# EXPRESSION OF INTEREST STANDARD/PAINT CREEK/COLLINSDALE WATERLINE DESIGN SERVICES #DEP14383

Submitted by:



SUMMIT ENGINEERING, INC.

Submittled to:

West Virginia
Department of Environmental Protection
Office of Abandoned Mine Lands



DECEIVED TO THE COURT OF THE CO

### WV Department for Environmental Protection Standard/Paint Creek/Collinsdale Waterline Design Services October 8, 2008

# Table of Contents

DEP14383 Request for Quotation Purchasing Affidavit

Section I	
Executive Summary	
General Statement of Qualifications	
AML Water Project Experience	
AML Groundwater Study Experience	6
Section II	
Project Discussion	7
Project Team	8
Team Chart	10
Section III	
Consultant Confidential Qualification Questionnaire	11
Related Project Experience Matrix	22
Section IV	
Droject Team Pagumes	25





RFQ COPY

TYPE NAME/ADDRESS HERE

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

# Request for Quotation

RFONDMBER DEP14383 PAGE

ADDRESS CORRESPONDENCE TO ATTENTION OF CHUCK BOWMAN 304-558-2157

ENVIRONMENTAL PROTECTION DEPARTMENT OF OFFICE OF AML&R 601 57TH STREET SE

CHARLESTON, WV 25304

304-926-0499

DATE PRINTED TERMS OF SALE SHIP VIA FOB. FREIGHTTERMS 09/04/2008 **BID OPENING DATE:** 10/08/2008 BID OPENING TIME 01:30PM QUANTITY ITEM NUMBER UNIT PRICE AMOUNT UOP LINE b06-94 bool JΒ 1 STANDARD/PAINT CK/COLLINSDALE WATERLINE DESIGN EXPRESSION OF INTEREST THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTEC-TION, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFES-SIONAL ENGINEERING DESIGN SERVICES AND CONSTRUCTION MONITORING SERVICES AT THE STANDARD PAINT CREEK/COL-LINSDALE WATERLINE EXTENSION PROJECT IN KANAWHA/FAYETTE COUNTIES, WV PER THE FOLLOWING BID REQUIREMENTS AND THE ATTACHED SPECIFICATIONS. IN THE EVENT THE VENDOR/CONTRACTOR FILES BANKRUPTCY: FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID AND IS TERMINATED WITHOUT FURTHER ORDER. SEE REVERSE SIDE FOR TERMS AND CONDITIONS: PHONE ) 342-1342 10/8/08 ADDRESS CHANGES TO BE NOTED ABOVE 61-0991104

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

RFQ No.	DEP14383
---------	----------

# STATE OF WEST VIRGINIA Purchasing Division

### PURCHASING AFFIDAVIT

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

### **DEFINITIONS:**

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

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

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

**LICENSING:** Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, West Virginia Insurance Commission, or any other state agencies or political subdivision. Furthermore, the vendor must provide all necessary releases to obtain information to enable the Director or spending unit to verify that the vendor is licensed and in good standing with the above entities.

**CONFIDENTIALITY:** The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures and rules. Vendors should visit **www.state.wv.us/admin/purchase/privacy** for the Notice of Agency Confidentiality Policies.

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

Vendor's Name: Summit Engineering, Inc.	1		
Authorized Signature: June L. Chin	teliny	Date: 10/08/2008	
Purchasing Affidavit (Revised 09/15/07)			

### Executive Summary

Summit Engineering, Inc. proposes to provide design and specification services, surveying and mapping, and any required laboratory or subsurface investigation, in support of the Department of Environmental Protection's (DEP) effort to reclaim lands and water affected by coal mining which occurred prior to the promulgation of the Surface Mining Control and Reclamation Act of 1977. We also propose to offer the service of construction contract document preparation and contract administration to these projects.

Summit Engineering, Inc. is a large, diverse mining and civil engineering firm with eight regional offices strategically located in the Appalachian Coalfields and in close proximity to the anticipated projects requested by the Department for the required scope of work. Our three West Virginia offices are located in Charleston, Chapmanville and Bridgeport, West Virginia. We have combined our individual talents and expertise to benefit many post mining projects in the region. As a mining and civil engineering firm, we have many corporate attributes that uniquely qualify our firm to provide services for abandoned mine lands projects in the state of West Virginia.

### These attributes include:

- Strategically located offices in West Virginia coalfields (Charleston, Chapmanville and Bridgeport)
- Successful working relationship with West Virginia DEP
- Extensive experience in the design and administration of AML Waterline Projects
- Vast amount of existing data in areas of potential projects
- Experienced and available professional staff
- Award-winning post mining land use projects

Summit has designed, administered and inspected AML water projects of various scope and size for over twenty years. One of those projects, the Fedscreek/Mouthcard AML Water Supply Project, was one of the largest AML projects in the state of Kentucky and included over 42 miles of distribution lines and a 2 mgd water treatment plant. Our vast experience has afforded us the opportunity to uniquely understand the challenges that may be encountered when designing an AML project. We have developed an excellent working relationship with the Division of Abandoned Mine Lands in Kentucky and invite you to contact them in reference to our capabilities. The contact information is as follows:

Mr. Steve Hohmann
Director, Division of Abandoned Mine Lands
2521 Lawrenceburg Road
Frankfort, KY 40601
(502) 564-2141





### SUMMIT ENGINEERING, INC.

Summit Engineering, Inc. 400 Allen Drive, Ste. 100 Charleston, WV 25302 (304) 342-1342

### Firm Highlights

- Founded in 1977
- Over 30 years experience in engineering and architectural services
- Combined experience of more than 110 highly trained employees
- Professionals registered in multiple states:

West Virginia Indiana Kentucky Virginia Tennessee Ohio Pennsylvania Arkansas

### Firm History

Summit Engineering Inc. is a consulting engineering firm offering civil, architectural, and mining services. Established in 1977, we currently have over 120 employees in eight (8) office locations in three states. These are:

- Charleston, WV
- Chapmanville, WV
- Bridgeport, WV
- Pikeville, KY
- Hazard, KY
- Big Rock, VA
- ₩ Wise, VA



Charleston, WV Office

Summit's experience and expertise offers a wide range of civil & mining engineering, surveying, architecture and environmental assessment consultation and design services.

### Civil Engineering Services

For over 30 years, Summit's staff of experienced civil engineers has provided water treatment design services for several municipalities as well as water and sewer districts. It is Summit's mission to provide cost-effective solutions to meeting the infrastructure needs of our clients. Summit's services range from project design and management to bidding and construction administration. As municipal engineers for various communities and projects, Summit has worked extensively with local, state and federal regulations that may be encountered during project development.

Services provided by our Civil Engineering division include:

- → Water supply systems
- Sanitary and storm sewer systems
- → Utilities/Infrastructure Needs Studies
- Regional Facilities Planning
- Industrial & Commercial site development
- ♦ Sanitary landfills
- Urban planning
- → Roadways and Bridges
- → Residential communities

It is our goal to be a full-service provider for your project. Summit also provides additional services to our civil engineering clients, including project administration, construction inspection and funding assistance.







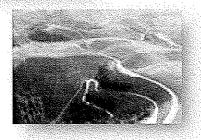
### Mining Engineering

Our firm has decades of combined experience in the mining and reclamation projects. Summit is proud to have accumulated an enormous amount of experience, which ensures our clients of high quality services at very competitive fees. Projects include:

- 💠 Plan Design
- Surveying and Mapping
- → Hydrologic Investigation
- Geologic Investigation
- Permitting
- Environmental Monitoring and Testing
- 💠 Technical Report Preparation

Summit's most valuable asset is the experience of our staff. Our staff has over of 110 years of cumulative experience in the mining industry. The experience, knowledge, and skills of our staff enable us to assist with the planning and permitting needs of the coal industry in order to overcome the obstacles faced in today's market. Summit has also been instrumental in the development of unique post mining land uses. We have been involved in developing golf courses, residential subdivisions, commercial developments and recreational facilities on previously mined sites, thus illustrating our capacity to combine different disciplines of engineering for the benefit of industry, community, and the environment.





### Surveying

Summit Engineering's field staff offers more than 100 years of combined experience in both conventional and global positioning (GPS) survey methods. Our survey staff is comprised of six qualified field personnel who have accumulated an impressive depth of experience on jobs, both large and small, the majority of which are in challenging terrain. Our survey projects are held to the highest standards of accuracy by utilizing state of the art equipment, software and support vehicles.

Summit's experience has been gained on a wide array of survey projects including:

- Planimetric
- Reconnaissance
- → Terrain
- 🕹 Boundary
- Property and subdivision
- Roadway surveys
- Control surveys for aerial photography
- Cross-sections
- Construction staking
- Mine Surveys
- ♦ Underground
- Quarries
- Stockpiles
- GPS Capability
- **→** ALTA Plat Standards

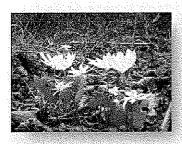




### Environmental

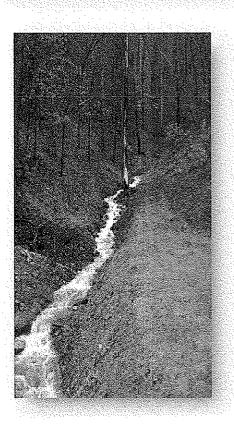
Summit has developed an in-depth understanding of environmental situations, investigations, and mitigation plans. Our staff of highly trained and experienced personnel enables Summit to provide quality, efficient results on projects ranging in size and sensitivity. Project owners have utilized Summit's services for both mining and civil engineering projects requiring:

- ♦ Environmental site assessments
- ♦ Water quality studies
- Reclamation liability studies
- Aquatic biologic surveys
- Stream and wetland mitigation
- → Wetland delineation
- Corps of Engineers permits
- → Toxic release inventory reporting
- → Land reclamation cost analysis
- Stream benthic surveys
- → KPDES permit applications
- Air quality permits and reporting
- Spill prevention control and countermeasures plans
- \* EPA underground injection permits











# AML Water Project Experience

Over the past twenty years, Summit Engineering has gained a vast amount of experience in the design, administration and inspection of AML-funded water projects. This exhibits highlights Summit's experience with AML projects of varying scope and size.

# Fedscreek/Mouthcard AML Water Supply Project, Pike County, Kentucky Greg May, Chief Operating Officer (606) 437-5114

This project materialized as a result of an AML groundwater study completed by Summit. The project included a 2.0 MGD treatment plant, a 1,000,000 gallon and a 300,000 gallon tank, a telemetry system and over 42 miles of water lines. Summit provided all services required for the study, design and construction administration of the project. The total cost of the project was approximately \$12,000,000.

### Freeburn Majestic Water Supply Project, Pike County, Kentucky Greg May, Chief Operating Officer (606) 437-5114

Summit conducted a groundwater contamination study of the impacted area. The study resulted in funding for a \$3,000,000 project including lines, tanks, pump stations, and telemetry. Summit provided all design, bidding documents and construction supervision for the project.

# Brushy AML Project, Pike County, Kentucky Greg May, Chief Operating Officer (606) 437-5114

Summit completed a groundwater contamination study of the impacted area. This study resulting in the funding of a \$1,200,000 project. Summit completed the study, design, inspection and construction administration services for the project.

### Elkhorn City/MWD Interconnect Project Billy Powell, Mayor, City of Elkhorn City (606) 754-5080

This project consisted of the design and construction of 18,955 linear feet of waterline. The completed project serves 42 households, but more importantly, the completed project will enable the City of Elkhorn City and the Mountain Water District to interconnect their water lines for emergency back-up capabilities.

# Shelby Valley AML Water Supply Project Greg May, Chief Operating Officer

This project consisted of the design and construction of approximately 26,000 linear feet of 4" ductile iron water mains. The completed project serves 82 households. The total cost of the project was approximately \$670,000.

### Ferrells Creek AML Water Supply Project Greg May, Chief Operating Officer (606) 437-5114

A result of an AML Grounwater Contamination Study completed by Summit, the Ferrells Creek AML Water Supply project provided potable water service to the residents of Road Creek, Jimmy's Creek, and Honey Fork in Pike County. The project installed approximately 5 ½ miles of new 6" and 4" water mains, two pump stations, one skid tank, and 105 meter sets. The total cost of the project was approximately \$1,150,000.



### AML Groundwater Contamination/Feasibility Studies Project Experience

Summit has completed Feasibility/Groundwater Contamination Studies for several Abandoned Mine Lands Projects. The following list highlights some of the studies completed by Summit:

### Ridgeline AML Groundwater Contamination Study, Pike County, Kentucky Greg May, Chief Operating Officer (606) 437-5114

Summit is in the process of conducting a groundwater contamination study for the Ridgeline area of Pike County funded by the Kentucky Division of Abandoned Mine Lands. The mine history and approximately 100 resident interviews have been conducted to date. The study will also involve water sampling and the production of a report on findings.

### Fedscreek/Mouthcard AML Water Supply Project, Pike County, Kentucky Greg May, Chief Operating Officer

(606) 437-5114

Groundwater contamination studies for the project area were completed by Summit. The study resulted in AML funding for a water supply project including a 2.0 MGD treatment plant, a 1,000,000 gallon and a 300,000 gallon tank, a telemetry system and over 42 miles of water lines. Summit provided all services required for the study, design and construction administration of the project. The total cost of the project was approximately \$12,000,000. (See Project Profile - Page 9)

# Elkhorn City AML Groundwater Contamination Study, Elkhorn City, Kentucky Billy R. Powell, Mayor

(606) 754-5080

A groundwater contamination study was conducted for multiple areas in Elkhorn City, Kentucky. A total of 170 households were involved in the project. The study resulted in funding of an AML water line expansion to serve the impacted households. Summit provided all study and design services.

# Pike County AML Short Line Extensions Study, Pike County, Kentucky Greg May, Chief Operating Officer (606) 437-5114

A groundwater contamination of multiple areas in Pike County was awarded to Summit Engineering. The entire area is within the service area of Mountain Water District. The study resulted in funding of 12 miles of waterline extension. Summit also provided design and construction administration services for the extensions.

### Chloe Creek Groundwater Contamination Study, Pikeville, Kentucky Donovan Blackburn, City Manager (606) 437-5104

Summit conducted a study of the Chloe Creek drainage basin (approximately 5 miles in length). The project resulted in funding of a water line extension project. The project provided water to 66 households. Summit provided all services required for the study, design and construction administration of the project.

# Freeburn Majestic Water Supply Project, Pike County, Kentucky Greg May, Chief Operating Officer (606) 437-5114

Summit conducted a groundwater contamination study of the impacted area. The study resulted in funding for a \$3,000,000 project including lines, tanks, pump stations, and telemetry. Summit provided all design, bidding documents and construction supervision for the project. (See Project Profile - Page 10)

# Brushy AML Project, Pike County, Kentucky Greg May, Chief Operating Officer (606) 437-5114

Summit completed a groundwater contamination study of the impacted area. This study resulting in the funding of a \$1,200,000 project. Summit completed the study, design, inspection and construction administration services for the project.



## **Project Discussion**

We have researched this project through various resources on the Department of Environmental Protection website, as well as downloaded Upper Kanawha Valley Public Service District's 2007 PSC Report. UKVPSD is a small-sized utility providing service to approximately 278 customers as of 2007. UKVPSD relies solely upon water purchases from the Town of Pratt as its water source. The distribution system as of 2007 included approximately 7.3 miles of water mains. UKVPSD sold 16 million gallons of water to customers in 2007.

This project will provide new service to 1,000 new customers in the Burnwell, Collinsdale and Mahan areas along Paint Creek. This project will increase the size of the UKVPSD system by approximately 400%. As the UKVPSD relies solely upon purchased water, it must be confirmed that 1) the district's existing wholesale water purchase contract will allow for the purchase of the additional water and 2) the wholesaler has the resources to provide the additional water to the district.

Based on the project synopsis, it is our understanding that this project involves the mapping and design of:

- 47,500 If of 8" DI pipe
- 2,000 If of 6" DI pipe
- One (1) booster pumping station
- One (1) 75,000 gallon water storage tank
- 1,000 service connections
- Fire Hydrants
- Meter Assemblies
- Miscellaneous Valves and Fittings

This project is located in Fayette and Kanahwa counties approximately thirty minutes from our Charleston, WV office. Summit Engineering has adequate resources (over 120 employees) to commit the completion of this project. We are confident that we can complete this project within the specified time limits.



### Project Team

The key personnel of the project team are highlighted on our project team chart (following pages). The personnel assigned to the team have several decades of combined experience. The following paragraphs highlight the duties and experience of the key project team members. Supplemental information may be obtained from the resumes provided in the Appendix.

### Mr. James Canterbury, PE, LS - Principal-in-Charge

Mr. Canterbury's primary responsibility is to oversee the operation of Summit Engineering's Charleston, West Virginia office. His duties also include obtaining and preparing coal-mining permits, US Army Corps of Engineers' permits, design of AML Projects, the design of water and sewer projects, invoicing, performing accounts receivable, assisting clients and working with regulatory agencies. He has worked with several governmental agencies in the state of West Virginia, particularly the Department for Environmental Protection. Mr. Canterbury is also very familiar with the obstacles that may be encountered during the process of obtaining environmental permits for a project. Projects for which Mr. Canterbury has served as principal-in-charge include:

- WV Division of Abandoned Mine Lands Twin Branch Portals Design Project
- WV Division of Abandoned Mine Lands Godby Branch Design Project
- Catenary Coal Company Moccasin Hollow Deep Mine Article 3 and NPDES Permit Application
- Wildcat Coal Company US Army Corps of Engineers 404 Individual Permit and final Compensatory Mitigation Plan
- Evergreen Mining Company- O'Brien Fork No. 2 Surface Mine Article 3, 401 and NPDES permit applications
- Arch of West Virginia- Guyan Ridge 3A Surface Mine Article 3 and NPDES permit applications

### Mr. Kevin Howard, PE, LS - Project Manager

Mr. Howard has 27 years of experience with Summit Engineering, providing civil engineering on water and wastewater-related projects in eastern Kentucky. He will serve as the Principal-In-Charge and be responsible for concept development and the project work plan. He will also act as liaison between the Owner and the funding and permitting agencies. A partial list of Mr. Howard's prior projects which are directly relevant includes:

- Johns Creek Water Supply Project, Pike County, KY
- Feds Creek Water Supply Project, Pike County, KY
- Elkhorn City Water and Sewer Improvements Project, Elkhorn City, KY
- City of Pikeville Water Treatment Plant Project, Pikeville, KY
- Salversville Water Tank and Line Extension Project, Magoffin County, KY
- Bill Hall Branch Water Line Project, Floyd County, KY
- Beaver-Elkhorn Water Treatment System Improvements, Allen, KY
- Feds Creek AML Groundwater Contamination Study, Pike County, KY

### Mr. Jack Sykes, PE, LS - Quality Assurance/Quality Control

Mr. Sykes is one of the founding partners of Summit Engineering, providing civil engineering on water and wastewaterrelated projects in eastern Kentucky for over 30 years. He will serve as quality assurance and quality control. A partial list of Mr. Sykes' relevant prior projects includes:

- City of Pikeville Wastewater Treatment System Project, Pikeville, KY
- Indian Hills Sewer Project Pikeville, KY
- Sandy Valley Sewer Extension Pikeville, KY
- Kentucky Avenue Utility Relocation Project Pikeville, KY
- Thompson Road Waterline Extension Pikeville, KY
- Downtown Underground Utility Relocation Project Pikeville, KY



### Project Team

Mr. Jody G. Hunt, PE, Senior Project Engineer

Mr. Hunt has accumulated a great deal of experience with utility extension projects in his six years with Summit. His ability to work with system personnel has helped other projects progress in a smooth and efficient manner. Jody's level of professionalism and attention to detail enhance his ability to listen to a client's needs and incorporate them into logical and feasible design elements. Some of his utility projects include:

- Ridgeline AML Groundwater Contamination Study Pike County, KY
- Ferrells Creek AML Water Supply Project Pike County, KY
- Johns Creek Water Supply Project Pike County, KY
- Big Sandy ADD Interconnector Study, Prestonsburg, KY
- Indian Hills Sewer Line Extension Project Pikeville, KY
- Shelby Sewer Project Pike County, KY
- Forest Hills Sewer Project Pike County, KY
- Collins Sewer Project, Pike County, KY

### Mr. Steve Haywood, LS - Chief of Survey

Mr. Haywood has 30 years of experience in land surveys including countless surveys in central and eastern Kentucky. His depth of experience and knowledge has allowed Summit to accumulate a wealth of information about the area. Steve's dedication to excellence makes him an invaluable asset to the team. Some of his similar project experience includes:

- Beaver Bottom Sewer Line Extension Project, Elkhorn City, KY
- South Williamson Sewer Line Extension Projects, South Williamson, KY
- Feds Creek Water Supply Project, Pike County, KY
- Johns Creek Water Supply Project, Pike County, KY
- Honey Branch Utilities Project, Martin County, KY
- Salversville Water Tank, Salversville, KY
- Salyersville City Annexation Map, Salyersville, KY

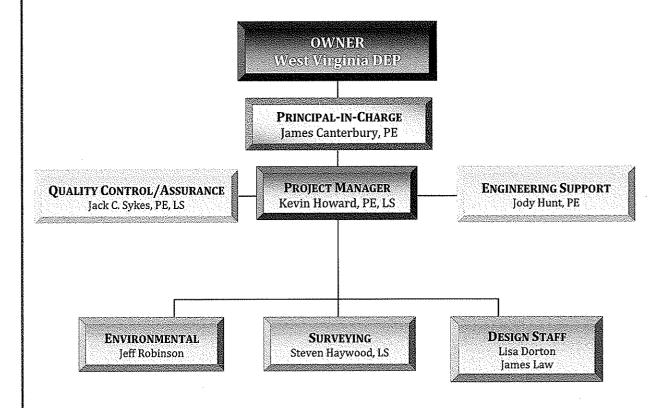
### Mr. Matt Elliott - GIS Information Specialist

Mr. Elliott serves as the GIS information manager and provides the team coordination of exhibits for deliverables. Brief examples of his prior projects include:

- Mapping Assistance Letcher County Airport Study
- Mapping Assistance Letcher County Prison Planning Study
- Sewer System Evaluation Project Whitesburg, Kentucky



### Team Chart



Summit Engineering, Inc. employs over 120 people, all of which will be available to assist with this project should it become necessary. Personnel include CAD operators, engineers, environmental personnel, technical support and office



WE	WEST VIRGINIA ML CONSULTAN	DEPARTMEN IT CONFIDENT	WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AME CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE	PROTECTION JESTIONNAIRE
PROJECT NAME #DEP14383 Standard/Paint Ck/Collinsdale Waterline	D/Waterline 08	DATE (DAY, MONTH, YEAR) 08 October 2008	H, YEAR)	FEIN 61-0991104
1. FIRM NAME Summit Engineering, Inc.		2. HOME OFFIG 400 Allen Drive, S	2. HOME OFFICE BUSINESS ADDRESS 400 Allen Drive, Suite 100 Charleston, WV 25302	3. FORMER FIRM NAME N/A
4. HOME OFFICE TELEPHONE (304) 342-1342	5. ESTABLISHED(YEAR) 1977	ED(YEAR) 1977	6. TYPE OWNERSHIP Individual K Corporation Partnership Joint-Venture	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES X NO
7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE 400 Allen Drive, Suite 100, Charleston, WV 25302/(304) 342-1342/ James Canterbury, PE/10 Personnel	DRESS/ TELEPH 7 25302/( 304) 342-	ONE/ PERSON IN -1342/ James Canter	CHARGE/ NO. AML DESIGN PER bury, PE/10 Personnel	SSONNEL EACH OFFICE
8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM Jack C. Sykes, P.E., L.S. Phillip Lucas, P.E., L.S. Steve T David Rasnick, P.E., L.S. Kevin M. Howard, P.E., L.S. David Sanders, P.E., L.S. Tracy Goff, P.E. Mike Hill. P.E., L.S.I.T. James Canterbury, P.E.	R MEMBERS OF I P.E., L.S. St vard, P.E., L.S. P.E. wry. PE	F FIRM Steve Tackett, PE	8a. NAME, TITLE, & TELEPHONE NUMBE J.D. Elkins, Office Manager (304) 855-5691 Byrd Copley, Office Manager (276) 530-7220	8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS J.D. Elkins, Office Manager (304) 855-5691 Byrd Copley, Office Manager (276) 530-7220
SCIF				
15 ADMINISTRATIVE  2 ARCHITECTS 3 BIOLOGIST 14 CADD OPERATORS 1 CHEMICAL ENGINEERS 11 CIVIL ENGINEERS 1 CONSTRUCTION INSPECTORS 5 DESIGNERS DRAFTSMEN	ECOLOGISTS ECONOMISTS ELECTRICAL ENGINEE ENVIRONMENTALISTS ESTIMATORS 4 GEOLOGISTS HISTORIANS HYDROLOGISTS	ECOLOGISTS ECONOMISTS ELECTRICAL ENGINEERS ENVIRONMENTALISTS ENTIMATORS GEOLOGISTS HISTORLANS HYDROLOGISTS	LANDSCAPE ARCHITECTS MECHANICAL ENGINEERS 17 MINING ENGINEERS PHOTOGRAMMETRISTS PHOTOGRAMMETRISTS PLANNERS: URBAN/REGIONAL SANITARY ENGINEERS SOILS ENGINEERS SPECIFICATION WRITERS	ECTS STRUCTURAL ENGINEERS EERS 3 SURVEYORS TRAFFIC ENGINEERS TS EGIONAL 8S 121 TOTAL PERSONNEL
TOTAL NUMBER OF WY REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 2 *RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.	ERED PROFESSI 1ust provide suppo 1rk.	IONAL ENGINEE orting documentati	RS IN PRIMARY OFFICE: 2 ion that qualifies them to	
		Prince Control	Not Applicable	
10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE?   \[ \text{TES} \]	ED TOGETHER B	EFORE? □ YES.	X  NO	

A 24219  SPECIALITY:  SPECIALITY:  SPECIALITY:  SPECIALITY:  SPECIALITY:  SPECIALITY:  SPECIALITY:  SPECIALITY:	Questionnaire".	Questionnaire".	
A 24219  SPECIALTY:  SPECIALTY:	NAME AND ADDRESS:	SPECIALITY:	WORKED WITH BEFORE
SPECIALTY:	Tuck Engineering 1928 Wildeat Road	Aerial Surveying	X Yes
SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY:	Big Stone Gap, VA 24219		No
SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY:	NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY:			Yes
SPECIALTY:  SPECIALTY:  SPECIALTY:  SPECIALTY:  SPECIALTY:			No
SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY:	NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY:			Yes
SPECIALTY:  SPECIALTY:  SPECIALTY:  SPECIALTY:  SPECIALTY:			No
SPECIALTY: SPECIALTY: SPECIALTY: SPECIALTY:	NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
SPECIALTY: SPECIALTY: SPECIALTY:			Yes
SPECIALTY:  SPECIALTY:  SPECIALTY:  SPECIALTY:  SPECIALTY:			No
SPECIALTY: SPECIALTY:	NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
SPECIALTY: SPECIALTY: SPECIALTY:			Yes
SPECIALTY:  SPECIALTY:  SPECIALTY:  SPECIALTY:			No
SPECIALTY: SPECIALTY:	NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
SPECIALTY:			Yes
SPECIALTY: SPECIALTY:			No
SPECIALTY:	NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
SPECIALTY:			Yes
SPECIALTY:			oN
Ye - Xe	NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE
			Yes
11.T			No

12.	
A. I	Is your firm experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?  YES Description and Number of Projects:  Our services include mining permits, reclamation projects and AML water line projects through our civil, mining, surveying and environmental divisions. The number of projects is well over 100 due to our 29 years of service to the various industries, public and private clients we serve.  NO
Ä	Is your firm experienced in Soil Analysis?  YES Description and Number of Projects:  We perform routine services such as slope stability analyses and small retaining wall design. We utilize sub-consultants for exploration and detailed analysis such as consolidation, liquefaction, etc. Number of Projects is well over 100 as we do soil analysis for many of our mining clients as well as for stream bank stabilization and environmental projects.
Ċ	Is your firm experienced in hydrology and hydraulics?  YES Description and Number of Projects:  Summit designs have primarily addressed the control, treatment, and diversion of surface and ground water. Summit has designed well over 100 projects involving hydrology and hydraulics.  NO
Ö.	Does your firm produce its own Aerial Photography and Develop Contour Mapping?  YES Description and Number of Projects:  We develop contour maps by field survey for sites up to 50 acres. We utilize sub-consultants for mapping by aerial photogrammetry for sites larger than 50 acres. Number of projects is well over 100 as we do mapping for all mining and civil engineering and surveying clients.
<b>ப்</b>	Is your firm experienced in domestic waterline design? (Include any experience your firm has in evaluation of aquifer degradation as a result of mining.)  YES Description and Number of Projects:  Summit's civil engineering division has over 30 years of experience with domestic waterline design. The firm has over 20 years experience in designing AML waterline projects. Our services for these projects consist of groundwater contamination studies, design, construction administration and resident inspection of the construction activities.
ជ	Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?  YES Description and Number of Projects:  Summit Engineering has been doing mining permits for 30 years and has addressed acid mine drainage in each of those. As a firm we have only completed one project that directly mitigated acid mine drainage.  NO

13. PE NAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES R. data but keep to essentials)	JNSIBLE FOR AML PROJECT DESIGN (Furnish complete
NAME & TITLE (Last, First, Middle Int.) YEARS OF AML DESIGN EXPERIENCE:	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN
James S. Canterbury, Partner/Office Manager 20	EXPERIENCE: 20 EXPERIENCE: 0
Brief Explanation of Responsibilities Partner, Branch Office Manager Mr. Canterbury's responsibilities include managing day-to-day activities of the office and staff. Responsibilities also include obtaining and assisting in the preparation of coalmining permits, invoicing, performing accounts receivable, assisting clients, and working with regulatory agencies.	aff. Responsibilities also include obtaining and assisting in the preparation ith regulatory agencies.
EDUCATION (Degree, Year, Specialization) B.S. – (1975) Civil Engineering – West Virginia Institute of Technology M.S. – (1979) Business Administration – Marshall University	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State) P.E.: WV (1977), KY (1979), PA (1998)
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESP data but keep to essentials)	S AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete
NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE
Kevin Howard, Vice President	CE: YEARS OF AML RELATED DESIGN YEARS OF DOMESTIC EXPERIENCE: 20 EXPERIENCE: 27
Brief Explanation of Responsibilities  Kevin Howard joined Summit Engineering in 1981 and became a Principal Owner and Vice President of Civil Design in 1996. Mr. Howard has worked on numerous water treatment and distribution projects throughout his 24 years with Summit Engineering, Inc. His leadership during design and construction of complex projects was demonstrated with Russell Fork Treatment Plant and Intake Facility one of the Kentucky's largest AML projects.	ice President of Civil Design in 1996. Mr. Howard has worked on nume His leadership during design and construction of complex projects was de rojects.
EDUCATION (Degree, Year, Specialization) University of Kentucky, M.S. Civil Engineering 1982	
University of Kentucky, B.S. Civil Engineering 1979	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS	REGISTRATION (Type, Year, State)
American Society of Civil Engineers	P.E. (1992) WV, (1983) KY L.S. (1985) KY

MAME & TITLE (a.s., finel, Middle int.)  TEARS OF AML DESIGN EXPERIENCE  TEARS OF EXPERIENCE  TEARS OF EXPERIENCE  TEARS OF EXPERIENCE  TEARS OF EXPERIENCE  TO COOL TO THE POSITION  TO COOL TO THE	13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES <b>RESPONS</b> II data but keep to essentials)	AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete	ish complete
Brief Explanation of Responsibilities  Mr. Syles has been a principal and President of Summit Engineering. Inc. since its establishment in October 1977. He has performed technical review and been in the position of responsible person in change for many potents handled by the firmt. Some of the projects by 6.5 syles has been associated with have included by the firmt. Some of the projects by 6.5 syles has been associated with have included foreass and classificial, and connected the celepanent, construction supervision, roadway design, design of season of mine plans, design of season of mine plans, design of course design.  ENGLATION (Degree, Year, Specialization)  B.S. (1975) Civil Engineering, University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  B.S. (1975) Civil Engineering, University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  B.S. (1975) Civil Engineering, University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  B.S. (1975) Civil Engineering, University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  B.S. (1975) Civil Engineering, University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  B.S. (1975) Civil Engineering, University of Kentucky  ANAHIE & TITLE (Lear, Frat, Madule Inv.)  TEARS OF ALL HURT TO POSSIONAL ORGANIZATIONS  TEARS OF ALL HURT TO POSSIONAL ORGANIZATIONS  B.S. (2001) Civil Engineering - University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  B.S. (2001) Civil Engineering - University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  B.S. (2001) Civil Engineering - University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  B.S. (2001) Civil Engineering - University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  P.E. KY (2007)  P.E. KY (2007)  B.S. (2007) Civil Engineering - University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  P.E. KY (2007)		YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 12	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 30
EDICCATION (Degree, Year, Specialization)  B.S. (1973) Civil Engineering, University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  E.E.: WV (1973), Civil Engineering, University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  E.E.: WV (1973), VA (1977), TIV(1979),  E.E.: WV (1974), VA (1977), TIV(1979),  E.E.: WV (1975), VA (1977), VA (1977), VA (1977), TIV(1979),  E.E.: WV (1975), VA (1977), V	Brief Explanation of Responsibilities  Mr. Sykes has been a principal and President of Summit Engineering, Inc. since its establishment of responsible person in charge for many projects handled by the firm. Some of the projects Mr. Sresidential and commercial development, construction supervision, roadway design, design of war mapping, earth fill designs, mineral reserve evaluation, preparation of mine plans, design of coal I golf course design.	n October 1977. He has performed technica ykes has been associated with have included ar and wastewater handling and treatment far andling facilities, mine permitting, mine land	I review and been in the position forecasts and feasibility studies, silities, control surveying and I reclamation, land surveying, and
MEMBERSHIP IN PROPESSIONAL ORGANIZATIONS  Kentucky Professional Engineers  Kentucky Society of Civil Engineers  Kentucky Society of Professional Engineers  Kentucky Professional Engineers  L.S.: WV (1995), KY (1977), AA (1977), TN (1979),  L.S.: WV (1985), OH (1986)  L.S.: WV (1995), KY (1980)  T.S.: WV (1995	EDUCATION (Degree, Year, Specialization) B.S. (1973) Civil Engineering, University of Kentucky M.S. (1975) Civil Engineering, University of Kentucky		
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Firmish complete data but keep to essentials)  NAME & TITLE (Last, First, Middle Int.)  NAME & TITLE (Last, First, Middle Int.)  YEARS OF AML DESIGN EXPERIENCE:  Jody G. Hunt  Brief Explanation of Responsibilities  Mr. Hunt is responsible for assisting with Summit's civil engineering related projects. Mr. Hunt's projects have included utility design, bank stabilization design, and excavation and fill design  EDUCATION (Degree, Year, Specialization)  B.S(2001)- Civil Engineering - University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  REGISTRATION (Type, Year, State)  REGISTRATION (Type, Year, State)  P.E.: KY (2007)	MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS Kentucky Society of Professional Engineers National Society Professional Engineers Institute of Transportation Engineers Coal Operators and Associates	REGISTRATION (Type, Year, State) P.E.: WV (1978), KY (1977), VA (1977), IN (1985), OH (1986) L.S.: WV (1995), KY (1980)	TN(1979),
NAME & TITLE (Last, First, Middle Int.)  YEARS OF AML DESIGN EXPERIENCE:  YEARS OF AML DESIGN EXPERIENCE:  THE EXPERIENCE:  THE RARES OF AML RELATED DESIGN WATERLINE DESIGN WAT	<ol> <li>PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSI data but keep to essentials)</li> </ol>	ILE FOR AML PROJECT DESIGN (Fun	ish complete
Brief Explanation of Responsibilities  Mr. Hunt's projects have included utility design, bank stabilization design, and excavation and fill design and fill design and fill design and fill design  EDUCATION (Degree, Year, Specialization)  B.S (2001)- Civil Engineering - University of Kentucky  MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS  American Society of Civil Engineers  REGISTRATION (Type, Year, State)  P.E.: KY (2007)	LE (Last, First, Middle Int.)	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 7	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 7
lization) iversity of Kentucky L ORGANIZATIONS	Brief Explanation of Responsibilities Mr. Hunt is responsible for assisting with Summit's civil engineering related projects. Mr. Hunt' and fill design	projects have included utility design, bank	tabilization design, and excavation
L ORGANIZATIONS	EDUCATION (Degree, Year, Specialization) B.S (2001)- Civil Engineering - University of Kentucky		
	MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS American Society of Civil Engineers	REGISTRATION (Type, Year, State) P.E.: KY (2007)	

# 14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE AME DESIGN SERVICES

Computers	Printers / Peripherals
Dell Optiplex GX280 with Dell 19" fp monitor	Canon Network/Work
Dell Optiplex GX620 with Dell 19" monitor	HP LaserJet 4050N No
Dell Optiplex GX620 with HannG 19" fp monitor	HP DeskJet 855 Cse P
Dell Optiplex GX620 with HannG 19" fp monitor	HP DesignJet 1050C
Dell Precision 490 Workstation with 1907 fp monitor	CalComp Digitizer
Dell Optiplex PC with HannG 19" fp monitor	HP Scanjet 4470 Scan
Dell Precision 490 Workstation with 1907 fp monitor	HP LaserJet 2200 S Pr
Dell Optiplex 320 with e197 fp monitor	HP LaserJet 1200 Prin
Gateway e-series pc with HannG 19" fp monitor	Xerox Phaser 3160 Co
Dell Dimension 4100	
Dell Dimension 4100	

Computers Dell Optiplex GX280 with Dell 19" fp monitor Dell Optiplex GX620 with Dell 19" fp monitor Dell Optiplex GX620 with HannG 19" fp monitor Dell Optiplex GX620 with HannG 19" fp monitor Dell Optiplex GX620 with HannG 19" fp monitor Dell Precision 490 Workstation with 1907 fp monitor Dell Precision 490 Workstation with 1907 fp monitor Dell Precision 490 Workstation with 1907 fp monitor	Printers / Peripherals Canon Network/Workgroup Printer/Copier/Fax HP LaserJet 4050N Network Printer HP DeskJet 855 Cse Printer HP DesignJet 1050C Network Plotter CalComp Digitizer HP Scanjet 4470 Scanner HP LaserJet 2200 S Printer	Engineering Software: Reame 2004 Sedcad Autodesk Map2007 Autodesk AutoCad 2007
Jateway e-series pc with HannG 19" fp monitor Dell Dimension 4100 Dell Dimension 4100	Xerox Phaser 3160 Color Network Printer	

Page 17	PROJECTS) PERCENT COMPLETE	Design 100% Construction 0%	Design 5% Construction 0%	%06	100%	100%	20%	100%	Autonomonate de la companya del companya de la companya del companya de la companya del la companya de la compa	
	SURE TO LIST ALL WVDEP ESTIMATED	\$2,000,000	\$5,000,000	\$500,000	\$1,050,000	Study only	\$5,000,000	\$1,150,000	JCTION COSTS:	\$ 14,150,000
	ENGINEER OF RECORD (BE NATURE OF YOUR FIRM'S DESIGNATION TAX	Design, Bidding, Construction Administration	Design, Bidding, Construction Administration	Design, Bidding, Construction Administration	Design, Bidding, Construction Administration	Design, Bidding, Construction Administration	Design, Bidding, Construction Administration, Construction Inspection	Design, Bidding, Construction Administration	TOTAL ESTIMATED CONSTRUCTION COSTS:	
	YOUR FIRM IS THE DESIGNATE NAME AND ADDRESS OF	Mountain Water District PO Box 3157 Pikeville, KY 41501	Mountain Water District PO Box 3157 Pikeville, KY 41501	Southern Water & Sewer Dist. PO Box 610 McDowell, KY 41501	Mountain Water District PO Box 3157 Pikeville, KY 41501	Mountain Water District PO Box 3157 Pikeville, KY 41501	City of Whitesburg Main Street Whitesburg, KY	Mountain Water District PO Box 3157 Pikeville, KY 41501		
)	15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD (BE SURE TO LIST ALL WYDEP PROJECTS)  PROJECT NAME, TYPE AND NAME AND ADDRESS OF NATURE OF YOUR FIRM'S ESTIMATED PERCEINAGE PROJECTION COST	Shelby Sewer Project Phase III	Pond Creek Sewer Project	Eastern Sewer Project	Shelby AML Water Supply Project	Ridgeline AML Groundwater Contamination Study	Whitesburg Wastewater Treatment Plant	Ferrells Creek AML Water Project	TOTAL NUMBER OF PROJECTS:	7 (this page)

	TRUCTION COST	YOUR FIRMS RESPONSIBILITY					
NONE	ESTIMATED CONSTRUCTION COST	ENTIRE PROJECT					
SULTANT TO OTHERS	ESTIMATED COMPLETION DATE						
16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS	NAME AND ADDRESS OF OWNER						
ON WHICH YOUR FIRM!	NATURE OF FIRMS RESPONSIBILITY			·			
16. CURRENT ACTIVITIES	PROJECT NAME, TYPE AND LOCATION		N/A				

ORD	OST YEAR (YES OR NO)	\$740,000 2004 Yes	\$11,633,000 2005 Yes	\$1,400,000 2007 Yes	\$1,520,000 2005 Yes	\$5,600,000 2007 Yes	\$3,500,000 2003 Yes		\$9,000,000 2005
THE DESIGNATED ENGINEER OF RECC	ESTIMATED CONSTRUCTION COST	ès.	\$11,	\$1,	\$1,	. \$55,	\$3;	)6\$	
17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD	NAME AND ADDRESS OF OWNER	City of Elkhom City P.O. Box 681 Elkhom City, KY 41522	Mountain Water District PO Box 3157 Pikeville, KY 41501	Mountain Water District PO Box 3157 Pikeville, KY 41501	Black Mountain Utilities 609 4 Mile Road Baxter, KY 40806	Southern Water & Sewer P.O. Box 610 McDowell, KY	Mountain Water District PO Box 3157 Pikeville, KY 41501	City of Pikeville 118 College Street	Pikeville, KY 41501
17. COMPLETED WORK WITHIN LAST	PROJECT NAME, TYPE AND LOCATION	Elkhorn City Multi-site Groundwater Contamination Study Elkhorn City, KY	Fedscreek Mouthcard AML Water Supply Project Pike County, KY	AML Shortline Extensions Water Line Extension Project Pike County, KY	Ages - Brookside Water Line Extension Harlan County, KY	Wayland Sewer Project Floyd County, KY	Shelby Valley Sewer Project Virgie, KY	City of Pikeville Downtown Revitalization Project	Pikeville, KY

17. COMPLETED WORK WITHIN LAST 5 YEARS ON		WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD		
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Indian Hills Sewer Line Extension Pike County, KY	Mountain Water District PO Box 3157 Pikeville, KY 41501	\$752,000	2005	Yes
Little Shepherd's Trail Water Line Extension Project Harlan County, KY	Green Hills Water District P.O. Box 116 Bledsoe, KY 40810	\$1,500,000	2005	Yes
City of Pikeville Housing Project Housing Renovation	City of Pikeville 118 College Street Pikeville, KY 41501	\$20,000,000	2004	Yes
Salyersville – Magoffin County Sewer Project Line Extensions	City of Salyersville P.O. Box 640 Salyersville, KY	\$2,200,000	2007	No
Honey Branch Industrial Park Road Phase II	Big Sandy Reg. Ind. Dev. Authority 110 Resource Court Prestonsburg, KY 41635	\$2,735,600	2004	No
Johns Creek Water Supply Project	Mountain Water District P.O. Box 3157 Pikeville, KY 41501	\$3,750,000	2008	Yes
Beaver Bottom Sewer Line Project	Elkhorn City P.O. Box 681 Elkhorn City 41522	\$618,000	2005	Yes
Various Mining Projects	Various Clients	Ongoing	Ongoing	No

Page 21 AS (INDICATE PHASE	CONSTRUCTED FIRM ASSOCIATED (YES OR NO) WITH		for the West Virginia Abandoned	Date: 10/8/08
JLTANT TO OTHER FIRI	YEAR		liffcations to perform work	Date:/
COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION		19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the West Virginia Abandoned Mine Lands Program.	<b>( </b>
THIN LAST 5 YEARS ON WHICH	OF OWNER  N/A		ny additional information or descrip	and facts.  Andulmun Title: Partner  my. PE
18. COMPLETED WORK WIT	PROJECT NAME, TYPE AND LOCATION  N/A		9. Use this space to provide a Mine Lands Program.	20. The foregoing is a statement of fagts. Signature: \text{NW U.}\text{UMUL} Printed Name: James Canterbury, PE

FF		anuH ybot			4	Ф				۵.	4.	۵											
	PRIMARY STAFF ICIPATIONICAPA IAGEMENT P-PROF	Kevin Howard		W/P	MIP	MIP	W/P	M/P	ďΨ	M/P	ΑW	₽W	M/P	MIP	M/P	MIP	MIP	WIP	ğ	₽	M/P	MVP	M/P
	PRIMARY STAFF PARTICIPATIONICAPACITY R=MANAGEMENT P=PROFESSIONAL.	James Canterbury																P//M	W/d	P/M	P/M	P/M	P/M
	PAR *** R=W	твок глкег		×	æ	æ	Σ	Σ	×	W	*	æ	æ	W	W	æ	æ						
		Geotechnical/Stability													٨	À		À			٨	٨	٨
		Stream Restoration												٨	٨		٨		7	7			
		EquipmentStructure Removal													٦				7				
		Water Treatment			7		7		>		7												
	TS	Construction Inspection/Management			7		7		٨		7		٨	γ	٨	~	٨			٨	7	7	٨
	REQUIREMENTS	Vater Quality meosiqeAhnoitsgifiMhnoitsulava fne		7	7	7	~	7	7	>	7	7											
	REQUI	Project Specifications			7		7		>		7		٨	٨	7	7	>			7	7	7	7
	PROJECT EXPERIENCE I	issoqeiO alssW euobasaH																					
		notisglisevne trvestigation Mitigation																					
	JECT	InemetedA evi3 ezuteRteniM													٨			٢	7				
	PR	noilaulavä gninimesi																					
		Hydrologic/Hydraulic Design/Eval.		7		7		7		7		7		7	7			7	>		7	7	٨
		Portal/Shaff Closura											٨	٦					>				
		eniM gesG berobrisdA noitsmalleR											7										
		eniM eoshug bardonadA Reciamation												٨		7	7	7			7	7	٨
RIX		Additional Info Provided In Section (s) **		Page 6	Page 5	Page 6	Page 5	Page 6	Page 5	Page 6	Page 6	Page 6											
ICE MATRIX				вотн	вотн	вотн	вотн	ВОТН	вотн	вотн	вотн	ВОТН	вотн	вотн	вотн	вотн	ВОТН	ВОТН	вотн	вотн	U	U	υ
AML and RELATED PROJECT EXPERIENCE MATRIX  EXP. Basis  C=Corp.  P=Personal			ELKHORN CITY GROUNDWATER STUDY	FEDSCREEK/AMI, WATER SUPPLY PROJECT	FERRELL'S CK AMI, GROUNDWATER CONTAMNATION STUDY	FREEBURN MAJESTIC WATER SUPPLY PROJECT	FEDSCREEK GROUND WATER CONTAMINATION STUDY	BRUSHY/BUCKLEYS CREEK WATER SUPPLY PROJECT	SHELBY AML GROUNDWATER STUDY	SHELBY AML WATER SUPPLY PROJECT	RIDGELINE AML GROUNDWATER STUDY	LITTLE FORK PROJ.	ASH CAMP	HELLIER REFUSE	FERGUSON SLIDE	WINNS BR. SLIDE	ASHLAND MED	DRY HOLLOW SED, PROJ.	ROAD RUNNER MINE	OHLOE CREEK	HURRICANE CREEK	SPRADLIN BR. (	

PROJECT  Page 1 of 2	Reclamation Portal/Shaft Closure Hydrologic/Hydraulic Design/Evaluation Remining Evaluation Mine/Refuse Fire Abatement Subsidence Investigation Miltigation Miltigation	Mater coality evaluation	Inspection/Management     Water Treatment     Eq;uipment/Structure Removal	Stream Restoration Geotechnical/Stability	Howard		
of 2.  City AM City AM ortline E water St water St Valley S Valley S Valley S Valles Sewer			×			Jody Hun	Steve Haywood
City AM City AM ortline E water St water St Valley S Valley S Valley S Valley S Valles Sewer			×				
ek Mouthcard AMIL Water orline Extensions water Study cookside Waterline d Sewer Project Valley Sewer Project. Valley Sewer Project. Parking Garage		×			M P	<u> 2</u>	
ortline Extensions water Study  ookside Waterline  d Sewer Project Valley Sewer Project  likeville Revitalization Parking Garage	×	×	×		M P	E E	0.
L L	×	×			d M	W d	
E E	×	×	***************************************		M.P.	W	
C.	×	×			M, P	M d	
u	×	×			M, Pa	<u> </u>	
t	×	×			M.P.	M	
	×	×				M d	
	×	×			M.P	P. M	
Little Shepherd's Trail Water Project Both:	×	×			M, P	N	
City of Pikeville Housing Project Both	×	×			MP	M	
Salversville:Magoffin County, Sewer	×	×			M, P	P	ā
Honey Branch Industrial Park Road- Phase II Both	×	×			M.P.	D M	А

nal	Watt Elliott					d										
ofessio	Steve Haywood			Δ	Ь											
PACITY 1 P=Pr	nack Sykes			M	N	M										
ION/CA Igemen	Jody Hunt			Ь	Ь											
TICIPAT VI=Mana	Kevin Howard			M, P	M.P	d W										
PAR	Jim Canterbury					a. ∑										
	Geotechnical/Stability															
	Stream Restoration		_			×										
	Eq;uipment/Structure Removal				~~~	×					********					
STI				×	×											
EMEN	Construction			×	×											
EQUIF	Vater Quality Evaluation/			×	×	×			<u></u>							
YCE R				×	×	×										
ERIEI	Miligation															
Z E																
ROJE	Remining Evaluation															
Ā	Hydrologic/Hydraulic Design/Evaluation															
	Portal/Shaft Closure															
	Abandoned Deep Mine Aeclamation					×										
	Abandoned Surface Mine			10000		×										6855488
	dditional Info vvided it ection (s)															
	asiss A command of the command of th															
	Exp. E	Projects		Both	Both	Both										
		5 Years		/Project	Project											
	ECT	revious		ir Supply	wer Line	olects										
	PRO			ek Wate	ttom Se	ining Pre										
		age 1 of		ms Cre	aver Bo	M shoi										
	PROJECT EXPERIENCE REQUIREMENTS  M=Management P=Professional  M=Management P=Professional	Reclamation  Abandoned Deep Mine Reclamation  Remining Evaluation  Mine/Refuse Fire Abatement  Moter Construction  Construction  Mater Quality Evaluation  Mater Quality Evaluation  Construction  Mater Quality Evaluation  Mater Treatment  Mater Treatment  Construction  Mater Treatment  Mater Tre	PROJECT EXPERIENCE  TEXTCEPATION/CAPACTY  TO THE COURT OF	PROJECT  The Provided Interpretation  Provided	PROJECT EXPERIENCE  Exp. Bass  Addition  Addit	Abandoned Surface Mine  Reclamation  Abandoned Surface Mine  Reclamation  Abandoned Surface Mine  Reclamation  Abandoned Deep Mine  Remining Evaluation  Subsidence Investigation  Remining Evaluation  Remining Evaluation  Remining Evaluation  Subsidence Investigation  Remining Evaluation  Remining Evaluation  Remining Evaluation  Subsidence Investigation  Remining Evaluation  Subsidence Investigation  Remining Evaluation  Authority Evaluation  Remining Evaluation  Subsidence Investigation  Authority Evaluation  Remining Evaluation  Authority Evaluation  Matter Duly  Authority Evaluation  Authority E	The construction of the control of t	PROJECT TO THE PROJECT OF THE PROJEC	A ARTICIPATION   A Colection Residence Investigation  A Colection Residence Investiga	A Collection of the collection	Abandoned Sulface Mine Restoration  Abandoned Sulface Mine  A X X X X X X X X X X X X X X X X X X	A Control on the Charles of the Market Disposal  A Control on the	A A TO TO TO THE PROTOCOLOUR Waste Disposal  A School of Parameter Colorans A School of Param	The managed benchmark  The color of the colo	The control of the co	Productive Control of the Control of

# Project Team Resumes



### KEVIN HOWARD, P.E., L.S.

### SUMMIT ENGINEERING, INC.

VICE PRESIDENT SENIOR DESIGN ENGINEER

### **EDUCATION**

University of Kentucky, M.S. Civil Engineering 1982

University of Kentucky, B.S. Civil Engineering 1979

### REGISTRATION

Professional Engineer Kentucky / # 13515

Professional Engineer, West Virginia / #11499

Registered Land Surveyor Kentucky / #2798

### **AFFILIATIONS**

American Society of Civil Engineers

### **PUBLICATIONS**

Howard, Kevin M. & Meadows, Michael E. "A Comparison of Four Synthetic Unit Hydrograph Techniques," Symposium on Surface Mining Hydrology, Sedimentology, and Reclamation, Lexington, Kentucky, December 1981

### PROFESSIONAL EXPERIENCE

Kevin Howard joined Summit Engineering in 1981 and became a Principal Owner and Vice President of Civil Design in 1996. Mr. Howard has either been the project engineer or assisted the project engineer in a substantial way on projects that vary from ALTA Plats to wastewater treatment and collection systems, industrial site development, drainage projects and water treatment and distribution projects.

### PROJECT EXPERIENCE

Mr. Howard has worked on numerous water treatment and distribution projects throughout his 24 years with Summit Engineering, Inc. His leadership during design and construction of complex projects was demonstrated with Russell Fork Treatment Plant and Intake Facility one of the state's largest AML projects.

- Russell Fork Water Treatment Plant and Intake Pike County, KY
- Feds Creek / Mouthcard Water Supply Project Pike County, KY
- Pikeville Water Improvements Project Pikeville, KY
- Beaver Elkhorn Water Treatment Plant Improvements Allen, KY
- Water System Improvements Project Pikeville, KY
- Freeburn Majestic (AML) Water Supply Project Pike County, KY
- Cedar Creek Development, Phases III and IV Pikeville, KY
- River Fill Waterline and Road Fork Tank No. 2 Pikeville, KY
- Hydraulic Analysis Pikeville, KY

Mr. Howard has had extensive experience with the design teams working on a variety of wastewater treatment and collection projects. He has fine-tuned his organizational skills while working on such notable projects as the following:

- Wayland WWTP and Line Extension Floyd County, KY
- Salyersville/Magoffin County Sanitary Sewer Project; Salyersville, KY
- Five Phase Wastewater System South Williamson, KY
- Pikeville Sewer Project Pikeville, KY
- Shelby Sewer Project Pike County, KY
- Thompson Road Sanitary Sewer Extension Pikeville, KY
- South Mayo Trail Sanitary Sewer Extension and Lift Station Reconstruction Pikeville, KY

Mr. Howard has worked on several site development projects including the ones listed here. Site development is a technical skill that requires design expertise and a creative vision for the future uses of the site.

- Pike County Regional Technology Center Pikeville, KY
- Mossy Bottom Industrial Park Pikeville, KY
- Lowes Corbin, KY
- Davidson Industrial Site Floyd County, KY
- Cancer Treatment Center Pikeville, KY

Some of Mr. Howard's special studies and projects include:

- Fedscreek / Mouthcard (AML) Groundwater Contamination Study Pike County, KY
- Fords Branch Contained Landfill Pike County, KY
- The Study Effects of Coal Mining on the Groundwater Resources of the Chloe Creek Drainage Basins - Pike County, KY



### JACK C. SYKES, P.E., L.S.

### SUMMIT ENGINEERING, INC.

PRESIDENT

### **EDUCATION**

University of Kentucky, B.S. Civil Engineering – 1973

University of Kentucky, M.S. in Civil Engineering - 1975

### REGISTRATION

Professional Engineer Kentucky / #10283

Professional Engineer, West Virginia / #7971

Professional Engineer Virginia / #0402 009834

Professional Engineer Ohio / #E-50047

Professional Engineer Tennessee / #13561

Professional Engineer Indiana / #60860057

Registered Land Surveyor Kentucky / #2313

Registered Land Surveyor West Virginia / #1369

### **AFFILIATIONS**

2004 Vice President of ACEC-KY Kentucky Society of Professional Engineers National Society of Professional Engineers Coal Operator & Associates – Board of Directors

Breaks Interstate Parks Commission - Co-Chairman

Pikeville Historic Preservation Board -Chairman

Pike County Golf Course Management Board – President

### PROFESSIONAL EXPERIENCE

Mr. Sykes has been a principal and President of Summit Engineering, Inc. since its establishment in October 1977. He has performed technical review and been in the position of responsible person in charge for many projects handled by the firm.

Some of the projects with which Mr. Sykes has been associated have included forecasts and
feasibility studies, residential and commercial development, construction supervision, roadway
design, design of water and wastewater handling and treatment facilities, control surveying
and mapping, earth fill designs, mineral reserve evaluation, preparation of mine plans, design
of coal handling facilities, mine permitting, mine land reclamation, land surveying, and golf
course design.

### **GENERAL RESPONSIBILITIES**

Mr. Sykes serves as a Principal-in-Charge for municipal engineering projects handled through Summit's corporate headquarters in Pikeville, KY. These services have included initial site investigations (geotechnical, mapping and project scoping), project design, preparation of specifications, cost estimations, construction inspection and /or management for various projects.

 Projects have included work for communities on recreational projects such as golf courses, work for the transportation department on highways and bridges, public utilities work for projects involving wastewater plants, industrial sites, water and wastewater lines, as well as landfills, fire stations and police stations.

### **RECENT PROJECTS**

- City of Pikeville Comprehensive Plan
- Pikeville Transit Facility & Parking Garage Planning
- Potter Flats Bridge
- Harold's Branch Road
- Thompson Road South Mayo Sewer Extension
- KY 610 Relocation
- Carr Fork Road
- Elm Street
- Kentucky Avenue
- Brvan Avenue
- Huffman Avenue Widening
- Honey Branch Industrial Park Master Plan
- Gateway Industrial Park Master Plan
- Mossy Bottom Industrial Park Master Planning
- Mountain Top Baking Industrial Park Planning
- Raven Rock Golf Club
- Pikeville Wastewater Treatment Plant
- Pikeville Water Tank Construction
- Pike County Landfill
- Cedar Creek Subdivision
- Northmonte Subdivision
- Bowles Park Townhouses
- Pikeville Police Station
- Clear Creek Golf Club and Residential Subdivision
- StoneCrest Golf Club and Subdivision



### SUMMIT ENGINEERING, INC.

### **PROJECT MANAGER**

### **EDUCATION**

University of Kentucky BS Civil Engineering 2001

### REGISTRATION

Professional Engineer Number #25374 Registered in Kentucky

### **AFFILIATIONS**

ASCE- American Society of Civil Engineers

### JODY G. HUNT, P.E.

### PROFESSIONAL EXPERIENCE

Summit Engineering, Inc. Pikeville, KY (December 2001 – Present)

Sidney Coal Pike County, KY

(1999-2001)

Mr. Hunt is responsible for assisting with Summit's civil engineering related projects. Mr. Hunt's projects have included utility design, bank stabilization design, and excavation and fill design.

### **GENERAL CIVIL PROJECTS**

Mr. Hunt has been project engineer or assisted the design team with the following projects:

- Shelby Valley Clinic Sewer line Extension. Shelby Valley, Kentucky Responsible for layout, design, permits, plans and specifications for the sewer line extension.
- Indian Hills Sanitary Sewer responsible for layout and design, combination of gravity and pressure system, two pump stations, approximately \$622,000 construction cost.
- Johns Creek Water Line Extension responsible for potable water layout and design, two pump stations and two water storage tanks. Estimated total project cost \$3,750,000.
- Renaissance Area Utility Project Phase II Pikeville, Kentucky Prepared quantities of the underground conduit, the replacement of existing water, sewer, and gas lines. Total cost of this phase of the project \$3.2 million.
- Little Shepherd's Trail Water Line Extension Harlan County, Kentucky Assisted in the design, plans, permits, and specifications for the water line extension. Total estimated cost of phase I of the project \$445,806.
- Putney to Totz Water Line Extension Harlan County, Kentucky Assisted in the preparation of quantities and permits for the water line extension. Total estimated cost of the project is \$2,045,000.
- Coal Run Medical Plaza utilities extension responsible for design of potable water and gravity sewer extension line extension estimated construction cost approximately \$40,000.
- Ages to Brookside Water line extension assisted in design, KY Pipe runs and layout, one pump station and one water storage tank estimated approximate construction cost \$4,000,000.
- Gateway Industrial Park Heliport Utilities Extension responsible for layout and design of water and gravity sewer extension. Estimated construction cost \$84,000.
- BJ Services utilities extension responsible for layout and design of water and gravity sewer extension. Estimated construction cost \$35,000.
- Hibbard Street Gas Line Replacement, Pikeville, KY Responsible for the layout, design, plans and specifications of the gas line replacement. Total cost of the project \$58,785.
- Quail Ridge/Jim Harris Project, Pikeville, KY Responsible for design and calculations for excavation, fill, and retaining wall for placement of an existing structure.
- Blue Grass Station Bank Stabilization, Hazard Kentucky Responsible for design, plans, specifications, and calculations for the excavation, fill and stabilization for the substation. Total estimated cost \$126,305.
- John's Creek Station Bank Stabilization John's Creek, KY Responsible for the design and layout of the gabion basket bank stabilization. Total estimated cost \$204,742.
- Cedar Creek Phase 6 Subdivision responsible for lot layout, design for potable water, sanitary sewer, storm drainage, grading design, and roadway layout and design. Estimated construction cost \$570,000.



### JODY G. HUNT, P.E.

### Page 2

- Pike County Landfill Phase III and IV, Pike County, KY Responsible for inspecting the daily
  construction activities ensuring that construction was conducted according to plans and
  specifications. Responsible for daily material quantities, and assisting in the preparation of
  contractor pay requests.
- South Williamson Sanitary Sewer Phase II, Pike County, KY Responsible for inspecting the
  daily construction activities ensuring that construction was conducted according to plans and
  specifications. Responsible for keeping daily material quantities, and assisting in the
  preparation of contractor pay requests.
- St. Martha Drive Utilities Relocation, Pikeville, KY Responsible for the layout and design for
  proposed utility relocation of water and gas lines, design calculations and KYPIPE Modeling.
  Responsible for obtaining Division of water Permits, preparation of the plan and detail sheets,
  specifications and contract documents. Total cost was approximately \$65,000.
- Big Sandy ADD Interconnector Study, Prestonsburg, KY Responsible for preparation of
  proposals for the Water Districts interconnection of water lines throughout the five Big Sandy
  ADD counties. Responsible for calculations and KYPIPE modeling of approximately 19
  proposed interconnections, determining the feasibility of each proposed interconnection and for
  doing the conceptual layout and cost estimates for each.
- Longfork and Jonancy Sanitary Sewer Extension, Pike County, KY Responsible for the layout and design for proposed force main and lift station, design calculations, KYPIPE Modeling, obtaining Division of Water and Encroachment Permits, preparation of plan and detail sheets, and of specifications and contract documents. Total project cost is approximately \$1,500,000.



### STEPHEN E. HAYWOOD, LS

### SUMMIT ENGINEERING, INC.

### SURVEYING MANAGER

### **EDUCATION**

Prestonsburg High School

### REGISTRATION

Land Surveyor Kentucky / #2661

### PROFESSIONAL EXPERIENCE

Summit Engineering, Inc. Pikeville, Kentucky Oct. 1977 – Present

Elkhorn Coal Corporation (1976-1977)

Kentucky Department of Transportation (1973-1976)

### **CERTIFICATIONS**

**Density Testing** 

### PROFESSIONAL EXPERIENCE

Mr. Haywood is responsible for all work assignments of the field crew personnel, note reductions of the surface surveys and mapping of all survey projects as well as the work assignments of the computer drafting personnel. With over 29 years experience with Summit, projects have included roadways, subdivisions, sanitary sewers, construction, and various deep mine and surface mine related projects.

Mr. Haywood has been with Summit Since its formation and has managed all survey projects performed to date.

### **PROJECTS**

- South Williamson Sewer Project
- Little Shepherd's Trail Water Project
- Feds Creek / Mouthcard Water Supply Project
- Gateway Industrial Park
- Pikeville Downtown Revitalization Project
- StoneCrest Golf Course/Residential Development/Industrial Park
- Honey Branch Industrial Park
- Fishtrap Park Boundary
- Habitat for Humanity Subdivisions and Property related projects
- Pikeville Methodist Hospital, Expansion Project
- Pine Mountain Properties
- Pike County Regional Technology Center
- Floyd County Development surveying and mapping the R & S Truck Body site at Ivel, Kentucky
- East Kentucky Exposition Center
- Breaks Interstate Park Mineral Boundary
- Appalachian Cellular Telephone. Survey and mapping for various cellular telephone tower sites.
- Pikeville Parking Garage
- Kentucky Division of A.M.L. Various Projects
- Edgewater Subdivision
- Davidson Industrial Park
- Sidney Coal Corporation. Survey for the construction of the Coal Refuse Belts and for the Raw Coal Storage areas.
- Clintwood Elkhorn Mining. Preparation plant and coal storage areas.
- Numerous Underground Surveys



# Summit Engineering, Inc.

GIS SPECIALIST

### **EDUCATION**

Morehead State University BBA – Computer Information Systems Graduated with honors 1996

# PROFESSIONAL CERTIFICATIONS

Microsoft Certified Systems Administrator

CompTIA Security<sup>+</sup> Certified Professional

### W. MATTHEW ELLIOTT

Mr. Elliott joined Summit Engineering, Inc. in 2005 and brings to the company more than eight years of Geographic Information Systems experience.

### **EXPERIENCE**

2005 - Present

Summit Engineering, Inc.

Pikeville, KY

### Project Manager:

- Knott County Adventure Trails Study
- · Letcher County Airport Feasibility Study

### GIS Specialist:

- Corps of Engineers Dewey Lake gas well and line mapping project
- Dewey Lake Campground Relocation and Improvements Concept Plan for Corps of Engineers
- Fishtrap Lake Park Development Project
- · Two housing development concepts
- Alternate sites for the prison at Gateway Business Park
- · Assistance on environmental impact assessments
- · Viewshed analysis for Corps of Engineers permits

1998 - 2005

Kentucky River Area Development District

Hazard, KY

### Geographic Information Systems Specialist / Network Administrator

- Center Line Project for Letcher County
  - o Drove entire county road system for Transportation Cabinet project

### GEOGRAPHIC INFORMATION SYSTEMS

- Use ArcInfo GIS software to manage, edit, query and display geographic data.
- Use ArcInfo and/or FreeHand to produce cartographic products as required.
- Supervise the work of the GIS/GPS technician and perform final quality and accuracy checks on all GIS data.
- Track time and expenses for GIS projects.
- Prepare reports to accompany data submitted to other agencies.
- · Perform fieldwork as necessary to collect data.

### **NETWORK ADMINISTRATION**

- · Installed and configured Netware 5 file and print server.
- Later installed and configured two servers running Windows Server 2003.
- · Perform all administration for office LAN.
- Configure network security to allow employees to access shared resources while
  preventing unauthorized access to sensitive information.
- · Resolve network connectivity problems.
- · Perform systematic backups of important data.