energy Regulatory Commission dam inspections and report preparation
- Water supply dam designs and mass balance analyses
- Erosion and sedimentation control dam designs
- Stormwater control impoundment and infiltration basin designs
- NPDES permit application preparation
- Miscellaneous permit application preparations for stream crossings
- Construction quality assurance for water resources projects
- Flood control structure designs and assessments
- FEMA flood insurance studies and existing study modification
- Regional stormwater management studies and ordinance preparation
- Abandoned mine drainage remediation assessment and designs
- Wetland assessments, delineation, and mitigation site designs



"I just wanted to thank you and commend you on the exceptional work that you have performed. Thank you for providing us with an invaluable tool for watershed conservation, protection, and remediation; but also setting a standard for all future assessments."
 Ryan D. Koch, Watershed Specialist
 Schuykill Conservation District

Stormwater Management



Since 1953, L.R. Kimball has provided comprehensive environmental and engineering services related to stormwater management for various commercial, industrial, municipal, government and private clients. We utilize evolving stormwater management practices based on the philosophy of maintaining, as nearly as possible, natural runoff flow characteristics. Our stormwater management practices include structural (detention ponds, pipes, etc.) and/or non-structural (land use planning to effectively preserve existing drainage patterns, vegetation, pervious areas, etc.) methodologies in which we provide the basic elements of a stormwater management program. The effectiveness of a stormwater management program is a result of good planning and engineering design, based on current concepts and practices.

L.R. Kimball's stormwater management experience is two-fold. We have experience in providing comprehensive watershed stormwater management plans utilizing state-of-the-art GIS based modeling technology. These plans support the development of which results in municipal land development and stormwater ordinances for regulatory based clients. We also have experience in providing services to numerous private sector landowners and developers to comply with federal, state, watershed-specific, county, and municipal stormwater management requirements and ordinances. This experience provides us with a clear understanding of currently accepted stormwater management methods and techniques, agency expectations and review processes, and the implementation of practical, yet economical, best management practices for our clients.

Services

- | | |
|--|--|
| <ul style="list-style-type: none"> • Comprehensive stormwater management master planning • Municipal stormwater management ordinance development • Stormwater management ordinance compliance • Regulatory stormwater permit compliance • Phase II NPDES assessment and permitting • Regulatory erosion and sedimentation control compliance • Emergency action plans • Annual dam inspections | <ul style="list-style-type: none"> • Flood assessment and control • Geographic Information System (GIS) development • Floodway and floodplain assessments • Construction monitoring and documentation • Stormwater and drainage assessment, analysis, evaluation and designs • Stormwater quality control • Stormwater monitoring, sampling and analyses • Existing facility and site expansion, improvement or rehabilitation |
|--|--|



"...I wish to extend our sincere compliments regarding the manner in which you handled our project. You can be proud of the quality of work your staff is producing and be assured that it is noticed and appreciated."
 Tyrone Petrich, President
 Enon Valley Borough Council

Certificate of Authorization – CDI-Infrastructure, LLC dba L.R. Kimball

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 013348

*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

APPENDICE 2. EOI FORMS

- A. Designated Contact Form**
- B. Addendum Acknowledgement Form**
- C. Purchasing Affidavit**

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)
 Richard E. Genday, PE, Vice President

 (Printed Name and Title)
 615 West Highland Avenue, Ebensburg, PA 15931

 (Address)
 814-419-7873 / F 814-472-7712

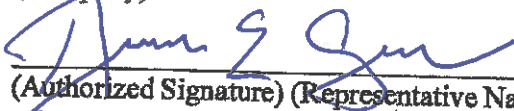
 (Phone Number) / (Fax Number)
 Rick.Genday@cdicorp.com

 (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, PE, Vice President

(Printed Name and Title of Authorized Representative)

2.20.19

(Date)

814-419-7873 / F 814-472-7712

(Phone Number) (Fax Number)

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:

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)

- | | |
|---|--|
| <input type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> 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 Richard E. Genday, PE, Vice President

2.20.19

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

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 exceeds 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: *Richard E. Genday* Date: 2.20.19
State of Commonwealth of Pennsylvania Richard E. Genday, PE, Vice President

County of Cambria to-wit:

Taken, subscribed, and sworn to before me this 20th day of February, 2019.

My Commission expires August 17, 2020

AFFIX SEAL HERE
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

NOTARY PUBLIC *Rosemarie E. Brennen*
Purchasing Affidavit (Revised 01/19/2018)