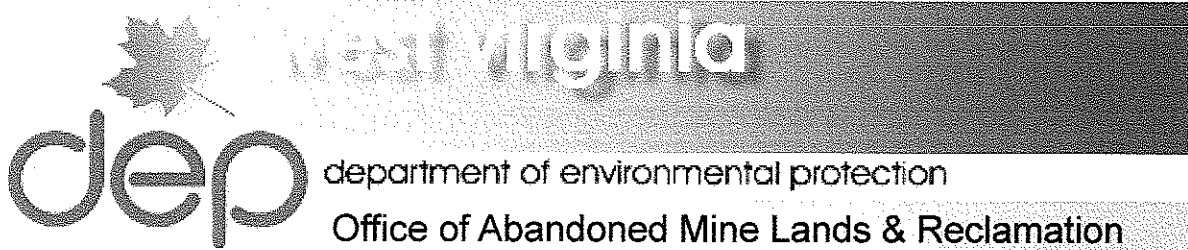


**EXPRESSION OF INTEREST
for
Engineering Services**

**SUGARTREE BRANCH REFUSE PILE DESIGN
RFQ NO. DEP15233**

December 9, 2010

PREPARED FOR



PREPARED BY



**STAFFORD
CONSULTANTS
INCORPORATED**

*Engineering, Design and Consulting
Planning and Environmental Services*

RECEIVED

2010 DEC -8 P 12: 26

Post Office Box 5849
1105 Mercer Street
Princeton, West Virginia 24740

Phone: (304) 425-9555
Fax: (304) 425-9557
E-mail: mail@staffordconsultantsinc.com

ENVIRONMENTAL DIVISION
STATE OF WV

ENGINEERING
A PEOPLE SERVICE PROFESSION

STAFFORD
A CLIENT SERVING COMPANY



**STAFFORD
CONSULTANTS
INCORPORATED**

*Engineering, Design, and Consulting
Planning and Environmental Services*

December 9, 2010

File: 9998

Mr. Chuck Bowman
Department of Administration
Purchasing Division
2019 Washington Street, East
Charleston, WV 25305-0130

Dear Mr. Bowman:

RE: RFQ No. DEP15233
Sugartree Branch Refuse Pile Design
Opening 12-9-10 at 1:30 p.m.

Stafford Consultants, Inc. is very pleased to have the opportunity to make this proposal in response to the RFQ for professional design services in connection with the Sugartree Branch Refuse Pile in Logan County.

Enclosed is one (1) original, one (1) convenience copy, and a CD as required by the RFQ.

We believe our project team approach and quality assurance/constructibility review results in projects being constructed on time and in budget.

This project is located in Logan County, approximately 84 miles from our office in Princeton. We have visited the site and are attaching photographs taken from this visit. Our proximity to the site will allow for efficient use of resources in developing the site reclamation plans.

We look forward to an opportunity to interview for this project. Should you have any questions or if you need additional information, please contact me.

Sincerely,

C. Dean Upton, P.E.
President

CDU/krc

Enclosures



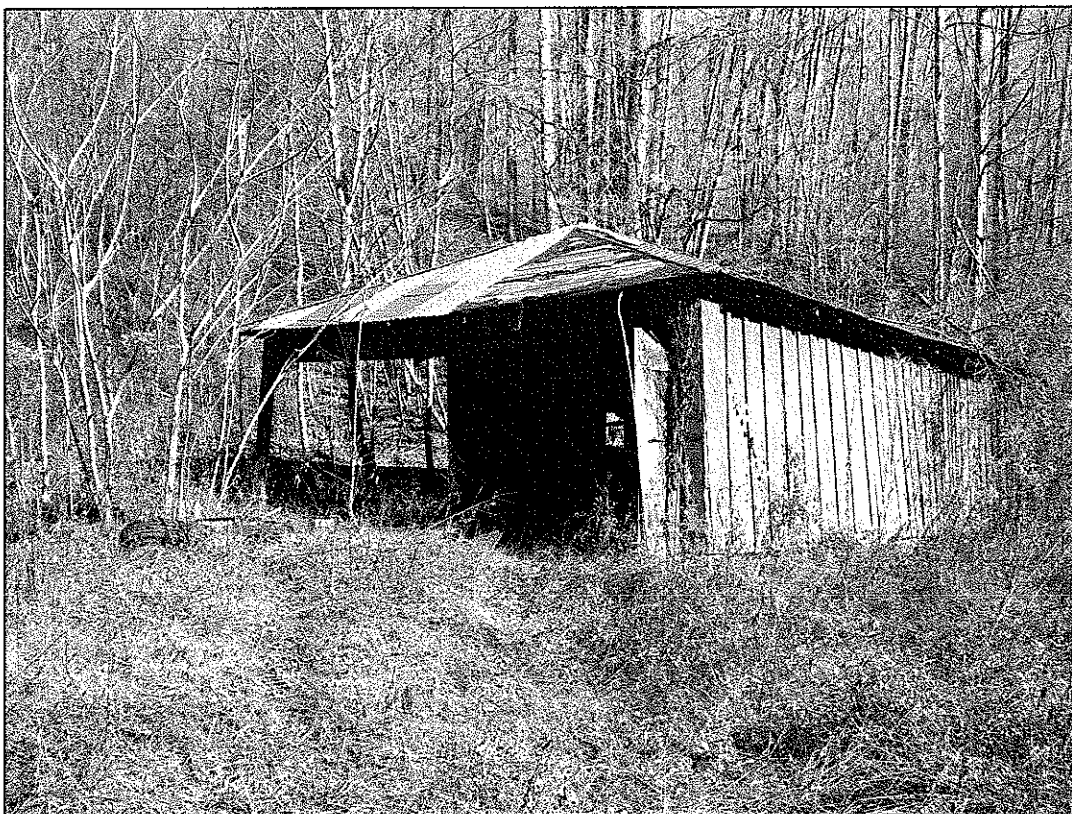
REFUSE ALONG ELK CREEK ROAD JUST PAST SUGARTREE BRANCH



REFUSE ALONG ELK CREEK ROAD JUST PAST SUGARTREE BRANCH



PARTIALLY COLLAPSED CONCRETE SILO NEAR REFUSE PILE



OLD GARAGE AT MOUTH OF SUGARTREE BRANCH



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

Request for Quotation

RFQ NUMBER

DEP15233

PAGE

1

ADDRESS CORRESPONDENCE TO ATTENTION OF

CHUCK BOWMAN
304-558-2157

RFQ COPY

TYPE NAME/ADDRESS HERE

Stafford Consultants
P.O. Box 5849
Princeton, WV 24740

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	POB	FREIGHT TERMS		
11/03/2010						
BID OPENING DATE: 12/09/2010		BID OPENING TIME 01:30PM				
LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-29		
SUGARTREE BRANCH REFUSE PILE DESIGN						
EXPRESSION OF INTEREST						
THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ENGINEERING DESIGN SERVICES AND CONSTRUCTION MONITORING SERVICES AT THE SUGARTREE BRANCH REFUSE PILE PROJECT IN LOGAN COUNTY, WEST VIRGINIA, PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS.						
BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THE STATE MAY DEEM THIS CONTRACT NULL AND VOID, AND TERMINATE SUCH CONTRACT WITHOUT FURTHER ORDER.						
SEE REVERSE SIDE FOR TERMS AND CONDITIONS						
SIGNATURE <i>C. Dean Upton</i>			TELEPHONE 304-425-9555		DATE 12-9-10	
TITLE President		FEIN 55-0656181		ADDRESS CHANGES TO BE NOTED ABOVE		

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

ABOUT STAFFORD CONSULTANTS

CORPORATION HISTORY

The Stafford Consultants, Inc. was founded in 1985 by a key group of employees from Gates Engineering Company. After many successful years of operation, Gates Engineering Company was bought by a large design/build firm that later decided to divest the consultant engineering firm. The company is headquartered in Princeton, West Virginia and all work will be conducted in that office.

Currently, Stafford Consultants employs a total staff of twenty-five, including six registered professional engineers. Our high ratio of professional to total employees is indicative of the importance we place on providing professional service to our clients.

EXPERIENCE

Our firm is a full service Engineering firm that provides services in Civil, Structural, Highway, Bridge, Dams, Airport, Site, Environmental, and Sanitary Engineering. Although the majority of our work is in water and wastewater for the municipal utility market, our firm is highly qualified and capable of completing varied civil and structural projects. Over 25 bridges for the West Virginia Division of Highways, the football stadiums at West Virginia and Marshall University, structural design for the Chuck Mathena Center for Performing Arts in Princeton, structural design for the Merriman Athletic Center at Virginia Tech, and master planning of athletic facilities at Virginia Tech and Marshall are prime examples.

Our expertise in abandoned mine lands work is also varied, having successfully completed over 20 projects for the Office of AMLR. These projects include:

- Refuse Pile Reclamation (regular and burning)
- Structure Demolition
- Drainage Control (channels, diversions, culverts)
- Mine Portal Sealing (wet and dry)
- Access Road Relocation
- Landslide Correction
- Slope Stabilization
- Acid Mine Drainage Collection
- Waterline Design
- Water Treatment Plant Design
- Water Supply Feasibility Studies

QUALIFICATIONS OF PROJECT TEAM

We have established a project team for this AML project which reflects the required technical expertise and project management needed for completion of a successful project.

Engineers

C. Dean Upton, P.E., will be the principal in charge of the project. Mr. Upton has over 37 years of engineering experience, with the last six years being Stafford's president. Mr. Upton will have overall responsibility for the project.

Edward L. Shutt, P.E., will oversee project quality control. Mr. Shutt has over 42 years of engineering experience and is well versed in risk management and quality control procedures.

James R. Bolton, P.E., will perform a quality assurance review of the plans and specifications prior to their final submittal. Mr. Bolton has over 35 years of engineering experience. While he retired from full time engineering work in 2008, Mr. Bolton works on a part-time basis to perform these reviews.

Kenneth R. Crowe, P.E., will be the project manager. Mr. Crowe has over 34 years of engineering experience. As our Chief Structural Engineer, he has managed over 25 bridge and roadway projects for the West Virginia Division of Highways. His AML experience includes project management and design engineering for over 20 reclamation projects and seven waterline feasibility studies. Being project manager, he will be the single point of contact for the AML staff and be responsible for all facets of the project.

Stacy A. Fowler, P.E., will assist with drainage and hydrology as needed. Mr. Fowler has over 15 years of engineering experience and a master's degree with specialization in water resources. His experience includes permit preparation, hydrologic and hydraulic studies, and waterline design.

Draftsmen

Don E. Parsons will perform drafting and CAD work on the project. Mr. Parsons has over 40 years of drafting and CAD experience and has performed or assisted with the drafting on all of our AML projects.

Kevin G. Smith is our AutoCAD Civil 3D specialist and will perform all modeling and 3D development of plans to enable profile and cross section plotting from the model. He will perform all earthwork quantity calculations. Mr. Smith has over 30 years of CAD experience and has worked on our last four AML reclamation projects.

While the above individuals comprise the main AML project team, other engineers, draftsmen, and technicians are available to assist as needed to maintain project schedule.

PROJECT MANAGEMENT PLAN

An organizational chart for this AML project is included to graphically depict Stafford Consultants' plans for management and reporting.

Because we take this work very seriously, we have placed Mr. C. Dean Upton, P.E., our President, in the direct line as principal in charge. This does not mean that the heavy cost of the firm's president will be born on a full time basis by the State of West Virginia; what this means is that no work will be submitted without review by Mr. Upton. Also, cost and schedules will be reviewed by Mr. Upton. Because of his strong qualifications in Quality Assurance/Constructability Review, Mr. Edward L. Shutt, P.E. will review all aspects of the project.

Mr. Kenneth R. Crowe, P.E. will manage the project on a day-to-day basis and have direct professional responsibility. Final approval of the project will be made only after review by both Mr. Shutt and Mr. Upton.

Experience has proven that not all projects can be controlled in the same manner. As a result of this experience, we employ several management systems such as CPM, GANTT, Bar Chart, and simple coordinate charts. Our personnel are trained and experienced in all of these methods, and we will use the method that is most practical and acceptable to the State.

A. Project Team

We have established a project team for this AML project which reflects the required technical expertise and available management time.

Once a scope of work and fees are agreed upon, we will prepare a Gantt Project Summary Report which identifies each activity (tasks) to be performed to achieve the project's objectives. This will identify who is responsible for the specific activity, starting and ending dates, manhours/expenses estimated (used), unit cost and total costs for each activity.

This Project Summary Report will be updated monthly to monitor task completion versus schedule and costs.

The information input for the Project Summary Chart will generate a Project Schedule Chart which will provide a bar chart over time for each activity to indicate actual or planned schedule, milestone, and the time increments.

We are experienced in management as indicated by our record of many successful construction projects. We are prepared to provide a Gantt report in as much detail as the Department of Environmental Protection may require. These reports will consist of

reports for construction progress, anticipated completion dates and milestones, cost control and a summary of problem areas with recommendations for solutions.

B. Location of Facilities

Stafford Consultants, Incorporated is located at 1105 Mercer Street, (P.O. Box 5849), Princeton, West Virginia. Our office is within easy driving distance to this project.

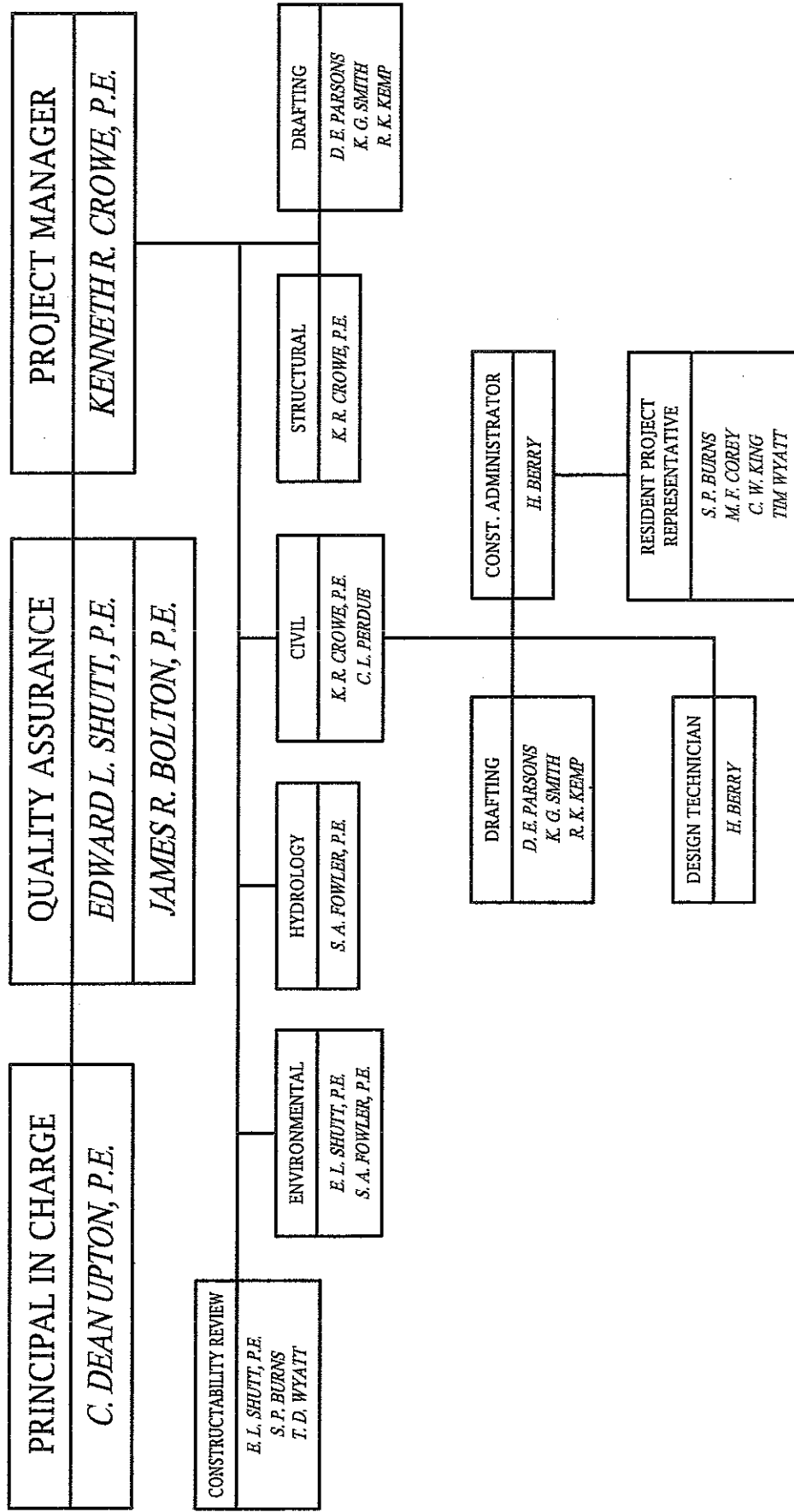
All work associated with AML projects will be performed in our office in Princeton, West Virginia. Work subcontracted to consultants will be performed in the following locations:

1. True Line, Inc. – Thorpe, WV (Surveying)
2. H. C. Nutting Company – Charleston, WV (Geotechnical)

DEPARTMENT OF ENVIRONMENTAL PROTECTION

ABANDONED MINE LANDS AND RECLAMATION

STAFFORD CONSULTANTS PROJECT TEAM



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AML CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE

PROJECT NAME Sugartree Branch Refuse Pile RFQ NO. DEP15233		DATE (DAY, MONTH, YEAR) 9, December, 2010		FEIN 55-0656181
1. FIRM NAME STAFFORD CONSULTANTS, INC.		2. HOME OFFICE BUSINESS ADDRESS P.O. Box 5849 Princeton, WV 24740		3. FORMER FIRM NAME Successors of Gates Engineering
4. HOME OFFICE TELEPHONE (304) 425-9555	5. ESTABLISHED (YEAR) 1985	6. TYPE OWNERSHIP Individual ☒ Partnership ☐ Corporation ☐ Joint-Venture ☐	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES ☐ NO ☒	
7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE P.O. Box 5849, Princeton, WV 24740 / 304/425-9555 / C. Dean Upton, P.E., President / 24				
8a. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM		8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS		
9. PERSONNEL BY DISCIPLINE				
3. ADMINISTRATIVE	ECOLOGISTS	LANDSCAPE ARCHITECTS	* STRUCTURAL ENGINEERS	
ARCHITECTS	ECONOMISTS	MECHANICAL ENGINEERS	* SURVEYORS	
BIOLOGISTS	ELECTRICAL ENGINEERS	MINING ENGINEERS	TRAFFIC ENGINEERS	
2. CADD OPERATORS	ENVIRONMENTALISTS	PHOTOGRAMMETRISTS	OTHER	
CHEMICAL ENGINEERS	ESTIMATORS	PLANNERS: URBAN / REGIONAL		
6. CIVIL ENGINEERS	GEOLOGISTS	1. SANITARY ENGINEERS		
8. CONSTRUCTION INSPECTORS	HISTORIANS	SOILS ENGINEERS		
4. DESIGNERS	* HYDROLOGISTS	** SPECIFICATION WRITERS	25. TOTAL PERSONNEL	
DRAFTSMEN				
TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 6				
* Structural Engineer and Hydrologist are also listed as a Civil Engineer. Professional Surveyor is also Sanitary Engineer.				
** Estimating and specification writing is performed by RPE's in firm.				
10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? YES NO				

12.	A. Is your firm experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering? YES Description and Number of Projects: <u>Landslide Correction (2), Burning Refuse Piles (2), Refuse Pile Reclamation (7),</u> <u>Shaft Sealing (1), Portal Sealing (5), Highwall Elimination (4)</u> NO
	B. Is your firm experienced in Soil Analysis? YES Description and Number of Projects: _____ _____
	NO Any soils parameters required will be determined by our geotechnical engineer, H. C. Nutting. C. Is your firm experienced in hydrology and hydraulics? YES <u>Bridge and dam hydraulics evaluation as related to design and permitting using HEC-RAS, HEC-1 and HEC-2. Storm runoff, drainage and</u> <u>pond design and routing using HydroCAD.</u> NO
	D. Does your firm produce its own Aerial Photography and Develop Contour Mapping? YES _____ NO Contour mapping will be developed in-house or by our surveyor, True Line, Inc.
	E. 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 <u>Over 50 water distribution and treatment projects throughout West Virginia, with one being a treatment plant at Danese PSD for AML.</u> <u>Seven studies of water quality and mining practices to determine adverse affect of mining on supply an quality: Maplewood, Summersville</u> <u>(Rt. 39), Mod-Mahan, Keystone (Rt. 52), and three in McDowell County PSD served areas. We provided design, construction administration</u> <u>and resident project representation for the AML funded New Haven PSD project, the McDowell County PSD project, and the Windmill Gap</u> <u>waterline project</u> NO
	F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design? YES Description and Number of Projects: <u>Heizer Creek "A", severe acid mine drainage isolation and collection. Mason County Bond</u> <u>Forfeiture, acid mine drainage collection and treatment with a biological wetland. (Wetland planned but not constructed)</u> NO

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Upton, C. Dean President		YEARS OF AML DESIGN EXPERIENCE: 9	YEARS OF AML RELATED DESIGN EXPERIENCE: 37
YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 37			
Brief Explanation of Responsibilities			
Mr. Upton is President of Stafford Consultants. As principal in charge, he monitors the planning, design, construction and financing of all projects. He designs and supervises public works projects such as water and wastewater systems and treatment plants, industrial parks, airports, dams, storm drainage, community planning and athletic and recreational projects. His management experience consists of design and construction projects such as large water and wastewater collection and treatment facilities. His design experience is primarily related to sanitary projects. However, he is experienced in all areas of civil engineering.			
EDUCATION (Degree, Year, Specialization)			
BS / 1973 / Civil Engineering / Marshall University			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			
National Society of Professional Engineers, Past President, West Virginia Society of Professional Engineers			
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Shutt, Edward L. Vice President		YEARS OF AML DESIGN EXPERIENCE: 25	YEARS OF AML RELATED DESIGN EXPERIENCE: 42
YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 42			
Brief Explanation of Responsibilities			
Mr. Shutt is the Chief Environmental Engineer and is responsible for all water and wastewater projects and quality assurance. As a principal of the firm, he is the Chief Operations Officer. Some of Mr. Shutt's projects include design and construction administration of wastewater treatment plants, lift stations and sewage collection systems, design of water treatment plants, distribution systems and storage tanks. Project manager for AML funded water projects in Windmill Gap in Mercer County, New Haven PSD in Fayette County and Glade Creek in Nicholas County. He has served as an expert witness concerning construction claims, change orders and engineering standards of practice. He was project manager for a WVDoH highway project. He has provided quality assurance and constructability reviews of AML projects.			
EDUCATION (Degree, Year, Specialization)			
BS / 1969 / Civil Engineering / Virginia Polytechnic Institute 1974-75 / Sanitary Engineering / Virginia Polytechnic Institute			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS			
National Society of Professional Engineers, American Water Works Association, WV Land Surveyors Assoc., WV Society of Professional Engineers, WV Rural Water Assoc.		REGISTRATION (Type, Year, State) Sanitary/1977/WV PLS/1996/WV	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Crowe, Kenneth R. Chief Structural Engineer	25	34	0
Brief Explanation of Responsibilities			
Mr. Crowe is responsible for all structural and roadway design required for bridge and highway projects. He has been project manager and chief designer for all 20 AML projects Stafford Consultants has completed. In addition, he performed all structural design for the \$6 million Merriman Athletic Facility at Virginia Tech, structural design for the private box additions to WVU football stadium and structural design of the Chuck Mathena Center for the Performing Arts in Princeton.			
EDUCATION (Degree, Year, Specialization)			
BS / 1976 / Civil Engineering / West Virginia Institute of Technology			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
Tau Beta Pi		Civil/1980/WV Civil/1981/VA Civil/1982/KY	
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Fowler, Stacy A.	1	15	14
Brief Explanation of Responsibilities			
Mr. Fowler's primary responsibility is design and project management for water and wastewater facilities. He has experience and educational training with Hydrology. He provides assistance with permitting and quality assurance reviews.			
EDUCATION (Degree, Year, Specialization)			
MS / 2007/ Civil Engineering / University of Central Florida; BS / 1995 / Civil Engineering Technology / Bluefield State College			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
National Society of Professional Engineers		Civil/2002/WV Civil/2007/FL	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.) Parsons, Don E. CADD Operator	YEARS OF AML DESIGN EXPERIENCE: 12	YEARS OF AML RELATED DESIGN EXPERIENCE: 17	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0
Brief Explanation of Responsibilities Mr. Parsons is our Chief Draftsman and primarily performs CADD work on bridge and roadway projects. He has also does CADD work on water and sewer treatment plants, buildings and airports.			
EDUCATION (Degree, Year, Specialization) Tazewell High School; Tazewell, VA/1968 Woodrow Wilson Rehabilitation Center; Fishersville, VA /1970 (School of Drafting – Technology) – Diploma			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.) Smith, Kevin G. CADD Operator	YEARS OF AML DESIGN EXPERIENCE: 4	YEARS OF AML RELATED DESIGN EXPERIENCE: 30	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 20
Brief Explanation of Responsibilities Mr. Smith presently assists in the roadway design/grading required for industrial parks, bridge and highway projects. He has experience in earthwork calculations and drainage runoff and facility design. He is an advanced CADD operator and very knowledgeable in the usage of InRoads SelectCAD and AutoCAD Civil 3D, advanced 3D earthwork modeling programs primarily used for roadway design, but applicable to any project with cut and fill work.			
EDUCATION (Degree, Year, Specialization) Certificate for Civil Technology I and II/1979/Raleigh County Vocational Education Center			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.) Kemp, Reggie K. CADD Operator	YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 16	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 14
	Brief Explanation of Responsibilities Mr. Kemp primarily performs CADD work on water and wastewater projects.		
EDUCATION (Degree, Year, Specialization) AAS/1987/Wytheville Community College/Mechanical and Machine Drafting			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.) Wyatt, Timothy D. Resident Project Representative	YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 30	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 34
	Brief Explanation of Responsibilities Mr. Wyatt presently serves as a resident project representative overseeing water projects including line installation, tank installation and treatment plant construction. He has served as a superintendent for an earthmoving contractor and has performed permitting of mining facilities.		
EDUCATION (Degree, Year, Specialization) AS/1977/Civil and Mining Engineering Technology/Bluefield State College			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.) Berry, Howard Designer/Contract Administrator	YEARS OF AML DESIGN EXPERIENCE: 12	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 28	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 28
Brief Explanation of Responsibilities Mr. Berry primarily assists in water and wastewater project design including line layout, quantity calculations, permitting and CADD work. In addition he has extensive experience in contract administration including change orders, processing pay requests, substantial and final completion inspections and project closeout. He also has several years experience as a resident project representative on both water and wastewater projects.			
EDUCATION (Degree, Year, Specialization) BA/1994/West Virginia Institute of Technology AS/1980/Mining Technology/Beckley College			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.) Burns, Sidney P. Sr. Resident Project Representative	YEARS OF AML DESIGN EXPERIENCE: 25	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 52	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 31
Brief Explanation of Responsibilities Mr. Burns presently serves as a senior resident project representative overseeing water projects including line installation, tank installation and treatment plant construction. These include current AML funded water facilities in Nicholas County. As an inspection supervisor with the WVDoH he worked on several sections of I-64, I-77 and Corridor L.			
EDUCATION (Degree, Year, Specialization) 1958/Diploma/Greenbrier High School			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State)	

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

Leitz Set 4 total station with Carlson Explorer data collector.

AutoCAD Civil 2010 and AutoCAD Civil 3D 2010 -- General drafting and earthwork modeling software.

HEC-RAS -- US Army Corps of Engineers River Analysis System. Used for channel relocation or design.

HEC-1 and 2 -- US Army Corps of Engineers Flood Hydrograph and Water Surface Profile programs.

HYDRAIN -- FHWA family of hydraulics programs. Includes runoff calculations, pipe sizing, etc.

WinTR-55 -- USDA Small Watershed Hydrology software.

EXCEL & WORD -- Industry standard spreadsheet and word processing software.

WaterCAD -- Waterline Design and Analysis software

HydroCAD -- Surface runoff calculations and pond and retention structure analysis.

RETWALL, FOOTING, BeamPro, General Frame Analysis, etc. -- Various structural design programs.

HP Plotters -- HP800 and HP2800 for final tracing plotting on paper, vellum or film.

Oce TDS320 plotter and scanner system.

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Jumping Branch/Nimitz PSD Madams Creek Water Project Summers County, WV	Jumping Branch/Nimitz PSD P.O. Box 69 Nimitz, WV 25978	Report - Preliminary Engineering Report	N/A	Report - 95%
Oakvale Road Public Service District South Eastern Mercer Water Study Mercer County, WV	Oakvale Road PSD P.O. Box 1061 Princeton, WV 24740	Report, Design, Construction Administration & Resident Project Representation	\$5,500,000	Design - 90%
City of Summersville Glade Ck - Phase IIA Waterline Nicholas County, WV	City of Summersville P.O. Box 525 Summersville, WV 26651	Report, Design, Construction Administration & Resident Project Representation	\$5,000,000	Construction - 95%
City of Summersville Glade Ck - Phase IIB Waterline Nicholas County, WV	City of Summersville P.O. Box 525 Summersville, WV 26651	Report, Design, Construction Administration & Resident Project Representation	\$4,500,000	Design - 5%
New Haven PSD Contracts 15/16 Water Fayette County, WV	New Haven PSD Route 1, Box 123C Fayetteville, WV 25840	Report, Design, Construction Administration & Resident Project Representation	\$3,200,000	Construction - 60%
Town of Alderson Water System Greenbrier County, WV	Town of Alderson P.O. Box 179 Alderson, WV 24910	Report, Design, Construction Administration & Resident Project Representation	\$1,000,000	Design - 10%
McDowell County PSD Coalwood Wastewater Treatment & Collection System McDowell County, WV	McDowell County PSD HC 31 Box 436 J Welch, WV 24801	Report, Design, Construction Administration & Resident Project Representation	\$3,825,000	Study - 100%
Big Bend PSD Ballangee, Barger Springs & Forest Hill Water System Summers County, WV	Big Bend PSD P.O. Box 114 Talcott, WV 24981	Report and Study	\$4,300,000	Report - 100%
Coalfields Expressway Highway & Bridge Design McDowell County, WV	WV Division of Highways Building 5, Room A317 1900 Kanawha Boulevard E. Charleston, WV 25305	Design and preparation of contract documents for 5.25 miles of four-lane highway including two bridges and two access roads.	\$150,000,000	Design - 80%
City of Princeton Wastewater Treatment Plant Expansion Princeton, WV	Princeton Sanitary Board 227 South Wickham Avenue Princeton, WV 24740	Design and preparation of contract documents needed to expand existing aeration capacity and construct additional aerobic digester.	\$10,000,000	Design - 100%
Glade Springs Utilities, East 2010 Beckley, WV	Cooper Land Development 903 North 47 th Street Rogers, AR 72756	Design and preparation of Contract Documents for waterline construction.	\$1,500,000	Design - 90%

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Big Bend PSD Armory/Wiggins Water Summers County, WV	Big Bend PSD P.O. Box 114 Talcott, WV 24981	Plan, Design and Construction phase engineering for waterline extension.	\$1,000,000	Design -- 30%
Town of Pineville Water Extension Pineville, WV	Town of Pineville P.O. Box 220 Pineville, WV 24874	Report, Design, Construction Administration & Resident Project Representation	N/A	Report Study
Logan County PSD Anchor Road Water Logan/Boone Counties, WV	Logan County PSD P.O. Box 506 Logan, WV 25601	Report, Design, Construction Administration & Resident Project Representation	\$2,000,000	Design -- 100%
Meadow Bridge Wastewater Improvements Meadow Bridge, WV	Town of Meadow Bridge P.O. Box 8 Meadow Bridge, WV 25976	Report, Design, Construction Administration & Resident Project Representation	\$1,000,000	Design -- 30%
Town of Rainelle Water System Improvements Rainelle, WV	Town of Rainelle P.O. Box 648 Rainelle, WV 25962	Report, Design, Construction Administration & Resident Project Representation	\$6,000,000	Report -- 100%
City of Hinton Brooks/Barksdale Hinton, WV	City of Hinton 322 Summers Street Hinton, WV 25951	Report, Design, Construction Administration & Resident Project Representation	\$4,000,000	Design -- 100%
City of Hinton Gold Coast Sewer Hinton, WV	City of Hinton 322 Summers Street Hinton, WV 25951	Report, Design, Construction Administration & Resident Project Representation	\$1,400,000	Construction -- 95%
TOTAL NUMBER OF PROJECTS: 18		TOTAL ESTIMATED CONSTRUCTION COSTS:		\$204,225,000

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRM'S RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
Epic Event Center Mercer County, WV	Feasibility Study – Site Civil and Utilities	City of Princeton 100 Courthouse Road Princeton, WV 24740	June 2011	\$60,000,000	\$20,000,000
New Weirton Elem. School Weirton, WV	Site Civil for new school	Hancock County Schools Weirton, WV	May 2013	\$26,630,000	\$4,000,000
Oak Glen High School New Manchester, WV	Site Civil for Multi-Sports Stadium	Hancock County Schools Weirton, WV	April 2010	\$4,600,000	\$1,000,000
Weir High School Weirton, WV	Site Civil for Multi-Sports Stadium	Hancock County Schools Weirton, WV	April 2012	\$4,800,000	\$1,000,000
Mercer County Health Center Mercer County, WV	Site Civil for new building	Mercer County Commission Princeton, WV	November 2011	\$2,800,000	\$400,000
Cameron High School Cameron, WV	Site Civil for new school	Marshall County Schools Moundsville, WV	April 2012	\$25,000,000	\$1,700,000

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOU WERE THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Weight Training Facility Marshall University Huntington, WV	Marshall University Sorrell Maintenance Building 20 th Street Huntington, WV 25755	\$2,900,000	2006	Yes
Chapmanville High School Site Development Logan County, WV	Logan Co. Board of Education Logan, WV 25601	\$150,000	2006	Yes
Oakvale Road PSD Pisgah Road - Elgood Water Extension Project Mercer County, WV	Mercer County Commission 1501 W. Main Street Princeton, WV 24740	\$800,000	2006	Yes
Center PSD WWTP Improvements Wyoming County, WV	Center PSD P.O. Box 760 Pineville, WV 24874	\$200,000	2006	Yes
Logan County PSD Caney-Rocky Waterline Extension Project Logan County, WV	Logan County PSD P.O. Box 506 Logan, WV 25601	\$2,000,000	2006	Yes
City of Princeton Various Sidewalk Projects Mercer County, WV	City of Princeton 100 Courthouse Road Princeton, WV 24740	\$350,000	2005-2007	On going
City of Welch Tom's Mountain Water/Sewer McDowell County, WV	City of Welch 88 Howard Street Welch, WV 24901	\$2,300,000	2007	Yes
Glade Springs Village - West Water & Sewer Raleigh County, WV	Cooper Land Development 903 North 47 th Street Rogers, AR 72756	\$2,000,000	2007	Yes
Paradise Park Grading and Utilities Princeton, WV	P&G Hospitality, LLC P.O. Box 1715 Princeton, WV 24740	\$500,000	2007	Yes
Welch Sewer Improvements Welch, WV	City of Welch 88 Howard Street Welch, WV 24801	\$1,000,000	2007	Yes
McDowell County PSD Jaeger Water System Replacement McDowell County, WV	McDowell County PSD HC 31 Box 436 J Welch, WV 24801	\$2,800,000	2008	Yes

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOU WERE THE DESIGNATED ENGINEER OF RECORD				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Rolfe Arch Bridge Bridge Replacement Project Rolfe, McDowell County, WV	WV Division of Highways Building 5, Room A317 1900 Kanawha Boulevard E. Charleston, WV 25305	\$900,000	2008	Yes
Glade Springs Utilities Beckley, WV	Cooper Land Development, Inc. 903 North 47 th Street Rogers, AR 72756	\$8,000,000	2009	Yes
Logan County Public Service District North Fork Water Logan County, WV	Logan County PSD P.O. Box 506 Logan, WV 25601	\$2,000,000	2009	Yes
McDowell County PSD Jaeger Water System McDowell County, WV	McDowell County PSD HC 31 Box 436J Welch, WV 24801	\$2,800,000	2009	Yes
Crescent Hospitality Microtel Site Work Mercer County, WV	Mr. Khalid Durrani 216 Third Street St. Marys, WV 26170	\$50,000	2009	Yes
P & G Hospitality Country Inn Suites Site Work Mercer County, WV	P&G Hospitality – Maresh Gadhia P.O. Box 1715 Princeton, WV 24740	\$100,000	2009	Yes
Cass Arch Bridge Bridge Replacement Project Pocahontas County	WV Division of Highways Building 5, Room A317 1900 Kanawha Boulevard E. Charleston, WV 25305	\$1,700,000	2009	Yes
City of Welch Indian Ridge/Industrial Park McDowell County, WV	City of Welch 88 Howard Street Welch, WV 24901	\$6,800,000	2010	Yes
Logan County PSD Phase IIA Sewer Logan County, WV	Logan County PSD P.O. Box 506 Logan, WV 25601	\$6,000,000	2010	Yes
Town of Renick / Falling Springs Renick Water System Greenbrier County, WV	Falling Springs Corporation P.O. Box 116 Renick, WV 24966	\$2,400,000	2010	Yes
City of Welch Sewer Improvements – Contract 7C McDowell County, WV	City of Welch 88 Howard Street Welch, WV 24801	\$1,000,000	2010	Yes

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)						
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH	
Hilltop Elementary School Sherrard, WV	Marshall County Schools Moundsville, WV	\$1,500,000	2009	Yes	McKinley & Assoc.	
Wheeling Park High School Road Relocation Wheeling, WV	Ohio County Schools Wheeling	\$1,000,000	2009	Yes	McKinley & Assoc.	
Field of Dreams - Oak Glen High School New Manchester, WV	Hancock County Schools Weirton, WV	\$800,000	2008	Yes	McKinley & Assoc.	
Williamstown High School Site Civil Work Williamstown, WV	Wood County Schools Parkersburg, WV	\$600,000	2007	Yes	McKinley & Assoc.	
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. Stafford Consultants has extensive experience in performing site regrading and reclamation of refuse disposal areas, having successfully completed ten such projects for the DEP, Office of AML. All of these projects also included drainage improvements and/or control and several also included demolition of ancillary structures. Our staff is experienced in AML design and plan preparation and look forward to continuing performing this valuable service for the Office of AML.						
20. The foregoing is a statement of facts. Signature: <u>C. Dean Upton</u> Title: <u>President</u> Date: <u>December 9, 2010</u> Printed Name: <u>C. Dean Upton, P.E.</u>						

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AML CONSULTANT QUALIFICATION QUESTIONNAIRE				Attachment "B"	
PROJECT NAME Sugartree Branch Refuse Pile RFQ DEP15233		DATE (DAY, MONTH, YEAR) 9, December, 2010		FEIN 31-0394550	
1. FIRM NAME H. C. Nutting A Terracon Company		2. HOME OFFICE BUSINESS ADDRESS 611 Lunken Park Drive, Cincinnati, OH 45226		3. FORMER FIRM NAME	
4. HOME OFFICE TELEPHONE 513.321.5816		5. ESTABLISHED (YEAR) 1921		6. TYPE OWNERSHIP Individual Partnership Joint-Venture Corporation	
				6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) YES NO	
7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE PRIMARY AML DESIGN OFFICE: 912 Morris Street, Charleston, WV 25301 / 304.344.8021 / John Blair / 38 ALL OTHER H.C. NUTTING/TERRACON OFFICES: 611 Lunken Park Drive, Cincinnati, OH 45226 / 513.321.5816 / Jess A. Schroeder / 101 790 Morrison Road, Columbus, OH 43230 / 614.863.3113 / Prasad Rege / 32 349 Walnut Street, Suite 8, Lawrenceburg, IN 47025 / 812.539.4300 / Fred Erdmann / 1 470-B Conway Court, Suite B-8, Lexington, KY 40511 / 859.455.8530 / Jess A. Schroeder / 9 1414 E Schaaf Rd, Brooklyn Heights, OH 44131 / 216.459.8378 / Jim Prinic / 20					
8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM R. Jackson Scott, James P. Cahill, Jess A. Schroeder, George C. Webb, Ronald J. Ebelhar, Swaminathan Srinivasan, Terry Stransky, Jason Sander, Ron Lech		8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS			
9. PERSONNEL BY DISCIPLINE					
12 ADMINISTRATIVE		— ECOLOGISTS		— LANDSCAPE ARCHITECTS	
— ARCHITECTS		— ECONOMISTS		— MECHANICAL ENGINEERS	
— BIOLOGIST		— ELECTRICAL ENGINEERS		1 MINING ENGINEERS	
2 CADD OPERATORS		6 ENVIRONMENTALISTS		— PHOTOGRAMMETRISTS	
— CHEMICAL ENGINEERS		— ESTIMATORS		— PLANNERS: URBAN/REGIONAL	
8 CIVIL ENGINEERS		3 GEOLOGISTS		— SANITARY ENGINEERS	
107 CONSTRUCTION		— HISTORIANS		41 SOILS ENGINEERS	
INSPECTORS		4 HYDROLOGISTS		— SPECIFICATION	
— DESIGNERS				WRITERS	
1 DRAFTSMEN				201 TOTAL PERSONNEL	
TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 3					
*RPES other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.					
10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? ☐ YES ☐ NO					

12.	A.	Is your firm experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?
	X	YES Description and Number of Projects: HCN has extensive experience on site grading and landslide repair projects, many of them associated with AML projects. HCN routinely performs mine subsidence investigations for the Ohio Mine Subsidence Insurance Underwriting Association, and has designed several mine grouting programs to mitigate the effects of future mine subsidence in Kentucky, Ohio and West Virginia.
	B.	Is your firm experienced in Soil Analysis?
	X	YES Description and Number of Projects: Over 80 years experience on thousands of projects in Geotechnical, Environmental and Materials Engineering.
		NO
	C.	Is your firm experienced in hydrology and hydraulics?
	X	YES Description and Number of Projects: Commercial, industrial, and residential storm water drainage projects for landfill development and closure, dam/lake spillway structures, site development drainage design, erosion and sediment control, stormwater pollution prevention plans. Dam spillway structures.
		NO
	D.	Does your firm produce its own Aerial Photography and Develop Contour Mapping?
		YES Description and Number of Projects: _____

	X	NO
	E.	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: _____

	X	NO
	F.	Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?
		YES Description and Number of Projects: _____

	X	NO

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Bruce, Rome E.	0	30	0
Brief Explanation of Responsibilities Responsibilities include conceptual and final design, report and drawing preparation, development of construction specifications, construction bidding and contract documents, coordination and management of construction observation, volume and cost estimate calculations, hydrologic analysis, and hydraulic analysis of drainage channels, spillways, and detention ponds.			
EDUCATION (Degree, Year, Specialization) Bachelor of Science, CEE, University of Wisconsin-Madison 1979 A.A.S., Civil, Gateway Technical Institute, Racine, WI 1974			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS American Society of Civil Engineers Solid Waste Assoc. of North America		REGISTRATION (Type, Year, State) Professional Engineer in Indiana 1991, Kentucky 1995, Michigan 1988, Ohio 1988, and Wisconsin 1982	
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.)	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Erdmann, Fred W.	1	42	0
Brief Explanation of Responsibilities Senior Consultant West Virginia Experience in Mining Engineering, Geotechnical Engineering, Groundwater Engineering, and Waste Management.			
EDUCATION (Degree, Year, Specialization) B.S., 1967, Geological Engineering M.S., 1971, Geological Engineering			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS Association of Engineering Geologists American Institute of Professional Geologists		REGISTRATION (Type, Year, State) P.E., 1982, West Virginia/P.E., 1982, Ohio/P.E., 1989, Florida/P.E., 1982, Kentucky/P.E., 1990, Pennsylvania/P.E., 1990, Indiana/P.G., 1993, Kentucky/P.E., 1982, Missouri/P.G., 1988, Tennessee	

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

AutoCAD 2007 / Land Development Desktop

Microstation Version 8

Microsoft 2003 Office Suite – (Word, Excel, Access, PowerPoint, Publisher)

Slope Stability Analyses (Visual Slope, STABL, ReSLOPE, etc.)

SHAKE2000 – Seismic Site Response Analyses

PLAXIS – Finite Element Analysis Software

AutoCAD Workstations (4)

Desktop Computers (100+)

Laptop Computers (200+)

Laser Printers (50)

Plotters – HP750C (Color) (3) OCE TDS450 Plotter – Large Format Flat Bed Scanner (1 ea.)

FLAC 3D Finite Difference Analysis Software

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
US 65 Iowa Falls Bridge	Iowa Department of Transportation	Retaining Wall Design	2M	0%

TOTAL NUMBER OF PROJECTS: 1

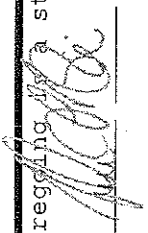
TOTAL ESTIMATED CONSTRUCTION COSTS: \$2M

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
Coalfields Expressway, Helen, WV	Geotechnical Engineering Analysis and Design	WVDOH, M. C. S & T		Unknown	\$29,000
Appalachian Corridor H - Section 6, Moorefield, WV	Geotechnical Engineering Analysis and Design	WVDOH c/o Michael Baker, Jr., Inc.		Unknown	\$14,000
Corridor H - Bismarck to Forman Section, Bismarck, WV	Geotechnical Engineering Analysis and Design	WVDOH c/o Chapman Technical Group		Unknown	\$14,000
Corridor H Bismarck RTO Form, Grant County, WV	Geotechnical Engineering Analysis and Design	WVDOH C/O Buchart Horn, Inc.		Unknown	\$150,000
Six Proposed Design Build Bridges, Charleston, WV	Geotechnical Engineering Analysis and Design	WVDOH c/o Wilbur Smith Associates		Unknown	\$30,000
WV 10 - Dabney to Stollings, Dabney, WV	Geotechnical Engineering Analysis and Design	WVDOH C/O Chapman Technical Group		Unknown	\$97,000
South Branch Bridge Abutment 1 Slope Protection, Moorefield, WV	Geotechnical Engineering Analysis and Design	WVDOH C/O Michael Baker, Jr., Inc.		Unknown	\$23,000

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)
Proposed New Dormitories, Mine Subsidence Assessment and Grouting Specifications	Hocking College, Nelsonville, Ohio	\$110K	2006	Yes
Mine Grouting Specifications for the Proposed Marion County 911 Building, Fairmont, WV	WVDOH C/O Burgess & Niple 4424 Emerson Avenue Parkersburg, West Virginia 26104	Unknown	2006	No
Ventilation Tunnel Remediation and Sealing, Marathon Fuel Terminal, Covington, KY	Marathon Petroleum, LLC Finlay, Ohio	Unknown	2006	Yes
Mine Subsidence Assessment, Melody Mountain Development Project, Ashland, KY	R.G. Properties 8163 Old Yankee Road Suite B Dayton, Ohio 45458	\$200K	2006	No
Peoples Bank of Mullens, Mine Subsidence Assessment and Preparation of Grouting Specifications	Peoples Bank of Mullens P.O. Box 817 Mullens, WV 25882	Unknown	2007	No
James Rumsey Potomac River Bridge Shepherdstown, West Virginia and Sharpsburg, Maryland	West Virginia DOT	\$600K	2006	Yes
St. Anthony Falls I-35W Bridge St. Anthony Falls, Minnesota	Minnesota DOT	\$40,000	2007	Yes

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)						
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH	
McComas AML Coal Mine Refuse Pile Mercer County, West VA	West Virginia Office of Abandoned Mined Lands and Reclamation.	\$28,000	2008	Yes	Stafford Consultants Incorporated, Princeton, WV	
Mine Subsidence Assessment, Mountain View High School Addition, Welch, WV	Mountain View High School	Unknown	2006	Yes	ZMM, Inc.	
Highwall Stability Assessment and Rock Fall Protection Design, Welch, WV	U.S. Bureau of Prisons	\$172K	2006	Yes	DMJM Harris	
Stabilization of Mine Spoil by Dynamic Compaction for Substations and Transmission Towers.	GenPower Longview Power Project Maidville, WV and Dunkard, PA	Unknown	2006	Not Yet	Beta Engineering	
Marnet Locks and Dam Construction Belle, West Virginia	USACE	\$100K	2008	Yes	Kokosing Fru-Con	
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.						
20. The foregoing is a statement of facts.						
Signature: 					Date: December 9, 2010	
Printed Name: John T. Blair						

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AML CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE			
PROJECT NAME Sugartree Branch Refuse Pile RFQ No. DEPI5233		DATE (DAY, MONTH, YEAR) 9, December, 2010	FEIN 55-0651663
1. FIRM NAME True Line, Inc.		2. HOME OFFICE BUSINESS ADDRESS P. O. Box 85, Rt. 103 Thorpe, WV 24888	3. FORMER FIRM NAME None
4. HOME OFFICE TELEPHONE (304) 448-2116	5. ESTABLISHED (YEAR) 1985	6. TYPE OWNERSHIP Individual Partnership	6a. WV REGISTERED DBE (Disadvantaged Business Enterprise) NO
7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE P.O. Box 85, Thorpe, WV 24888 / 304-448-2116 / Dwight Gillespie / Surveying only			
8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM Dwight Gillespie - President Vera Gillespie - Secretary & Treasurer 8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS John E. Caffrey, P.E. & PLS James H. Corner, EIT & PLS Stacey B. Mullens, P. E.			
9. PERSONNEL BY DISCIPLINE (Bold Lettering Indicates Minimum Design Team Members)			
— ADMINISTRATIVE — ARCHITECTS — BIOLOGISTS — 6 CADD OPERATORS — CHEMICAL ENGINEERS — 1 CIVIL ENGINEERS — CONSTRUCTION INSPECTORS — DESIGNERS — DRAFTSMEN	— ECOLOGISTS — ECONOMISTS — ELECTRICAL ENGINEERS — ENVIRONMENTALISTS — ESTIMATORS — GEOLOGISTS — HISTORIANS — HYDROLOGISTS	— LANDSCAPE ARCHITECTS — MECHANICAL ENGINEERS — 2 MINING ENGINEERS — PHOTOGRAMMETRISTS — PLANNERS: URBAN / REGIONAL — SANITARY ENGINEERS — SOILS ENGINEERS — SPECIFICATION WRITERS	— STRUCTURAL ENGINEERS — 2 SURVEYORS — TRAFFIC ENGINEERS — OTHER — — 25 TOTAL PERSONNEL
TOTAL NUMBER OF WV 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.			
None			
10. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? YES			

12.	A. Is your firm experienced in Abandoned Mine Lands Remediation/Mine Reclamation Engineering?	YES Description and Number of Projects: _____	Surveying only
		NO	
	B. Is your firm experienced in Soil Analysis?	YES Description and Number of Projects: _____	Surveying only
		NO	
	C. Is your firm experienced in hydrology and hydraulics?	YES _____	Surveying only
		NO	
	D. Does your firm produce its own Aerial Photography and Develop Contour Mapping?	YES _____	Surveying and Contour Mapping
		NO	
	E. 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 _____	Surveying only
		NO	
	F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?	YES Description and Number of Projects: _____	Surveying only
		NO	

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
James H. Corner		YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 6
Brief Explanation of Responsibilities Plot Surveys Produce Site plans Overburden calculations Hydrologic designs		Property Plats Gas Well Plats	
EDUCATION (Degree, Year, Specialization) B.S. Civil Engineering (Graduation Dec. 2004) B. S. Mining Engineering (Graduation Dec. 2006)			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS WV Secretary of Professional Surveyors		REGISTRATION (Type, Year, State) Professional Surveyor (2006) WV# 213750 Engineer Intern (2004) WV# 8649	
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.)		YEARS OF EXPERIENCE	
Stacey B. Mullens		YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 17
Brief Explanation of Responsibilities Plot Surveys Produce Site plans Overburden calculations Hydrologic designs		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0	
EDUCATION (Degree, Year, Specialization) B.S. Civil Engineering (Graduation 1995) B. S. Mining Engineering (Graduation 2007)			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS None		REGISTRATION (Type, Year, State) Professional Engineer (2002) WV# 15423 Professional Engineer (2003) VA# 039682	

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

Leica Single Frequency GPS System

Sokkia Set 610 Total Station

Sokkia Set 630R Total Station

Sokkia Set 4B Total Station

Carlson Explorer Data Collector (SurvCE 2.0 software)

HP 48 / SMI Data Collector (version 5.0 software)

AutoCAD 2005

SurvCADD 2006 for Auto CAD (COGO, DTM, Profile & Mining Modules)

SKI GPS Post Processing Software

SEDCAD 4.0

Corpscon 6 (Coordinate Conversion Software)

15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD

[illegible]

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A SUB-CONSULTANT TO OTHERS					
PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRM'S RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
Bradshaw School / Road Re-location		Potesta & Associates, Inc. 7012 MacCorkle Ave., S.E. Charleston, WV 25304	11/01/07		Project Oversight
City of Welch water tank site		Clark Construction Group 101 Federal Drive Welch, WV 24801	2007		Surveying

[illegible]

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
Toms Mountain Wastewater Collection system extension project	Stafford Consulting P. O. Box 5849 Princeton, WV 24740		2005		Surveying
Layout weight room at Marshall University	Stafford Consulting P. O. Box 5849 Princeton, WV 24740		2005		Surveying
Logan County PSD, Phase II	Stafford Consulting P. O. Box 5849 Princeton, WV 24740		2006		Surveying
Logan County PSD, North Fork Water distribution System extension	Stafford Consulting P. O. Box 5849 Princeton, WV 24740		2007		Surveying

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.

True Line, Inc. has been providing surveying, mapping, site design and permit surface coal mining applications for operations in McDowell and Wyoming counties since 1985. The applications include overburden balance and storage areas, ditch and culvert designs, sediment structure designs and final reclamation plans.

True Line, Inc. has also provided pre-surveying and post surveying services and mapping for several companies that have been awarded contracts to complete AML projects in southern West Virginia for over ten years.

20. The foregoing is a statement of facts.

Signature: Dwight Gillespie Title: President

Printed Name: Dwight Gillespie

Date: December 9, 2010

AML and RELATED PROJECT EXPERIENCE MATRIX

PROJECT	Exp. Basis C=Corp P=Personal *	Additional Info Provided in Section(s) **	PROJECT EXPERIENCE REQUIREMENTS													PRIMARY STAFF PARTICIPATION/CAPACITY *** M=Management P=Professional				
			Abandoned Surface Mine Reclamation	Abandoned Deep Mine Reclamation	Portal/Shaft Closure	Hydrologic/Hydraulic Design/Evaluation	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation/ Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/ Mitigation/Replacement	Constuction Inspection/ Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	C. Dean Upton, P.E.	Edward L. Shutt, P.E.	Kenneth R. Crowe, P.E.
Williamson Nursing Home Slide	C	19	X	X	X							X	X	X		X		P	P	
Mason County Bond Forfeiture	C	19	X	X	X	X							X	X				P	P	
Weyanoke Portals	C	19	X	X	X									X				P	P	
Sarah Ann Drainage	C	19	X	X	X									X				P	P	
Heizer Creek "A"	C	19	X	X	X	X							X					P	P	P
Canebrake Complex	C	19	X	X	X				X				X			X		P	P	
Millersville Road Refuse	C	19	X	X	X													P	P	
Millburn Red Dog	C	19						X								X		P	P	
Charleston Portals	C	19	X	X	X											X		P	P	
Mill Branch Refuse	C	19													X			P	P	
Ameagle Complex	C	19											X					P	P	
Cabin Branch Refuse	C	19														X		P	P	
Shoemaker Landslide	C	19														X			P	
Birds Creek Refuse	C	19	X	X	X														P	
Kermit (Hatcher) Drainage	C	19																	P	
Maplewood Study	C	19											X						P	
Summersville (Rt 39) Study	C	19											X						P	
Mod-Mahan Study	C	19											X					P	P	
Danese Water Treatment Plant	C	19											X					P		P
Blue Pennant Complex	C	19	X	X	X		X						X			X		P	P	
Keystone (US 52) Study	C	19											X				M	P	P	
New Haven PSD	C	19											X	X						
McDowell PSD	C	19											X	X			P	M/P		M/P
Logan County PSD	C	19											X	X			P			M
McComas Refuse	C	19			X											X	M		P	
McDowell County Feasibility Studies	C	19															M	P	P	
Thompson, Young, & Crespo Drainage	C	19			X											X	M		P	

* List whether project experience is corporate or personal based or both.
 *** List Primary Design personnel and their functional capacity for the projects listed.
 ** Use this area to provide specific sections or pages if needed for reference.

ABANDONED MINE LANDS EXPERIENCE

Stafford Consultants has performed Engineering and Design for twenty four (24) projects for the West Virginia Department of Environmental Protection – Office of Abandoned Mine Lands and Reclamation. Each design was delivered on schedule and within budget. These projects are as follows:

- 1) **Williamson Nursing Home Slide** (Mingo County): This project consisted of corrections to a major slide that was endangering the building and parking lot at the Williamson Nursing Home. Stafford provided subsurface investigations, preparation of contract plans and specifications, and construction inspection.
- 2) **Mason County Bond Forfeiture**: This project involved several areas of unreclaimed highwalls, spoil piles, and mine portals. While not constructed, the design contained relocation of a large pond and treating acid mine drainage by the use of a biological wetland, planted with specialized plants. This project was extensive in nature and size.
- 3) **Weyanoke Portals** (Mercer County): This project consisted of sealing existing portals and providing for draining which was being used for a water supply. This project involved both dry and wet seals, and was constructed within budget and on time.
- 4) **Sarah Ann Drainage** (Logan County): This project consisted of elimination of several highwalls, a refuse pile, entries, and an abandoned shaft. The project is complete and is an excellent example of Abandoned Mine Reclamation at its best. This project utilized pneumatic backstowing for the sealing of several portals due to tight site access and closeness to a creek.
- 5) **Heizer Creek "A"** (Putnam County): This project consisted of elimination of four large entries that were discharging acid mine water. In addition to these, more than 15 other openings were eliminated. This project involved wet and dry seals, grading, and major drainage control features.
- 6) **Canebrake Complex** (McDowell County): This project included regrading and revegetation of several large refuse piles (one of which is burning) placed on very steep mountainsides, and the removal of abandoned mining structures. Also, this work was adjacent to a stream whose banks and water had to be protected.
- 7) **Millersville Road Refuse** (Upshur County): This project consisted of elimination of refuse piles, highwalls, and spoil piles located in a hollow directly above a populated area. It also included the consideration that a mine directly below the piles was full of water. Although drilling proved that mine water was not a serious problem, provisions were made in the design to deal with the problem if it had arisen. That project is complete and is very attractive.

- 8) **Milburn Red Dog Refuse Pile** (Fayette County): This refuse pile was along the side of the WV Turnpike and had been burning and slipping for several years. Work effort consisted of total regrading and revegetation of the pile and drainage improvements.
- 9) **Charleston Portals** (Kanawha County): This project consisted of the elimination of some fifteen mine openings located above a populated area. The work consists of wet and dry seals and grading.
- 10) **Mill Branch Refuse Piles** (Wyoming County): This project consisted of the elimination of two refuse piles placed on a steep mountainside above Bud, West Virginia. This was a straightforward grading, drainage and revegetation project, but required extreme care because of the steepness of the terrain.
- 11) **Ameagle Complex** (Raleigh County): This project included the removal of a large coal preparation plant and associated facilities and several refuse piles. The preparation plant would have been a relatively straightforward demolition project, except that the area was very cramped and the plant was sided with asbestos panels.
- 12) **Cabin Branch Refuse Piles** (Logan County): This project consisted of the grading, drainage, relocation and revegetation of three refuse piles. Extreme care was required because the piles were located on both sides of a road serving a community, gas compressor station and mining operation. Also, a stream runs along the piles and was protected.
- 13) **Shoemaker Landslide** (Upshur County): This project included the construction of a soldier pile retaining wall and regrading of a previously reclaimed fill area which was slipping.
- 14) **Birds Creek Refuse** (Preston County): Two refuse piles and over 1200 linear feet of highwall were reclaimed in this project.
- 15) **Kermit (Hatcher) Drainage** (Mingo County): This was not your normal AML project. An existing structure was located over a draining mine slope. The work consisted of installing a drainage pipe from the slope, through the building, and tying into the local storm sewer system. Some interior remodeling was also performed.
- 16) **Maplewood (Route 41) Waterline Feasibility Study** (Fayette County): This study was conducted to determine if pre-1977 mining activity contributed to the degradation of the water supply for the Danese Public Service District.
- 17) **Mod-Mahan Road Waterline Feasibility Study** (Marion County): This study was conducted to determine if pre-1977 mining activity contributed to the water quality problems of the wells used for water supply of the local residents.
- 18) **City of Summersville (Route 39) Waterline Feasibility Study** (Nicholas County): This preliminary investigation was performed to determine if pre-1977 mining activities affected the local water supply wells.

- 19) **Danese Water Treatment Plant Modifications** (Fayette County): As a result of the findings of project 16 (above) a new 350-gpm plant was designed. The old plant was in very poor shape and had insufficient capacity to meet the system demands.
- 20) **Blue Pennant Complex** (Boone County): This reclamation project consisted of the regrading of three refuse sites, one of which was burning. Several old conveyors and structures were also demolished.
- 21) **Keystone (US Route 52) Feasibility Study** (McDowell County): This preliminary investigation was performed to determine if pre-1977 mining activities affected the supply wells for the Town of Keystone's municipal water system. (The fee included the Phase 2 study as well which was not required due to results of Phase 1 Study).
- 22) **McComas (Poca Land) Refuse Pile** (Mercer County): This reclamation project consisted of regrading a refuse pile, installing wet seals into two abandoned mine portals, and installing site drainage improvements. Construction was completed in early 2010.
- 23) **Rockridge, Little Slate Creek, Route 80, Baker Ridge, Whittaker Ridge, State Line Ridge and US52 Water Systems Feasibility Study** (McDowell County): This preliminary investigation was performed in areas than can be, or are, covered by McDowell County PSD to determine if pre-1977 mining activities affected the water supply in the Rockridge, Little Slate Creek, Route 80, Baker Ridge, Whittaker Ridge, and State Line Ridge areas where there are presently no public water systems; and the water sources for several old coal company systems in the eastern end of McDowell County along and adjacent to US52. This investigation is complete. (The fee included Phase 2 studies as well, but only Rockridge proceeded to that phase).
- 24) **Thompson (McComas), Young (Matoaka), and Crespo (Matoaka) Drainage** (Mercer County): The Thompson project entailed sealing two draining portals while maintaining a water supply source for one local resident. Stabilization of a potentially unstable slope immediately behind a house using stabilization fabric anchored into the slope was also included. The Young and Crespo projects consisted of sealing draining mine portals and construction of collection ditches. Plans have been completed on this project and construction is nearly complete.

Our Design Fee Experience has been exceptional with no overruns. The maximum Design Fee used to date is 88% of the approved fee. All projects done to date have been completed on schedule.

In addition to these projects, we have provided design, construction administration and/or resident project representation for AML funded water projects for New Haven Public Service District, Logan County Public Service District, McDowell County Public Service District, City of Summersville, and Bluewell PSD.



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**AML EXPERIENCE
McComas (Poca Land)
Refuse Pile**

The McComas (Poca Land) Refuse Pile is located north of the Mercer County community of McComas on the east side of County Route 11.

This project consisted of regrading a side hill refuse pile, installing wet seals into two abandoned mine portals, and installing site drainage improvements. Construction was completed in early 2010.

There was a natural hollow below the side hill fill, but water only flowed during periods of heavy rainfall. However, when it did rain heavily, water flowed down the hollow and flooded the yards of several houses located along CR 11 and also flooded the road.

Consequently, the work effort included drainage improvements to prevent this flooding from occurring. A new riprap channel was formed at the base of the side hill fill and now routes the flow to a new pipe arch culvert for conveyance through the resident's yards and under CR 11 to the creek.

The refuse pile was graded to provide stable slopes with benches every 50' in elevation. The pile was then topsoiled and revegetated. Wet seals were installed in the draining portals, with the outlets directed to the new main riprap channel.



**ORIGINAL PILE – VIEW FROM ROAD
AT TOP OF PILE**



**RECLAIMED PILE – VIEW FROM ROAD
AT TOP OF PILE**



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AML EXPERIENCE Canebrake Complex

The Canebrake Complex is located adjacent to Dry Fork in McDowell County between the communities of Canebrake and Berwind.

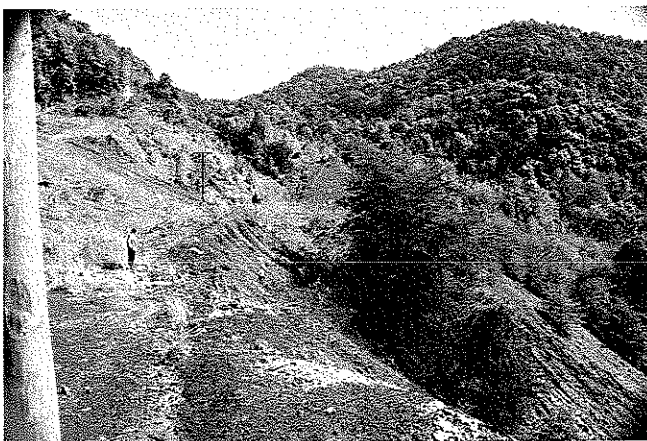
The project site is divided by Dry Fork and State Route 9, with three portals and one refuse area located south of the creek and the old plant site, eight additional portals, and another refuse area located north of the creek. The three portals south of the creek were actually located between the road and creek and extended back underneath the road. All three of these portals were draining.

Work south of the creek included regrading the refuse pile to have stable 2:1 slopes with benches every 50' in elevation. Riprap drainage channels were installed along the edges of the regraded pile and the pile revegetated. All three draining portals that extended under the road were sealed with wet seals.

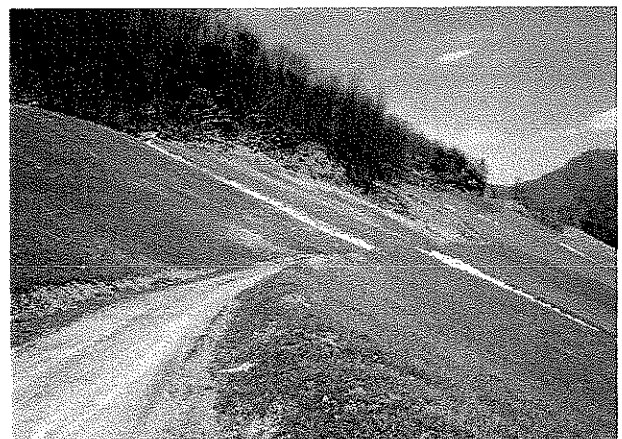
The plant site contained several old concrete foundations and remnants of the old plant structures which were demolished. The entire plant site was then topsoiled and revegetated.

The large refuse area on the north side was located on the side of the hill above an unnamed tributary of Dry Fork. The refuse was severely eroded and had washed down into the hollow. A small section of the pile was also actively burning. Work here consisted of total regrading of the pile to stable 2:1 slopes with benches every 50' in elevation. Since the creek was intermittent and the original hollow had been filled with refuse, the creek was re-established and lined with riprap during the regrading of the pile. The areas of burning refuse were excavated out and extinguished. The entire pile was then topsoiled and revegetated.

Site work also included rerouting a couple of access roads, graveling the roads, culvert installation, and cleanout of existing culverts.



ORIGINAL NORTH REFUSE AREA



RECLAIMED NORTH REFUSE AREA



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AML EXPERIENCE Millersville Road Refuse

The Millersville Road Refuse Project is located east of Adrian in Upshur County. The site is in a U shape, wrapping around an unnamed tributary of French Creek.

The area had previously been strip mined around the U and numerous spoil piles and water ponds remained. An old tipple and loadout were on the site in addition to four areas of refuse. There was one area that appeared to be a possible portal that was draining. A road was located all around the U to provide access to a residence and a gas well and had to be maintained.

Work included demolition of the old tipple and loadout and total regrading of the old stripped area and the refuse piles. At the head of the U, the unnamed tributary split into two forks. Both forks and the main tributary were reshaped and lined with riprap. A new arch culvert was installed where the road crossed the main tributary. New road ditches were established and several existing culverts either cleaned out or replaced.

Drilling was performed to ascertain whether there had been old mine workings west of the site where the draining area was observed. No underground workings were discovered, so a rock aggregate underdrain was installed to collect the water and routed to a new culvert.



ORIGINAL AREA



RECLAIMED AREA