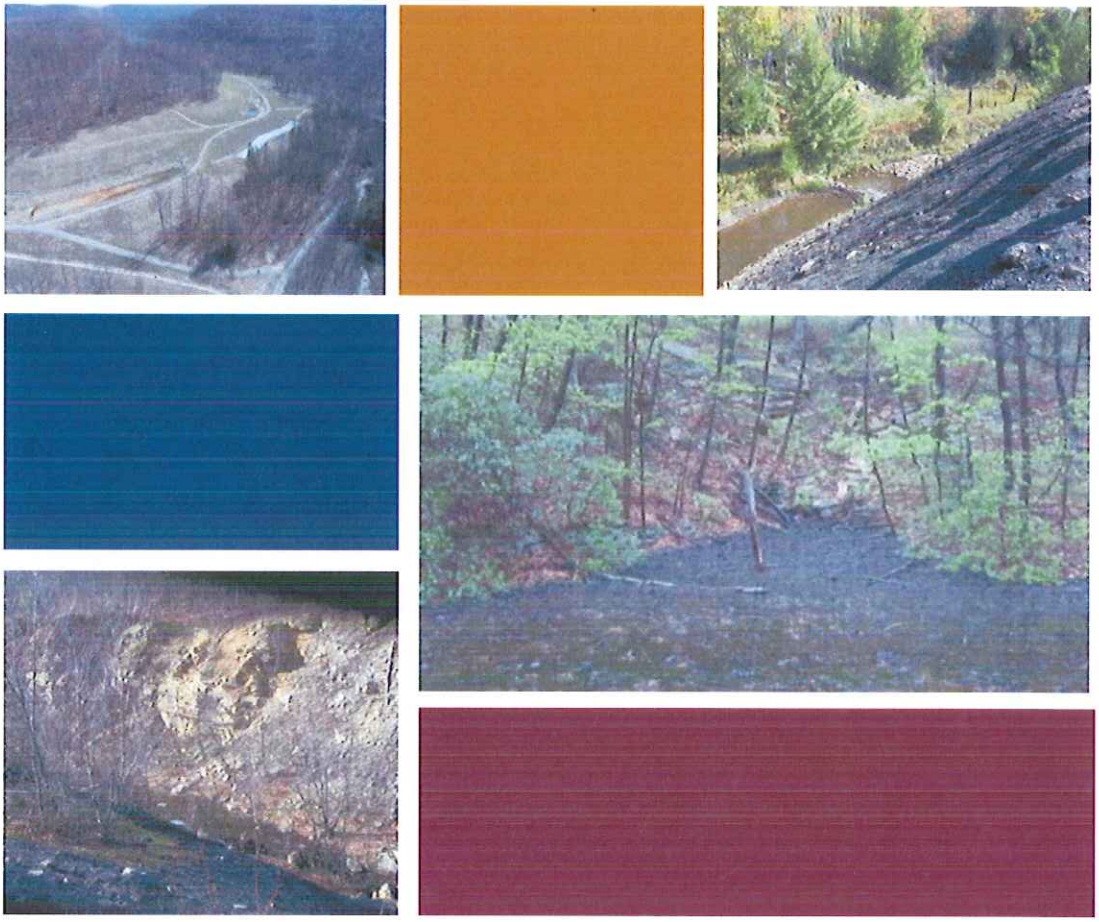
EXPRESSION OF INTEREST
FOR
WVDEP OWL CREEK HIGHWALL #2 DESIGN



Submitted to: Department of Administration, Purchasing Division
Deparment of Environmental Protection- AML
2019 Washington Street, East
Charleston, WV 25305-0130
Sumitted by: Stantec Consulting Serivces, Inc.
Submitted: March 28, 2013

03/22/13 09:29:33 AM
'West Virginia Purchasing Division

Stantec

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Stantec

March 28, 2013

West Virginia Department of Administration, Purchasing Division
WVDEP-Office of Abandoned Mine Lands
2019 Washington Street, East
PO Box 50130
Charleston, West Virginia 25305-0130
Attention: Mr. Frank Whittaker, Buyer

Reference: Expression of Interest for the WVDEP Owl Creek Highwall #2 Design

Dear Mr. Whittaker,

Stantec is pleased to respond to the Expression of Interest request for the Owl Creek Highwall #2 Project. Prepared in our expression of interest, you will find an abundance of information that describes in detail our qualifications and experience. The information includes a statement of our qualifications, personnel summaries and project experience to reflect the broader scope of services identified in your EOI.

Stantec now has three office locations in West Virginia at Fairmont, Buckhannon, and Charleston. The Fairmont office is readily available to provide engineering services on the Owl Creek Highwall #2 AML Project. Stantec can allot three (3) design teams to this project. Each design team will have necessary support personnel including CADD Operators, Staff Engineers, Survey Crews, and other support personnel to ensure the project is completed within WVDEP timeframes.

Stantec has Project specific experience successfully completing projects for the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands (WVAML) Program; for the West Virginia Department of Environmental Protection, Office of Special Reclamation; for the Ohio Department of Natural Resources (ODNR) AML Program; and for the West Virginia Conservation Agency. In addition, Stantec has employee project-specific experience completing additional Projects for the WVAML Program.

We are very excited about the opportunity to continue our working relationship with the West Virginia Department of Environmental Protection and look forward to providing engineering services on this most important project. We believe no other company can meet our quality of work, which, when coupled with our experience, allows us to be more efficient and therefore very cost competitive. Our Fairmont Office will respond quickly, effectively, and in the most economical way.

Should any questions arise, or if we can supply additional information or be of further service to you, the Purchasing Division, or the West Virginia Department of Environmental Protection, please contact me anytime at (304) 367-9401.

Respectfully Submitted,

STANTEC CONSULTING SERVICES INC.

Richard L. Gaines, Project Manager
Tel: (304) 367-9401
Richard.Gaines@stantec.com

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CAPABILITIES & TECHNICAL EXPERIENCE

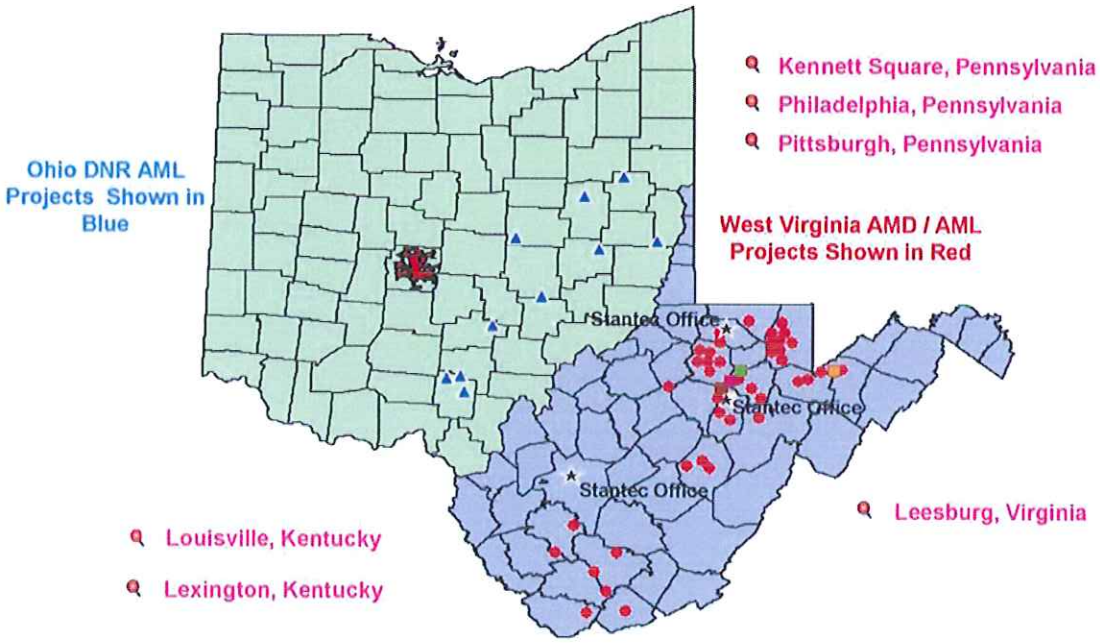
Stantec, founded in 1954, provides professional consulting services in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics for infrastructure and facilities projects. Continually striving to balance economic, environmental, and social responsibilities, we are recognized as a world-class leader and innovator in the delivery of sustainable solutions. We support public and private sector clients in a diverse range of markets, at every stage, from initial concept and financial feasibility to project completion and beyond. Our services are provided on projects around the world through approximately 12,000 employees operating out of more than 200 locations in North America and 4 locations internationally.

Stantec has project specific experience successfully completing projects for the West Virginia Department of Environmental Protection, Office of Abandoned Mine Lands (WVAML) Program; for the West Virginia Department of Environmental Protection, Office of Special Reclamation; for the Ohio Department of Natural Resources (ODNR) AML Program; and for the West Virginia Conservation Agency. In addition, Stantec has employee project-specific experience completing additional Projects for the WVAML Program. Our AML project experience includes surveying and mapping; subsurface investigations; groundwater and surface water testing and analyses; wet mine seals and modified wet mine seals with bat gates design; vertical shaft cap design; mass balanced earthwork quantities; structure demolition and removal plans; site drainage design including hydrologic and hydraulic studies for bridges, natural stream design; channels, ditches, pipes and box culverts; civil site design; sediment control; and revegetation plans as well as construction plans and specifications. Some of our projects also involved passive acid mine drainage designs ranging from simple limestone beds to complex interactive systems that boost AMD pH to precipitate metals, settle and filter dissolved metals, and polish effluent water with alkalinity prior to release of near neutral waters from the project area. In addition, Stantec designed the first active alkaline treatment system for the State of West Virginia (Special Reclamation).

SIMILAR EXPERIENCE

The map below shows the locations of some of our AML projects on which Stantec was the prime consultant for West Virginia Department of Environmental protection and Ohio Division of Natural Resources. The pages following this one show our experience more in depth.

Stantec AML Project Locations



SIMILAR EXPERIENCE

The table below shows some of Stantec's regrading, drainage and mine seal qualifications.

PROJECT NAME	MINE SEALS/ BAT GATES	REGRADING	DRAINAGE CONVEYANCES
Tub Run Highwall and Refuse Phase II	4	307,000 CY	11,450 LF
Tub Run Highwall and Refuse Phase I	0	265,000 CY	9,805 LF
Greenbrier Hollow Refuse	3	51,500 CY	1,011 LF
Pageton (Lambert) Portals	24	60,000 CY	829 LF
Birds Creek Number Four	4/4	34,600 CY	5,860 LF
Church Creek / Manown Highwall	21 / 2	220,400 CY	14,882 LF
Howesville Sites	11 / 4	63,000 CY	5,676 LF
Sandy Run Highwall and Portals	6	47,200 CY	4,148 LF
Hampton Number Four Maintenance		25,000CY	2,927 LF
Racine (Bradshaw) Portals	8 / 8	2,500 CY	1,062 LF
Price Hill Airshaft and Buildings	2	1,300 CY	174 LF
Weaver Portals and Highwall I & II	20	97,200 CY	7,006 LF
Nixon Run AMD	1 / 1	1,800 CY	841 LF
Old Bridgeport Hill, Phase II	4	8,800 CY	1,400 LF
Francis Drainage and Refuse	15	163,000 CY	9,000 LF
Thomas (Euclid Avenue) Subsidence	3	153,500 CY	6,500 LF

SIMILAR EXPERIENCE

Tub Run Highwall and Refuse Phase II
Tucker County, West Virginia

Stantec was contracted by the WVDEP to provide reclamation of 12,500 Linear Feet of Highwall with 307,000 C.Yds. of balanced earthwork; refuse regrading and soiling; revegetation of 87.0 Acres, 27.0 Acres on Forest Service; drainage: hydrologic and hydraulic studies for design of eighteen ditches (11,450 LF), four (4) wet mine seals; and surveying and mapping. Services also included subsurface investigation (12 holes, 1 Piezometer Set); clearing and grubbing of 87.0 Acres and 27.0 acres on forest service; surface and ground water testing and reporting; Debris Removal Plan; subsurface drain; access road design and improvement; sediment control design; construction plans and specifications; engineers cost estimate, bid schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

Tub Run Highwall and Refuse Phase I
Tucker County, West Virginia

Stantec was contracted by the WVDEP to provide reclamation of 10,000 LF of highwall with 265,000 C.Yds of balanced earthwork; refuse regrading and soiling; revegetation of 74.0 Acres; drainage: hydrologic and hydraulic studies for design of nine ditches (9,805 LF); stream bank protection; five pipes (244 LF); 8-Foot by 8-Foot box culvert, and surveying and mapping. Services also included: subsurface investigation (15 holes); clearing and grubbing of 74 Acres; surface and ground water testing and reporting; debris removal plan; subsurface drain; access road design and improvement; sediment control design; construction plans and specifications; engineers cost estimate, bid schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

Greenbrier Hollow Refuse
McDowell County, West Virginia

Stantec was selected by the WVDEP to provide reclamation of Cast-Over-The-Hill refuse pile and mine seal reclamation totaling 51,500 C.Yds of balanced earthwork; refuse regrading and soiling; revegetation of 8.0 Acres; drainage: hydrologic and hydraulic studies for design of six ditches (1,011 LF); two manholes; three pipes (open-cutting McDowell County Route 17/10); three wet mine seals; and surveying and mapping. Services also included: utility relocations and coordination, clearing and grubbing of 8 Acres; surface and ground water testing and reporting; mine dewatering and treatment plan; debris removal plan; subsurface drain; access road design and improvement; sediment control design; construction plans and

specifications; engineers cost estimate, bid schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

Pageton (Lambert) Portals
McDowell County, West Virginia

Stantec was selected to provide the WVDEP with reclamation of Cast-Over-The-Hill refuse pile and mine seal reclamation totaling 60,000 C.Yds of balanced earthwork; refuse regrading and soiling; revegetation of 24 Acres; drainage: hydrologic and hydraulic studies for design of four ditches (829 LF); stream bank protection; 1 pipe; and seventeen splash pads; twenty three wet mine seals; one dry seal, and surveying and mapping. Services also included were utility coordination; clearing and grubbing of 24 acres; surface and ground water testing and reporting; mine dewatering and treatment plan; debris removal plan; subsurface drain; access road design and improvement; sediment control design; construction plans and specifications; engineers cost estimate, bid schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

Birds Creek #4
Preston County, West Virginia

Stantec was selected by the WVDEP to provide reclamation of a 4,300 LF highwall with 34,500 C.Yds of balanced earthwork; refuse regrading and soiling; revegetation of 28 acres; drainage: hydrologic and hydraulic studies for design of ten ditches (5,860 LF) and one pipe; four wet mine seals; four bat gate installations, and surveying and mapping. Services also included subsurface geological investigation (5 piezometers installed); clearing and grubbing of 28 acres; surface and ground water testing and reporting; mine dewatering and treatment plan; debris removal plan; subsurface drain; access road design and improvement; sediment control design; construction plans and specifications; engineers cost estimate, bid schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

Church Creek/Manown Highwall
Preston County, West Virginia

Stantec was contracted by the WVDEP to provide reclamation of a 15,500 LF highwall with 220,400 C.Yds of balanced earthwork; refuse regrading and soiling; reforestation of 8 acres; revegetation of 63 Acres; drainage: hydrologic and hydraulic studies and design of thirty three ditches (14,882 LF) and two pipes; twenty one wet mine seals; two bat gate installations; one dry mine seal, and surveying and mapping. Other services included: subsurface geological investigation (6 piezometers installed); clearing and grubbing of 71

acres; surface and ground water testing and reporting; mine dewatering and treatment plan; debris removal plan; subsurface drains; access road design and improvement; sediment control design; construction plans and specifications; engineers cost estimate, bid schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

Howesville Sites and Sandy Run Highwall and Portals
Preston County, West Virginia

Stantec was selected by the WVDEP to provide reclamation of 5,900 LF highwall with 110,200 C.Yds of balanced earthwork; refuse regrading and soiling; 52 acres of revegetation ; drainage: hydrologic and hydraulic studies and design of thirty two ditches (9,824 LF)and five pipes; seventeen wet mine seals; four bat gate installations; and surveying and mapping. Services also included subsurface geological investigation (5 piezometers installed); clearing and grubbing of 52 acres; surface and ground water testing and reporting; mine dewatering and treatment plan; debris removal plan; stream bank protection; subsurface drains; access road design and improvement; sediment control design; construction plans and specifications; engineers cost estimate, bid schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

Weaver Portals and Highwall, Phase I and II
Randolph County, West Virginia

Stantec was selected by the WVDEP to provide reclamation of a 4,200 LF highwall with 97,200 cubic yards of balanced earthwork; refuse regrading and soiling; 35 acres of revegetation; drainage: hydrologic and hydraulic studies and design of twenty five ditches (4,148 LF) and ten pipes; twenty wet mine seals including modified seals; and surveying and mapping. Services also included subsurface geological investigation (6 piezometers installed); clearing and grubbing of 35 acres; ACOE Permit; sediment control plan; surface and ground water testing and reporting; mine dewatering and treatment plan; six AMD passive treatment limestone beds; subsurface drains and manholes; access road design and improvement; debris removal plan; sediment control design; construction plans and specifications; engineers cost estimate, bid schedule and calculation brief; initial on-site meeting, preliminary design, pre-bid and pre-construction meetings; and monthly reports and invoicing.

SIMILAR EXPERIENCE

Abandoned Underground Mine Inventory and Risk Assessment Statewide Database Population

Various Counties, Ohio

Stantec performed mine inventory and risk assessment of state roadways underlain by abandoned underground mines.

The Ohio Department of Transportation (ODOT) Office of Geotechnical Engineering developed the Abandoned Underground Mine Inventory and Risk Assessment (AUMIRA) process to prioritize sites with regard to the potential threat to public safety and need for a more detailed investigation, monitoring or remediation. Stantec was selected to populate the AUMIRA database for Districts 3, 8, 10 and 11, which totaled approximately 675 sites. Sites were identified by overlaying Ohio Department of Natural Resources (ODNR) abandoned mine mapping on state roadway mapping.

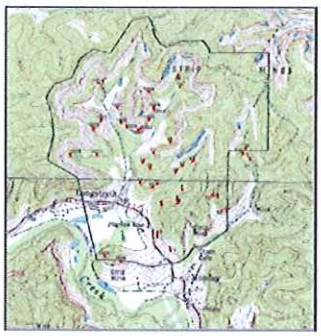
Prior to field work, Stantec reviewed information sources, such as available mapping, historical information, roadway and right-of-way plans, previous subsurface investigations and maintenance records. The information gathered included locations of mapped mine openings, elevation of the mine, overburden composition, coal seam thickness, traffic volumes and hydrogeologic setting.

Stantec's field team consisting of four engineers and geologists, performed a reconnaissance of each site identifying features indicating past underground mining activity, such as surface deformations, sinkholes, seeps, acid mine drainage, drift and slope entries, and vertical mine shafts. Handheld GPS units were used to collect locations of these points. Digital photographs were collected of the mining features.

The AUMIRA database was populated and a score was assigned to each site indicating the potential for subsidence. Stantec prepared cost estimates for remediation for the ten highest ranking sites in each county.

Wayne National Forest Abandoned and Inactive Mine Lands

Athens, Ohio



The project site is situated in east central Ohio within the boundaries of the Athens District of the Wayne National Forest. Numerous areas within the forest have been disturbed by surface and underground coal mining operations which did not include proper reclamation measures.

The objective of the project was to identify abandoned and inactive coal mine sites, their associated features, collect required field data, prepare a database and merge it with the database of the Ironton Ranger District of the forest.

SIMILAR EXPERIENCE

Efforts were initially focused within the Monday Creek Watershed. Additional inventory followed in the Sunday and Raccoon Creek Watersheds. The Abandoned and Inactive Mine (AIM) search and discovery focused on areas with known underground mines, and areas with a combination of known underground and strip mines. U.S. Forestry Service prioritized areas for inventory based on ODNR-Division of Geologic Survey underground mine maps, and underground mine locations known to Forest Service personnel. The work encompassed a total area of 31,000 acres.

Stantec provided two-person teams to perform discovery and field inventory work by walking up drains (hollows) and along hillside elevation contours of known coal seams and benches in specified areas. Data was collected in accordance with the "Wayne National Forest AIM Data Dictionary". The data dictionary was installed into a GPS field data recorder, which was also used to store the position of the different AIM features. GPS-obtained location information was differentially corrected by downloading base station data from an internet web site.

Any pond, seep or stream encountered along the selected drains was subjected to water quality monitoring. The monitoring was accomplished by using portable water quality instruments that measured multiple parameters simultaneously including: temperature, pH, conductivity, dissolved oxygen, oxygen reduction potential and turbidity.

Upper Coldwater Fork Stream Restoration

Martin County, Kentucky

Following initial clean-up efforts of a coal slurry release, Stantec was retained to lead the stream and ecosystem rehabilitation of nearly 6,000 LF of Upper Coldwater Fork in Eastern Kentucky.

In October 2000 a coal slurry impoundment breached into underlying mineworks, releasing more than 250 million gallons of slurry into the Coldwater Fork and Wolf Creek valleys. Called one of the worst mining disasters on the environment by the EPA, clean-up efforts were begun immediately for the Coldwater Fork and Wolf Creek(s) and continued for several months. During clean-up efforts, portions of Coldwater Fork were realigned as up to eight feet of debris and slurry was removed. Following this initial clean-up, the channel was unstable and the riparian and aquatic habitats destroyed.

Stantec was contracted to lead the stream and ecosystem rehabilitation on Upper Coldwater Fork. The scope of work included collection of field data on impacted reaches and reference reaches; preparation of natural channel design stream restoration plans; construction assistance, and post-construction monitoring. The urgency of the project required a streamlined approach to design, permitting and construction. Stantec worked closely with the owner, regulatory agencies, and property owners to meet critical timelines and maximize construction and planting seasons. Construction was completed within five months.

Nearly 6,000 LF of stream was designed, consisting of a C-type stream with step pools, cross vanes, and j-hooks; bioengineering treatments such as live staking were utilized throughout the project. Three years of post-construction monitoring have been completed with results demonstrating

excellent recovery from both a geomorphology perspective as well as a biological function perspective.

Oxford Mine Mitigation Monitoring
Multiple Sites, Ohio

Stantec monitored various mitigation sites resulting from impacts by coal mining activities. Impacts to resources included streams and wetlands which were "waters of the United States" (WOUS). Mitigation measures included stream reclamation and relocation and wetland creation. Mitigation streams and wetlands were monitored to ensure the restoration of pre-mining ecological functions.

Stantec provided services for 16 mine sites ranging from 18 to 775 acres in Belmont, Coshocton, Guernsey, Harrison, Jefferson, Muskingum, Perry, and Tuscarawas counties. Mitigation sites were assessed according to performance criteria specified in the Coal Mining and Reclamation Permit, Section 404 Permit, and the 401 Water Quality Certification. Streams and wetlands were assessed using standard procedures outlined in Ohio EPA's Qualitative Habitat Evaluation Index (QHEI) and Ohio Rapid Assessment Method for Wetlands (ORAM).

Project highlights included field investigations and reporting. Field investigations included an evaluation of the physical characteristics and function of constructed wetlands and streams. Monitoring was performed for a total of 70 streams and 23 wetlands. Sites are to be monitored for at least five years and are in various stages of monitoring. A report is prepared and submitted to the Ohio EPA and U.S. Army Corps of Engineers for approval at the end of each monitoring year.

Little Coal River Stream Restoration
Boone and Lincoln Counties, West Virginia

Stantec was contracted to provide restoration design and construction services of approximately 16.5 miles along the Little Coal River in southern West Virginia. The project was funded through the West Virginia Department of Environmental Protection to mitigate for coal mining impacts in the Appalachian Plateau.

Stantec worked with the West Virginia Conservation Agency, Patriot Coal Company, Green Rivers LLC, and North State Environmental through multiple phases of the project. Stantec completed all phases of the design including a 16.5 mile geomorphic assessment and survey.

As part of this restoration work, fish and habitat surveys were conducted to determine appropriate design parameters and construction techniques and establish baseline conditions for fish populations prior to construction. Deep water habitats were sampled from a boat using a Smith-

Root GPP 5.0 electrofisher. Wadeable habitats were sampled with a Smith-Root LR24 backpack electrofisher and a 6-foot by 10-foot seine. Surveyors attempted to equalize fishing efforts between gear types and macrohabitats by shocking for approximately 200 seconds. Survey areas were stratified by observable macrohabitat types and by position on the channel margin or in mid-channel. Within the discrete limits of each macrohabitat type, surveyors measured depth and velocity at three physical habitat stations using a Marsh-McBirney FloMate. Surveyors also visually assessed the proportion of substrates present at these stations using a modified Wentworth scale and visually assessed cover type and availability.

The first 1.5 miles of restoration was constructed in the winter of 2011/2012 in which Stantec provided construction support. The remaining 15 mile restoration design will be completed in the summer of 2012 and construction for the 15 miles will be implemented in the fall of 2012.

Little Coal Fish and Habitat Surveys

Boone & Lincoln Counties, West Virginia

Stantec was contracted by the West Virginia Conservation Agency (WVCA), Guyan District to assess conditions and develop restoration designs for approximately 15 miles of the Little Coal River in Boone and Lincoln Counties, West Virginia. The objectives of this study were to complete fish and habitat surveys to aid in determining appropriate design parameters and construction techniques, and establish baseline conditions for fish populations prior to construction.

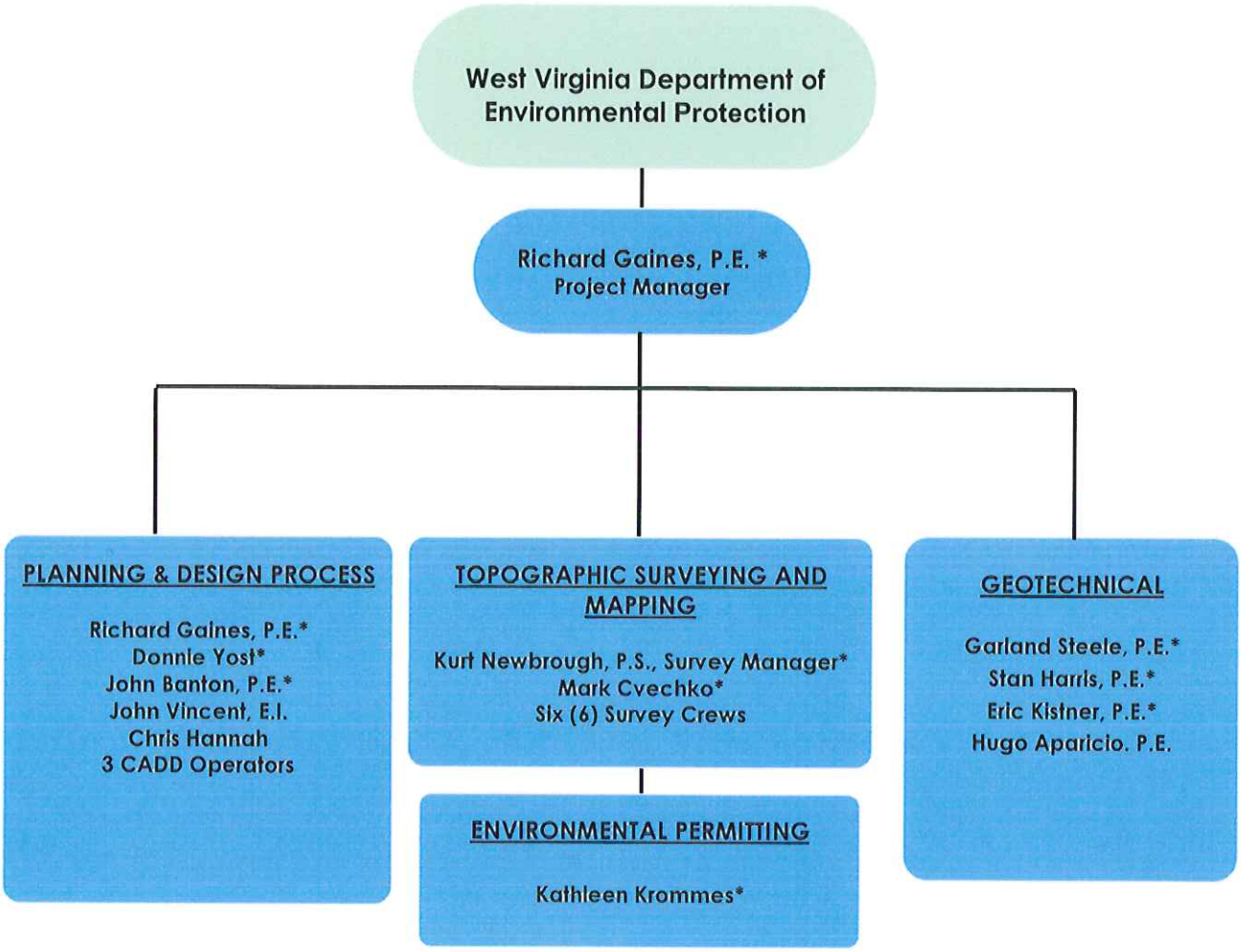
A total of 6 sites and 29 macrohabitats were surveyed for fish in the fall of 2011. Deep water habitats were sampled from a boat using a Smith-Root GPP 5.0 electrofisher and wadeable habitats were sampled with a Smith-Root LR24 backpack electrofisher and a 6-foot x 10-foot seine. Physical habitat was measured and visually assessed at 86 stations within the macrohabitats. Within the discrete limits of each macrohabitat type, surveyors measured depth and velocity at three physical habitat stations using a Marsh-McBirney FloMate. Surveyors also visually assessed the proportion of substrates present at these stations using a modified Wentworth scale and visually assessed cover type and availability.

Runs, pools, eddies, and backwaters were dominated by fine grained substrates (i.e., silt and sand). Sand was observed at 73 of 86 locations, and some form of cover was observed in 55 of 86 physical habitat stations. Over 500 fish comprising 29 species were collected in the sampling effort. Species density and richness was highest in coarse-grained substrates. Fish were most frequently associated with large wood and boulder cover types. Fish densities were high in mid-channel units sampled with backpack electrofisher but species per unit effort was low suggesting the presence of a small number of specialized species. Species richness was highest in the margin habitats and fourteen of the 29 species collected were found exclusively in margin habitats.

These observations informed restoration design and implementation regarding substrate composition, instream cover, availability of off-channel habitats, glide dimensions, riffle slopes, and pool dimensions.

PROJECT TEAM

Below is our proposed project team for the completion of the Owl Creek Highwall #2 Project. Resumes are included on the following pages.



*Resumes Included

PROJECT TEAM

Richard Gaines, P.E.
Project Manager

Mr. Gaines has 25 years of experience in project management and civil engineering related to oil and gas development, land development, water systems and treatment, and sanitary sewer collection and treatment projects. His design experience includes layout, grading, drainage, erosion control and permitting for road entrances, access roads, well pads, pits and impoundments for multiple well pads and developments. He is currently a Senior Civil Engineer in the Fairmont office West Virginia of Stantec.

EDUCATION

B.S./Civil Engineering/Fairmont State College
A.S./Mechanical Engineering/Fairmont State College

RELEVANT REGISTRATIONS

Registered Professional Engineer/17220–WV/2007
Registered Professional Engineer/035466–VA/2002

PROJECT EXPERIENCE

PSD#4 Lenox/Cuzzart Water System, Preston County, WV - Public Service District #4, Bruceton Mills, Preston County, WV.

Project Manager to design, permit, bid and inspect the construction of a 42-mile water system extension to serve approximately 400 new customers in the Lenox and Cuzzart area of Preston County, West Virginia for the Preston County Public Service District #4. The project includes the design of the water distribution system which includes four water storage tanks, five booster pump stations, and three pressure reducing valves. Funding for the project is provided by the Abandoned Mine Lands division of the West Virginia Department of Environmental Protection (WVDEP AML) and the West Virginia Infrastructure and Jobs Development Council. The project was initiated by the WVDEP AML because the areas water sources were significantly impacted by coal mining operations prior to permitting requirements enacted in 1977.

PSD#4 Hudson to State Line Water System, Preston County, WV - Public Service District #4, Bruceton Mills, Preston County, WV.

Project Manager to design, permit, bid and inspect the construction of a 81-mile water system extension to serve approximately 400 new customers in the Hudson to the State Line area of Preston County, West Virginia for the Preston County Public Service District #4. The project includes the design of the water distribution system which includes four water storage tanks, two booster pump stations, and one pressure reducing valves. Funding for the project is provided by the Abandoned Mine Lands division of the West Virginia Department of Environmental Protection (WVDEP AML), Drinking Water Treatment Revolving Fund (DWTRF) and the West Virginia Infrastructure and Jobs Development Council. The project was initiated by the WVDEP AML because the areas water sources were significantly impacted by coal mining operations prior to permitting requirements enacted in 1977.

Lyonsouth, Commercial Development Property, Nutter Fort, WV.

Project Engineer Manager on a a multi-phased commercial property development site for a private land developer. The phases consist of working with the developer to obtain cut and fill information along with permanent storm retention pond sizing and location on a 15 acre parcel of land, permitting for the phases that include permits to the Department of Environmental Protection for an MR-4C Incidental Coal Removal Permit, an update to the WV Construction Storm Water General Permit. Another phase consisted of assisting the developer in obtaining status of approval for limestone being removed from the property to be qualified for use on a public damn project.

Sub-consultant to Land Surveyor for E&P Client – Well Pad, Upshur County, WV.

Project Manager for the development of a well pad in Upshur County, West Virginia. Provided oversight of the preliminary and final design for a well pad with four proposed wells, two drill pits, a 4 million gallon impoundment and 2600 LF of access road. The design included layout, grading, drainage and erosion control per WVDEP standards.

Confidential E&P Client – County Route 9/7 Improvements, Ritchie County, WV.

Project Manager for the design of 1.25 miles of road upgrade to access multiple well pads. The improvements included increasing roadway travel widths, reshaping of roadway cut/fill slopes, improving roadway geometry, extension/replacement of drainage culverts. All design was completed in accordance with WVDOH and WVDEP standards.

Confidential E&P Client – County Route 22/5 Improvements (Turtle Run), Ritchie County, WV.

Project Manager for the design of 1.70 miles of road upgrade to access proposed well pads. The improvements included increasing roadway travel widths, reshaping of roadway cut/fill slopes, improving roadway geometry, extension/replacement of drainage culverts.

PROJECT TEAM

Donnie Yost
Planning & Design

Mr. Yost has 2 years experience in AML Design and 8 years of experience in other AML related design work. He has performed quantity calculations; developed CADD drawings, developed Hydrologic and Hydraulic design data; has completed sampling for water, soil, coal, and hazmat; prepared technical reports and engineer's estimates for several AML projects.

EDUCATION

B.S./Civil Engineering Technology

PROJECT EXPERIENCE

Norton Highwall #1
Developed CADD drawings and hydrologic and hydraulic design. The project included included reclamation, revegetation; topographic surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for ditches and pipes; Sediment Control Design; and a revegetation plan.

Tub Run Highwall & Refuse, Phase I
Developed CADD drawings and hydrologic and hydraulic design. The Project included reclamation design with 265,000 Cubic Yards of Excavation, 8,500 l.ft. Access Road; 46,000 l. ft. Sediment Control; 9,900 l.ft. of Ditches; 4 Pipes; 8 ft. by 8 ft. Box Culvert, and 74 acres of Revegetation. Topographic Surveying; Generation of Construction Mapping; Soil Testing, Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Dewatering and AMD Treatment Plan; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.

Tub Run Highwall & Refuse, Phase II
Developed CADD drawings and hydrologic and hydraulic design. Project included the reclamation design with 307,000 Cubic Yards of Excavation, Four (4) Wet Mine Seals; 9,500 l.ft Access Road; 65,000 l. ft. Sediment Control; 11,400 l.ft. of Ditches; and 114 acres of Revegetation; Topographic Surveying, Generation of Construction Mapping, Soil Testing, Hydraulic Studies and design for Ditches and Pipes, Sediment Control Design; Revegetation Plan Preliminary and Final Design, Construction Plans and Specifications; Dewatering and AMD Treatment Plan; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.

Greenbrier Hollow Refuse Pile
Developed CADD drawings and hydrologic and hydraulic design. The project included reclamation design of coal refuse pile with 51,000 Cubic Yards of Excavation, two (2) wet mine seals; 4,300 l.ft. Sediment Control; 1,015 l.ft. of Ditches; 5 Pipes; and 8 acres of revegetation. Topographic Surveying, Generation of Construction Mapping, Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design, Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.

Pageton (Lambert) Portals
Developed CADD drawings and hydrologic and hydraulic design. The project included reclamation design of coal refuse pile with 51,000 Cubic Yards of Excavation, twenty four (24) wet mine seals; 13,700 l.ft. Sediment Control; 1,600 l.ft. of Ditches; 1 Pipe; Streambank Protection; and 24 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes, Sediment Control Design; Revegetation Plan Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief, Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings, Monthly Reports and Invoicing.

Town of Newburg Waterline Extension Feasibility Study
Collected water samples and provided the report for a 8.0 Mile Waterline Extension Feasibility Study – I.D. No. 392, involving 96 Residents. Project included surface and Ground Water Testing and Reporting, Public and Private Record Search, Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; and Initial On-Site Meeting. Engineering cost proposal.

PROJECT TEAM

John Banton, P.E.
Planning & Design

Mr. Banton currently serves as a senior project engineer and is involved in a range of geotechnical civil engineering projects. His primary responsibilities include the supervision of all aspects of geotechnical explorations, overseeing construction quality control inspections, and designing and overseeing drafting of general civil engineering. Mr. Banton's background includes experience as both technician and engineer. He has supervised subsurface investigations for residential, commercial and industrial facilities. He has designed soil retention and underground and above ground stormwater detention systems. Other experience includes performing foundation and soil construction quality assurance, drafting, surveying, drilling and sampling, and report writing. He has worked on design projects involving dams, drainage, retaining walls, water and sewer lines, foundations for buildings, towers, tanks and roads.

EDUCATION

BS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1995
Structural Geogrid Seminar, Cincinnati, Ohio, 2000
Underground Detention Designs for Stormwater Management, National Corrugated Steel Piple Association and American Iron and Steel Institute, Cincinnati, Ohio, 1998

REGISTRATIONS

Professional Engineer #21645, Commonwealth of Kentucky
Professional Engineer #65018, State of Ohio

PROJECT EXPERIENCE

Wilson Landslide, Ironton, Lawrence County, Ohio
Served as project engineer for the geotechnical exploration as well as for the design of the repair of the landslide. The project consisted of a landslide, that threatened a private residence, due in part by groundwater seeping from a series of abandoned mines. A gabion retaining wall was constructed to restore the resident's usable space. Subsurface drains were installed to control groundwater. The project qualified for ODNR AML Emergency Program funding. Mr. Banton ensured a quick turnaround of the design documents in order to execute a timely remediation.

Diamond Brick Subsidence Emergency Project, Oak Hill, Jackson County, Ohio
Past underground mining caused a sinkhole to suddenly develop beside a house, in a play area for resident children. Stantec advanced rock core borings on the property to establish coal void extents. Mr. Banton, as with many other similar projects in the Emergency Program, quickly visited the site, performed a rough topographic survey and produced a suitable plan view drawing for use as a construction layout. A photographic survey of the structure and surrounding land was also performed. A set of bid-ready documents for a grouting program were prepared and submitted within 11 days of the site visit.

Midvale Burning Gob Pile, Tuscarawas County, Ohio
A former coal and clay strip mine was the site of a deposit of coal refuse that was burning underground. Past efforts failed to extinguish the fire. Stantec prepared plans and specifications to stop the fire and reclaim the surrounding mine bench. Mr. Banton designed the excavation and backfill plans as well as drainage and sediment control plans. He supervised surveying, the geotechnical exploration, and produced the plans and specifications for the project.

K&R D-105 Bond Forfeiture Reclamation Project, Stark County, Ohio
A lake that formed behind a large spoil pile was flooding adjacent land. The firm's design included an economical spillway through the spoil pile and fill for reclaiming mine benches. Mr. Banton detailed drainage and cut and fill limits for a balanced reclamation design. He also provided a detailed estimate of quantities and a engineer's cost estimate.

Abandoned Mine Lands Reclamation Projects, OH
Stantec contracted to design and prepare plans and specifications to stop the effects of flooding, slope failure, erosion and acidic runoff on properties of nearby residents. Mr. Banton assisted in design of slopes, design of roads and drainage and design of artificial wetlands. He supervised surveying, assisted in research and created construction documents for the three-site project.

PROJECT TEAM

Garland Steele, P.E.
Geotechnical

Garland has more than 50 years of experience in civil engineering with a special emphasis on materials, soils, pavements, forensics, quality assurance, geotechnical exploration and design, construction inspection, and contract administration.

He has in-depth experience implementing research findings in the field; working with a state Department of Transportation program for materials sampling and testing, materials and pavement specifications, structural steel inspection and testing, and soil and rock mechanics exploration, testing, and design; working with state Department of Transportation maintenance and construction operations; and overseeing operations related to the management, recovery and repairs required in the wake of emergencies and disasters affecting the West Virginia highway system (including flooding, earth movements, winds, structural failures, ice and snow, and other traffic flow impacts).

EDUCATION

Concrete Technician (#136), WVDOT, Charleston, West Virginia, 1990
Aggregate Inspector (#5913), WVDOT, Charleston, West Virginia, 1990
Asphalt Technician (#159), WVDOT, Charleston, West Virginia, 1990
Licensed Class B Explosives Permit (#B060119285913), West Virginia, Charleston, West Virginia, 1990
Bachelor of Arts, West Virginia State University, Institute, West Virginia, 1976
Training, FHWA-NHI-130055 Safety Inspection of In-Service Bridges, National Highway Institute, West Virginia, 2012

RELEVANT REGISTRATIONS

Professional Land Surveyor #1386, State of West Virginia
Professional Engineer #3929, State of West Virginia

PROJECT EXPERIENCE

Geotechnical Engineering
Old Bridgeport Hill Mine Drainage, Phase II Plans Modification, Harrison County, West Virginia
Harrison County – Near Bridgeport, Clarksburg - Design AML Project, P.O. #12373A

Coalfields Expressway (5-14-04), Wyoming and Raleigh Counties, West Virginia
Design of 2 mile section of four lane highway with at-grade intersections (withdrawn)
State Project #X355-121-16.65 00
Federal Project #HP-1808(007)C

Sauls Run Strip and Landslide Project (7-2004), Lewis County, West Virginia
AML Project

Tunnelton (Dillworth) Landslide (8-2004), Preston County, West Virginia
AML Project

Weaver Portals and Mine Drainage
AML Project, P.O. #DEP12578

Fisher-Mill Creek Bank Stabilization (10-04), Jackson County
Design and Construction inspection.

Laurel Lake Sediment Removal Project, Mingo County

Summit Park Waterline Feasibility Study

Hendrickson Subsidence Investigation
AML Project

North Fork Hughes River – Stream Bank Stabilization, Cairo, Ritchie County, West Virginia

Nixon Run
AML Project

PROJECT TEAM

Stan Harris, P.E.
Geotechnical

Mr. Harris has broad experience in the field of geotechnical engineering. His past work includes performance of geotechnical explorations for buildings, bridges, dams, landfills, highways, water and waste water treatment plants, and manufacturing facilities. Duties on these projects include development of boring plans, supervision of drilling operations, direction of laboratory testing programs, and performance of engineering analysis and design. He is also responsible for preparation of final geotechnical reports. Mr. Harris reviews and performs engineering analysis for settlement, bearing capacity, and slope stability, and he is experienced in the analysis and design of foundation systems and retaining walls. Mr. Harris is responsible for the supervision of Project Engineers along with numerous Drill Crews, and Field and Laboratory Technicians. He is also responsible for directing efforts of Field Technicians performing quality control testing on major earthwork projects.

EDUCATION

BS in Civil Engineering, University of Kentucky, Lexington, Kentucky, 1980
MS in Civil Engineering, University of Kentucky, Lexington, Kentucky, 1982
Foundations and Earth Retaining Structures, University of Akron, Akron, Ohio, 2006
ODOT Office of Geotechnical Engineering Workshop, Columbus, Ohio, 2008
Ohio River Valley Soils Seminars, Various Topics, Cincinnati, Ohio, 2007

RELEVANT REGISTRATIONS

Professional Engineer #53083, State of Ohio

PROJECT EXPERIENCE

Stock Township Road 302, Noble and Muskingum Counties, Ohio (Project Manager)
Project Manager for investigation and design of repairs to Stock Township Road 302. Project included hydraulic analysis leading to raising of road to mitigate impacts of flooding caused by strip mining. The project also included remediation of two abandoned tipple sites, one with acid mine drainage. A wetlands was designed to treat AMD.

Ohio AML Emergency Program, Ohio (Project Manager)
Mr. Harris serves as Stantec's Project Manger for the AML Emergency program since 1995. He performs site inspections and investigations for mining related problems such as subsidence and landslides. Mr. Harris oversees the preparation of construction documents including drawings, specifications and cost estimates. He has served as Project Manager for more than 60 emergency projects.

River Road Bank Stabilization, Fairfield, Ohio
Erosion from the Great Miami River washed out a 125-foot long section of River Road, forcing its closure. Stantec performed a geotechnical exploration and prepared construction plans for the repairs. The design approach incorporated a rock toe and soil embankment reinforced with geogrids. Heavy duty turf reinforcement mat was also used to protect the face of the new slope until vegetation could be established. Live stakings were also used to provide additional protection against erosion. The project was selected by the American Public Works Association as one of its outstanding projects of 2004.

Center Hill Landfill Bank Stabilization, Cincinnati, Ohio
Supervised geotechnical exploration for stabilization of approximately 300 feet of stream bank along the Mill Creek, next to a closed landfill. Stantec performed exploratory borings and slope stability analyses for various remediation concepts. Mr. Harris also supervised engineering technicians who performed quality control testing during construction.

Upper Mill Creek WWTP, West Chester, Ohio
Project Manager for three phases of geotechnical exploration for expansions of the Upper Mill Creek waste water treatment plant. Developed scope of work, assigned field crews and prepared engineering reports for numerous new structures. Stantec also provided similar services for the expansion of Butler County's LeSourdsville treatment plant.

Symmes Road Extension, Butler County, Ohio
Served as Project Manager for the geotechnical exploration for the two-mile extension of Symmes Road. Project included exploration for new bridge over CSX railroad.

PROJECT TEAM

Eric Kistner, PE
Geotechnical

Mr. Kistner currently serves as Project Manager with Stantec and is involved in a wide range of geotechnical engineering projects. His project experience includes management and performance of geotechnical exploration for municipal infrastructure, roadways and bridges, landslides, subsidences, dams and levees, and other public works projects. He also has extensive construction materials testing experience on projects such as new school buildings, parking structures, roadway improvements, and elevation water storage facilities. Mr. Kistner has been involved with numerous abandoned mine-related projects including identifying and locating abandoned mines, exploration of underground abandoned mines, and design of abandoned mine remediation.

EDUCATION

BS, Civil Engineering, University of Cincinnati, Cincinnati, Ohio, 1996
Non-Destructive Testing of Drilled Shafts, Deep Foundations Institute (DFI) Specialty Seminar, Cincinnati, Ohio, 2004
Helical Foundations and Tiebacks, DFI Specialty Seminar, Cincinnati, Ohio, 2003
Design and Construction of Earth Retention Structures, DFI Specialty Seminar, Cincinnati, Ohio, 2000
Mechanically Stabilized Earth Walls, The University of Akron Continuing Education Seminar, Akron, Ohio, 1999
Various Topics, Ohio River Valley Soil Seminars, Cincinnati, Ohio, 2011

REGISTRATIONS

Professional Engineer #18654, State of West Virginia
Professional Engineer #24653, Commonwealth of Kentucky
Professional Engineer #65507, State of Ohio

PROJECT EXPERIENCE

ODOT Abandoned Underground Mine Inventory and Risk Assessment, Ohio
Mr. Kistner served as Project Manager for this project that consisted of populating a risk assessment database for areas where state highway overlaid mapped abandoned mines. Mr. Kistner coordinated with the ODOT and was responsible for training and supervising the field teams. He was responsible for performing quality control review of the database inputs, RCDA remediation cost estimates, and the final report that included inventory statistics and GIS maps.

Leon Subsidence, Columbiana County, Ohio
Investigated a settlement feature of a house addition being constructed near Franklin Square, Ohio through the DMRM Emergency Program. The contractor believed that the sudden settlement may have been mining related. Mr. Kistner supervised a drilling crew while advancing borings near the problem area. It was determined that the settlement was not mining related. He was responsible for preparing a report that explained that the settlement was probably caused by a loss of shear strength in soil underlying the basement excavation followed by a rise in the groundwater level during a precipitation event.

Rodgers Hallow Reclamation Project, Perry County, Ohio
Mr. Kistner served as geotechnical engineer on this ODNR Division of Mineral Resources Management (DMRM) project that consisted of remediation design for a stream flowing into an abandoned mine and reappearing as acid mine drainage in another stream. He was responsible for coordinating the drilling, sampling and laboratory testing program. Preliminary design recommendations included sealing the mine, stream relocation and stream restoration. Mr. Kistner developed design details and construction cost estimates for the planned mine sealing operation.

Abandoned Mine Inventory and Risk Assessment (AUMIRA) Statewide Database Population, Ohio
Mr. Kistner served as Project Manager for this ODOT project that consisted of populating a risk assessment database for areas where state highways overlaid mapped abandoned mines. The project included a published information review, field reconnaissance using handheld GPS equipment, organizing data in a GIS and database population that scored sites on their potential for future collapse. The project also included remediation cost estimating for the higher ranking sites.

PROJECT TEAM

Kurt Newbrough, P.S.
Survey Manager

Mr. Newbrough has 27 years of experience in the survey profession which has allowed him to incorporate hands on knowledge along with a proven strategy to develop, maintain, and sustain quality survey departments and field services divisions. Expertise of having performed more than 270 miles of route design, surveying, and mapping for natural gas pipelines in West Virginia, Pennsylvania, New York, and Virginia. Mr. Newbrough is currently a Project Manager in the Fairmont office of Greenhorne & O'Mara, Inc., now Stantec, were his primary role is to gain market share in the surveying and mapping arena and foster client retention through service and performance.

EDUCATION

Coursework/Land Survey/John Tyler Community College

RELEVANT REGISTRATIONS

Professional Surveyor/WV/1618/2012
Professional Land Surveyor/PA/003039/2012

PROJECT EXPERIENCE

Hardy County Industrial Parks, Hardy County Rural Development Authority, Hardy County, WV.
Project Manager for performing boundary surveying and platting for two new industrial parks, 220 acres and 25 acres.

Dominion Transmission
Survey Manager for 200+ Miles of Route Surveying and Mapping Located in New York, Pennsylvania, West Virginia, and Virginia (numerous listings available)

Eastern Associated Coal
Survey Manager for Pre and Post Mining Surveys, Site Surveys, GPS Emergency Control Network

Municipality/Public Service Districts:
Cities of Clarksburg, Bridgeport, Nutter Fort, Moorefield and Weston, West Virginia
Comprehensive Plan Mapping; Corporation Boundary Surveying and Mapping; Annexation Surveying, Mapping, and Legal Descriptions; Easement/Right-of-Way Surveying and Mapping (utilities, roadways); Condemnation Surveying and Mapping (utilities); GIS Facilities Surveying, Mapping, and Presentation (utilities); Budgeting Allowances for Surveying and Mapping Services.

Greater Harrison PSD, Scotts Run PSD, Sun Valley PSD, Hardy County RDA:
Public Service District Boundary Expansion; Mapping and Descriptions; Public Meetings for Easement/Right-of-Way Acquisitions; Easement/Right-of-Way Surveying and Mapping (utilities); Budgeting Allowances for Surveying and Mapping Services.

Energy/Transmission: Peabody Coal, Dominion Transmission, Shell Energy, NedPower Wind Energy
Pre/Post Mining and Blasting Survey and Mapping (750 + structures); GPS Emergency Control Network for Underground Mines; GPS Ground Control Survey Networks; Solar Powered Permanent Project GPS Base Stations; ALTA/ACSM Surveys for Wind Turbine Sitting Projects (10,000 + acres); Gas Transmission Line Design and As-Built Surveys and Mapping (150 + miles); Budgeting Allowances for Surveying and Mapping Services.

Conservation/Federal Government Agencies: Clarksburg FBI Center, Natural Resource Conservation Service, USCOE Local Flood Protection Program
Boundary Surveys, Mapping, and Legal Descriptions, FBI and SSCD (1,500 + acres); Natural Resource Conservation Service Surveys, Mapping, and Legal Descriptions; Wetland Reserve Program Surveys, Mapping and Legal Descriptions; Grassland Protection Program Surveys, Mapping and Legal Descriptions; Wetland Delineation Surveys, Mapping and Legal Descriptions; USCOE Local Flood Protection Program Surveys, Mapping and Legal Descriptions; Budgeting Allowances for Surveying and Mapping Services.

General Survey Services for the Private Sector:
Construction Layout for Large Scale Site; Development Projects (RTK and conventional); Topographic Surveys (RTK and conventional); Large Scale Boundary Surveys; GPS Ground Control for Aerial Photography (RTK and static); Telecommunication Surveys, Raw-Land, As-Built, Co-Locate, FAA 1A and 2C Letters.

PROJECT TEAM

Mark Cvechko
Togographic Surveying and Mapping

Mr. Cvechko has 30 years of management experience in the Heavy/Highway/Building/Wind Power industry. Mr. Cvechko has worked as senior estimator, project manager and construction manager on projects ranging from one to 30 million dollars. Mr. Cvechko has been in charge of and implemented numerous safety programs and performed safety field inspections. Mr. Cvechko has also performs plan review on design projects for constructability. He has field experience as a superintendent, which attributes a key eliminate in the design process. Mr. Cvechko manages construction projects which include surveying, geotechnical investigation, construction observation, and quality control testing and is responsible for oversight of the Concrete and Aggregate Materials Laboratory.

EDUCATION

AS, Land Surveying, Glenville State College, Glenville, WV, 1977

PROJECT EXPERIENCE

Various WVDEP AML Projects
Assisted with survey and mapping services on various AML projects for the WVDEP.

Upshur County Board of Education
Construction Inspector responsible for providing quality control testing during construction of a new school. Provide monitoring and inspection of auger cast in place piles. Coordinate with contractor and owner.

Nedpower LLC, Mount Storm, WV
Project Manager responsible for staffing construction inspection. Provide best construction management practices and value engineering for civil construction of 30 miles of roadway and turbine pads. Project included field inspection and erosion sediment control inspections. Field changes were evaluated and provide to the owner as value engineering to reduce cost to owners and to keep the project on budget and schedule. Attend progress meeting, prepare invoices and communicate with the owner.

Mt. Storm Wind Farm
Project Manager responsible for directing workforce to provide quality control testing for all roadways, turbine pads, concrete foundations, anchor bolt testing and grout testing. Providing an onsite laboratory to conduct concrete breaks. Coordinate schedule to provide personnel for 7 day a week/ 24hour a day coverage. Review reports and provide client with all required submittals.

Laurel Mountain Wind PowerProject
Project Manager responsible for staffing construction inspection. Provide best construction management practices and value engineering for civil construction of 12 miles of roadway.

Snowshoe Site and Utilities
Construction Manager responsible for installation of underground power and fiber optic cables. Duties included directing work force, safety, ordering and scheduling delivery of supplies, preparing cost estimates, prepare change order requests, scheduling subcontractor. Communicating with owner the progress of the project.

Calhoun County High School/School
Project manager responsible for site work and utilities for construction of a new high school. Duties included preparing submittals, project scheduling, ordering supplies, attend progress meetings and maintain cost controls, safety inspections, prepare pay estimates and change orders.

Mussleman High School
Project manager responsible for site work and utilities for construction of a new high school. Duties included preparing submittals, project scheduling, ordering supplies, attend progress meetings and maintain cost controls, safety inspections, prepare pay estimates and change orders.

Oil Creek Road
Construction Manager Duties included directing work force, safety, ordering and scheduling delivery of supplies, preparing cost estimates, preparing change order requests, scheduling subcontractors. Communicating and coordinating construction activities with the railroad.

Route 50 By-Pass
Field superintendent responsible for all aspects of roadway construction, including safety, production, scheduling supply deliveries, coordinating subcontractors, maintaining cost control and schedule, submitting change orders and pay estimates.

PROJECT TEAM

Kathleen Krommes
Environmental Permitting

Ms. Krommes has more than 24 years experience in the environmental engineering and consulting field, primarily in NEPA studies for transportation projects. Through her involvement in the preparation of Environmental Impact Statements (EIS), Environmental Assessments (EA), Categorical Exclusion Evaluations (CEE), and other environmental documents, she has acquired extensive knowledge of PENNDOT's Transportation Project Development Process. She has also managed the waste management portions of transportation projects for PENNDOT and the Pennsylvania Turnpike Commission. Miss Krommes has played a key role in agency coordination, public outreach programs, and technical review of NEPA documents.

EDUCATION

BS/Chemical Engineering/Grove City College

REGISTRATIONS

Engineer-in-Training/PA/1992

PROJECT EXPERIENCE

GSA Region 3 Blanket Purchase Agreement Contract, General Services Administration, Region 3, Virginia.
Permitting Specialist for the updating of an existing Spill Prevention, Control, and Countermeasure Plan and West Virginia Department of Environmental Protection Underground Injection Permit. Work included field investigation of storm sewers and oil water separators to determine illicit discharge connections and surveying of existing features to development base mapping. The SPCC Plan evaluated various fuel storage areas, both above- and underground storage tanks, tank filling operations, training and inspection requirements, and spill prevention and response issues. The original West Virginia NPDES Water Pollution Control Permit for the IRS-ECC facility was issued as a non-significant industrial user of the Public Sanitary Sewer District. The original permit allowed the ECC to discharge up to 2,000 gallons per day. Our calculations indicated the facility's discharge was greater than 10,000 gallons per day. Air permit applications were completed and submitted to the State of West Virginia's Department of Environmental Quality. The construction and operating air permits for the facility were secured.

E01528 Somerset Borough Bridge Replacement, Pennsylvania Department of Transportation - District 9-0. Borough of Somerset, Somerset County, PA.
Project Manager for providing environmental studies and documentation, including NEPA, wetlands identification and delineation, waterway permitting, and Phase I ESA.

Department of Homeland Security Headquarters at St. Elizabeths Environmental and Engineering Studies, Washington, DC.
NEPA Specialist for redevelopment of the St. Elizabeths West Campus. This high-profile, controversial project entails developing a Master Plan for construction of the USCG Headquarters and other components of the Department of Homeland Security on the former mental institution property. G&O is responsible for the Environmental Impact Statement; Section 4(f) Evaluation; wetlands and wildlife assessments; utility planning; site surveying; hazardous materials/hazardous waste assessments; and archeological investigations.

E01524 Garmantown Bridges, Pennsylvania Department of Transportation, District 9-0. Project Manager.
As a subconsultant to Keller Engineers, Inc. responsible for the environmental studies and documentation including NEPA, wetland identification and delineation, threatened and endangered species coordination, Phase I ESA, and historic resource studies. Also, provided supplemental engineering services for the preliminary maintenance and protection of traffic plan.

Lackawanna Valley Industrial Highway Project, Pennsylvania Department of Transportation, District 4-0, Lackawanna County, PA.
Coordinated waste management activities for both preliminary design and final design of this fast-tracked project. Her involvement encompassed all aspects of the project, beginning with preliminary area reconnaissance and culminating in development of PS&E's for corrective action at specific waste sites. Critical to the successful development of corrective action plans, was her contribution to negotiations with PADEP. Also assisted in writing and editing the Environmental Impact Statement for the project.

REFERENCES

The following references are given to provide insight on our quality of work and commitment to our clients.

Mr. Robert (Al) Bailey, Chairman
Preston County Public Service District #4
PO Box 370
Bruceton Mills, WV 26525
304-379-3130

Mr. Gregg Smith, P.E.
West Virginia Department of Environmental Protection
209 South Main Street
Philippi, WV 26416
304-842-1900

Mr. Gene Saurborn, P.M.
West Virginia Conservation Agency
4720 Brenda Lane, Building Five
Charleston, WV 25305
304-367-2770

Ms. Nancy Seger, P.E.
Ohio Department of Natural Resources
Division of Mineral Resources Management
2045 Morse Rd. Building H-3
Columbus, OH 43229-6693
614-265-6633

Mr. Mike Steinmaus, Director
Monday Creek Restoration Project
P.O. Box 129
New Straitsville, OH 43766
740-394-2047

REQUIRED FORMS

The forms on the following pages are submitted in accordance with the requirements of the Expression of Interest for the Owl Creek Highwall #2 Design Project.

CERTIFICATION AND SIGNATURE PAGE

By signing below, I certify that I have reviewed this Solicitation in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this bid or proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

Stantec Consulting Services, Inc.
(Company)

(Authorized Signature)

Richard Gaines, PE, Senior Associate
(Representative Name, Title)

304-367-9401 304-367-9403
(Phone Number) (Fax Number)

3/28/2013
(Date)

ADDENDUM ACKNOWLEDGEMENT FORM

SOLICITATION NO.: DEP16159

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

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

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

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

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

Stantec Consulting Services, Inc.
Company

Authorized Signature

3/28/2013
Date

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

RFQ No. DEP16159

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

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

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

DEFINITIONS:

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

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

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

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Stantec Consulting Services, Inc.

Authorized Signature: _____ Date: 3/28/2013

State of West Virginia

County of Marion, to-wit:

Taken, subscribed, and sworn to before me this 28th day of March, 2013

My Commission expires Nov 8, 2020

AFFIX SEAL HERE

NOTARY PUBLIC _____

NOTARY PUBLIC OFFICIAL SEAL
STATE OF WEST VIRGINIA
JORDAN L. STRAIGHT
PO BOX 1691
FAIRMONT, WV 26555
MY COMMISSION EXPIRES NOV. 8, 2020

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
AML CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE

Attachment "B"

PROJECT NAME: DEP 16159 Owl Creek Highwall #2 Design	DATE (DAY, MONTH, YEAR) 28 March 2013	FEIN 11-2167170
1. FIRM NAME Stantec Consulting Inc.	2. HOME OFFICE BUSINESS ADDRESS 10160-112 Street, Edmonton, Alberta, Canada, T5K 216	3. FORMER FIRM NAME

4. REGIONAL OFFICE TELEPHONE	5. ESTABLISHED (YEAR)	6. TYPE OWNERSHIP	6a. WV REGISTERED DBE
304-367-9401	1954	_ Individual X Corporation _ Partnership _ Joint-Venture	_ YES X NO

7. PRESENT OFFICES: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. PERSONNEL EACH OFFICE

7a.

Stantec has over 190 offices across North America. Below we have listed our current offices in West Virginia. For a full listing of Stantec's office locations, please visit www.stantec.com/locationMap.html.

Buckhannon, WV (26)
1 Moore Avenue
Buckhannon, WV 26201
(304) 472-7140
Garland Steele, PE, PS, FASCE

Charleston, WV (1)
723 Kanawha Blvd East, Ste. 411
Charleston, WV 25301
(304) 343-0222
Michael Perry, PE

Fairmont, WV (29)
111 Elkins Street
Fairmont, WV 26554-4021
(304) 367-9401
Gary Fazalare, PE

8. NAMES OF PRINCIPAL OFFICIALS OR MEMBERS OF FIRM	8a. NAME, TITLE & TELEPHONE NUMBER - OTHER PRINCIPALS	
Robert Gomes – President & CEO	Aram H. Keith – Chairman Stantec Inc.	Susan E. Hartman – President Hartman Group.
Rich Allen – Senior Vice President & COO	David L. Emerson – Corporate Director	Ivor M. Ruste – Executive Vice President
Dan Lefaivre – Senior Vice President & CFO	Douglas K. Ammerman – Corporate Director	
	Anthony P. Franceschini Corporate Director	

9. **Personnel by Discipline:** (List each person only once, by primary function.)

2140	Administrative	5	Ecologist	55	Hydraulic Engineer	352	Project Manager
157	Archeologist	14	Economist	55	Hydrologist		Sanitary Engineer
618	Architect	406	Electrical Engineer	27	Interior Designer	346	Structural Engineer
226	Biologist	583	Environmental Engineer	364	Landscape Architect		Surveyor
491	CADD Technician	886	Environmental Scientist	163	Mechanical Engineer	1865	Technician / Analyst
31	Chemical Engineer	179	Foundation/Geotechnical Engineer	463	Mining Engineer	17	Toxicologist
612	Civil Engineer	132	Geographic Info. System Specialist	97	Planner: Urban / Regional	503	Transportation Engineer
29	Construction Inspector	191	Geologist		Process Engineer / Designer	30	Water Resources Engineer
158	Construction Manager	15	Geotechnical Engineer		Professional Land Surveyor	1237	Other
						12377	*TOTAL PERSONNEL*

STANTEC can allot three (3) AML Design Teams to this project. Each AML Design Team will be comprised of: necessary CADD operators and other necessary support personnel to ensure project goals are achieved and the project is completed within WVDEP established timeframes.

10 HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE? N/A ☐ YES ☐ NO

11.	**OUTSIDE KEY CONSULTANTS / SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Confidential Qualification Questionnaire".**	
NAME AND ADDRESS: Novel Geo-Environmental, PLLC 806 B Street St. Albans, West Virginia 25177	**SPECIALTY:** Subsurface drilling investigation-geotechnical engineering – soil, rock, coal physical property testing	**WORKED WITH BEFORE:** [X] YES [ ] NO
NAME AND ADDRESS: Sturm Environmental Services P.O. Box 650 Bridgeport, WV 26330	**SPECIALTY:** Chemical analysis of soil, rock, and coal	**WORKED WITH BEFORE:** [X] YES [ ] NO
NAME AND ADDRESS: Keddal Aerial Mapping 1121 Boyce Rd, Suite 3100 Pittsburgh, PA 15241	**SPECIALTY:** Aerial Photography Developing mapping from aerial photography	**WORKED WITH BEFORE:** [X] YES [ ] NO
NAME AND ADDRESS:	**SPECIALTY:**	**WORKED WITH BEFORE:** [ ] YES [ ] NO
NAME AND ADDRESS:	**SPECIALTY:**	**WORKED WITH BEFORE:** [ ] YES [ ] NO
NAME AND ADDRESS:	**SPECIALTY:**	**WORKED WITH BEFORE:** [ ] YES [ ] NO
NAME AND ADDRESS:	**SPECIALTY:**	**WORKED WITH BEFORE:** [ ] YES [ ] NO

12. A. **Is your firm experienced in Abandoned Mine Lands Remed. n / Mine Reclamation Engineering?**

[X] Yes
[ ] No

Description and Number of Projects: **Corporate Experience: 40+ projects**

Stantec has successfully completed 40+ AML Reclamation projects. See Sheets 4 through 10 for a detailed listing of the projects, including the tasks involved with each project.

B. **Is your firm experienced in Soil Analysis?**

[X] Yes
[ ] No

Description and Number of Projects: **Corporate Experience: Over 200, including 30+ AML and AML Related Projects**

Stantec has successfully completed over 200 soil analysis projects, ranging in size and complexity. In addition, Stantec has completed 30+ AML and AML related Soil Analysis projects. See Sheet 12 for a detailed listing of the AML and related projects, including the tasks involved with each project.

C. **Is your firm experienced in Hydrology and Hydraulics?**

[X] Yes
[ ] No

Description and Number of Projects: **Corporate Experience: 80+ projects, including 50+ AML and AML Related Projects**

Stantec has successfully completed 100+ hydrology and hydraulics projects, including studies associated with bridges, box culverts, pipes, ditches, and sediment and other ponds. In addition, Stantec has completed 50+ AML and AML Related Hydrology and Hydraulics projects. See Sheets 4 through 10 and Sheet 13 for a detailed listing of the projects, including the tasks involved with each of the AML and AML related projects.

D. **Does your firm produce its own Aerial Photography and Develop Contour Mapping?**

[X] Yes
[X] No

Description and Number of Projects: **Corporate Experience: 90+ projects, including 75+ AML and AML Related Projects**

Stantec subcontracts development of aerial photography to Aerocon Photogrammetric Services and has successfully set aerial photographic control points on numerous engineering projects by GPS and Conventional Surveying techniques. Stantec has also developed topographic and planimetric maps from GPS and Conventional Surveying techniques and supplemented topographic and planimetric features on mapping developed by aerial mapping firms. In addition, Stantec has completed 75+ AML and AML related mapping projects. See Sheets 4 through 10 and Sheet 14 for a detailed listing of the AML and AML related projects, including the tasks involved with each project.

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.)**

[X] Yes
[ ] No

Description and Number of Projects: **Corporate Experience: 100+ projects, including 15+ AML projects**

Stantec has successfully completed One Hundred Twenty Two (122) Domestic Waterline projects. In addition, Stantec has completed Eleven (11) AML-related Domestic Waterline Projects. See Sheets 9 through 10 and Sheet 15 for a detailed listing of the projects, including the tasks involved with each project.

F. **Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?**

[X] Yes
[ ] No

Description and Number of Projects: **Corporate Experience: 15+ projects; Employee Experience Seventeen (17) Projects**

Stantec has successfully completed 15+ Acid Mine Drainage Evaluation and Abatement Design projects. See Sheets 9 through 10 and Sheets 16 and 17 for a detailed listing of the projects, including the tasks involved with each project.

12.	Is your firm experienced in Abandoned Mine Lands Remed. ...n / Mine Reclamation Engineering?
X Yes No	Description and Number of Projects: **Corporate Experience: 45+ projects**

CORPORATE EXPERIENCE:	
Nortan Highwall #1 Design Services	Reclamation design with Excavation, wet mine seals including bat gate designs; and revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Tub Run Highwall and Refuse Phase II:	Reclamation design with 307,000 Cubic Yards of Excavation, Four (4) Wet Mine Seals; 9,500 l.ft. Access Road; 65,000 l. ft. Sediment Control; 11,400 l.ft. of Ditches; and 114 acres of Revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Dewatering and AMD Treatment Plan; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Tub Run Highwall and Refuse Phase I:	Reclamation design with 265,000 Cubic Yards of Excavation, 8,500 l.ft. Access Road; 46,000 l. ft. Sediment Control; 9,900 l.ft. of Ditches; 4 Pipes; 8 ft. by 8 ft. Box Culvert; and 74 acres of Revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Dewatering and AMD Treatment Plan; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392:	8.0 Mile Waterline Extension Feasibility Study – I.D. No. 392, involving 96 Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; and Initial On-Site Meeting. Engineering cost proposal approved and awaiting a purchase order and "Notice to Proceed".
Webster County Point Mountain Waterline Extension Feasibility Study:	15.0 Mile Waterline Extension Feasibility Study – I.D. No. 384, involving 103 Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; and Initial On-Site Meeting, Preliminary Report, Monthly Reports, and Invoicing.
Greenbrier Hollow Refuse:	Reclamation design of coal refuse pile with 51,000 Cubic Yards of Excavation, two (2) wet mine seals; 4,300 l.ft. Sediment Control; 1,015 l.ft. of Ditches; 5 Pipes; and 8 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Sauls Run (Carpenter) Landslide:	Mitigation of a landslide behind the Carpenter House with 40,000 Cubic Yards of Excavation, 2,500 l.ft. Sediment Control; 610 l.ft. of Ditches; 3 Pipes; 1 Manhole; Subsurface Drain; and 7 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Pageton (Lambert) Portals:	Reclamation design of coal refuse pile with 51,000 Cubic Yards of Excavation, twenty four (24) wet mine seals; 13,700 l.ft. Sediment Control; 1,600 l.ft. of Ditches; 1 Pipe; Streambank Protection; and 24 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
WVDEP Mapping Contract –South Region:	Project awarded, awaiting project assignments, cost approvals, and "Notice to Proceed".

12.	Is your firm experienced in Abandoned Mine Lands Remed. n / Mine Reclamation Engineering?
X Yes No	Description and Number of Projects: **Corporate Experience: 45+ Projects**

CORPORATE EXPERIENCE:	
Birds Creek Number Four:	Reclamation design with 35,000 Cubic Yards of Excavation, eight (8) wet mine seals including five (5) bat gate designs; and 18 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Bergoo Waterline Extension Feasibility Study, I.D. No. 351:	12.0 Mile Waterline Extension Feasibility Study – I.D. No. 351, involving 350 to 400 Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.
Lewis County EDA Waterline Extension Feasibility Study, I.D. No. 374:	15.2 Mile Waterline Extension Feasibility Study – I.D. No. 374, involving 110 Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; and Initial On-Site Meeting, Preliminary Report, Monthly Reports, and Invoicing.
Scott Road and Findley Road Waterline Extension Feasibility Study, I.D. No. 356:	1.5 Mile Waterline Extension Feasibility Study – I.D. No. 356, involving 7 Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.
WVDEP Mapping Contract –South Region:	Twenty one (21) sites mapped totaling 1,700 acres. Set horizontal and vertical control for and developed aerial mapping for the sites. Set baselines for Engineering Design and Construction on all sites and provided topographic and planimetric survey for features not shown by aerial photography. Visited all sites with DEP, attended project meetings, provided weekly/monthly updates, and invoicing.
WVDEP Mapping Contract –North Region:	Eight (8) sites mapped totaling 950 acres. Set horizontal and vertical control for and developed aerial mapping for the sites. Set baselines for Engineering Design and Construction on all sites and provided topographic and planimetric survey for features not shown by aerial photography. Visited all sites with DEP, attended project meetings, provided weekly/monthly updates, and invoicing.
Church Creek/Manown Highwall:	Reclamation design of four (4) sites with 11,800 linear feet of highwall with 220,000 Cubic Yards of Excavation, twenty three (23) wet mine seals including two (2) bat gate designs; and 85 acres of revegetation; Topographic Surveying; Subsurface and Geological Investigation (nine (9) piezometers installed); Generation of Construction Mapping; Water and Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Racine (Bradshaw) Portals:	Reclamation design of six (6) sites with 2,500 Cubic Yards of Excavation, sixteen (16) wet mine seals including eight (8) bat gate designs; and 5 acres of revegetation; Topographic Surveying; Generation of Construction Mapping; Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Hampton Number Four Maintenance:	Reclamation design of a failed refuse fill approximately 600 feet high (in elevation). The site consists of one (1) slip area and an erosion channel up to 40-feet deep in some areas that traverses the centermost portion of the fill area. Acid mine drainage seeps (field pH = 2.5 S.U.) impacts Spruce Laurel Fork, a high quality trout stream. The 16 acre site required 25,000 cubic yards of earthwork, 2,700 linear foot of ditches, a bridge upgrade to handle construction loads, and upgrading existing access roads. Topographic Surveying; Subsurface Geological Investigation; Surface and Groundwater Testing and Reporting; Generation of Construction Mapping; Hydrologic and Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.

12.	Is your firm experienced in Abandoned Mine Lands Remed n / Mine Reclamation Engineering?
X Yes No	Description and Number of Projects: **Corporate Experience: 45+ Projects**

CORPORATE EXPERIENCE:	
Howesville Sites:	Reclamation design of two (2) sites with 4,000 linear feet of highwall with 63,000 Cubic Yards of Excavation, fifteen (15) wet mine seals including four (4) bat gate designs; and 52 acres of revegetation; Topographic Surveying of 67 acres; Subsurface and Geological Investigation (five (5) piezometers installed); Generation of Construction Mapping; Water and Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design; Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Sandy Run Highwall and Portals:	Reclamation design of 1,850 linear feet of highwall with 47,200 Cubic yards of Excavation, five (5) wet mine seals; and 15 acres of revegetation. Topographic Surveying of 22 acres; Subsurface and Geological Investigation (three (3) piezometers installed); Generation of Construction Mapping; Water and Soil Testing; Hydraulic Studies and design for Ditches and Pipes; Sediment Control Design; Revegetation Plan. Preliminary and Final Design. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Wilsie-Rosedale, Sugar Creek PSD Waterline Feasibility Study I.D. No. 324:	17.0 Mile Waterline Extension Feasibility Study – I.D. No. 324, involving 175 Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.
Laurel Valley (Daniels) Landslide Emergency AML Project:	Reclamation design of a 4.0 acre landslide from an abandoned surface mine resting against the Daniels house; 13,000 yards of earthwork; Geotechnical Subsurface Investigation; Existing and Proposed Slope Stability Analysis; Hydrologic and Hydraulic Studies for ditches and culverts; Sediment Control; Revegetation Design. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Price Hill Airshaft/Buildings (Price Hill Complex):	Reclamation design of a 1.5 acre abandoned deep mine shaft site; 1,300 yards of earthwork; suspected vertical mine shaft investigation and sealing (if present); capping another vertical mine shaft with ability to discharge up to 12 cfs of mine water; demolishing several concrete and cut stone ruins; garbage removal, stockpiling and burying on-site refuse. Subsurface Investigation for seating of caps; mine water testing; Hydrologic and Hydraulic Studies for ditches and existing culverts; Sediment Control; Revegetation Design. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Weaver Portals and Highwall, Phases I and II:	Reclamation design of 4,200 linear feet of highwall with 97,000 yards of earthwork; twenty (20) wet mine seals; six AMD treatment limestone beds with "Aluminators", and 35 acres of revegetation. Topographic Surveying; Subsurface Geological Investigation (six (6) piezometers installed); Surface and Groundwater Testing and Reporting; Supplement and Generation of Mapping; Hydrologic and Hydraulic Studies and design for twenty five (25) Ditches and ten (10) Pipes; Sediment Control Design; Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Old Bridgeport Hill Mine Drainage, Phase II:	Reclamation design including four (4) Wet Mine Seals and Drainage Facilities to capture and convey mine drainage around businesses and residents along a half-mile stretch of Old Bridgeport Hill Road. Topographic Surveying; Subsurface Geological Investigation (Piezometer Installation); Surface and Ground Water Testing and Reporting; Generation of Mapping; Reclamation Design with earthwork quantities; Design and Hydrologic and Hydraulic Studies for nine (9) Ditches, eight (8) Pipes, one (1) Subsurface Drain, and four (4) Inlets; Sediment Control Design; Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.

12. **Is your firm experienced in Abandoned Mine Lands Reme[illegible]ion / Mine Reclamation Engineering?**

[X] Yes [ ] No

Description and Number of Projects: **Corporate Experience: 45+ Projects**

CORPORATE EXPERIENCE:

Nixon Run AMD:	The site consists of one (1) open portal into the abandoned Consol 32 Mine that is discharging acid mine drainage (AMD). Preliminary average estimates of AMD flow from the open portal is 235 gallons per minute exhibiting a pH of 3.2 with acidity concentrations around 150 mg/l, iron concentrations around 11 mg/l, aluminum concentrations around 8 mg/l, and manganese concentrations less than 2 mg/l. Topographic Surveying; Subsurface Geological Investigation (Piezometer Installation); Surface and Ground Water Testing and Reporting; Generation of Mapping; Reclamation Design with earthwork quantities; Design and Hydrologic and Hydraulic Studies for nine 905 L.Ft. Ditches, four (4) Pipes, one (1) Subsurface Drain, Sediment Control Design; and Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Arlington (Cox) Drainage:	Reclamation design to alleviate ground water impacts to the Cox Residence involving Two (2) Wet Mine Seals; Hydrologic and Hydraulic Studies and design for 198 feet of Subsurface Drains, two (2) Ditches, and one (1) Pipe; Mine Dewatering and AMD Treatment Plan; Sediment Control Plan; and Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
James and Amanda Taylor Waterline Feasibility Study I.D. No. 309:	1.0 Mile Waterline Extension Feasibility Study – I.D. No. 309, involving ten (10) Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.
Glady Fork Mining, Inc. (Permit D-35-82) Bond Forfeiture:	Active AMD Treatment Facility – Involved the design of a $3,000,000.00 AMD plant design that incorporated a single treatment train capable of handling 1,000 gallons per minute of alkaline mine drainage with 15 ppm of total iron and included necessary piping and seating for a second treatment train if future needs arise. The project also involved relining existing boreholes to eliminate mine discharge interruptions, design and construction of 2,500 linear feet of gravity fed plant intake line from the boreholes to the plant site, and an active chemical treatment plant. The treatment plant included an aeration basin (concrete), flocculator (concrete), chemical feed building, settling basin (concrete), sludge thickener (concrete), and geo-tube sludge disposal system with overflow catchment and re-treatment capabilities.
Poplar Ridge / Morrison Ridge Waterline Feasibility Study – I.D. No. 298:	Waterline Extension Feasibility Study – I.D. No. 298, involving 21 Residences. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water; On-Site Meeting and interviews, Monthly Reports, and Invoicing.

NIXON RUN AMD:
Wet Mine Seal outlet pipes and receiving ditch.

PRICE HILL AIRSHAFT AND BUILDINGS:
Vertical mine shaft sealing in progress.

12. a. **Is your firm experienced in Abandoned Mine Lands Reme[illegible]ion / Mine Reclamation Engineering?**

[X] **Yes** [ ] **No** Description and Number of Projects: **Corporate Experience: 45+ Projects**

CORPORATE EXPERIENCE:	
Summit Park PSD Waterline Feasibility Study – I.D. No. 288:	2.75 Mile Waterline Extension Feasibility Study – I.D. No. 288, involving 167 Residences and Businesses. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation; Soil Sampling; Project Mapping; Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Executive Summary, Monthly Reports, and Invoicing.
Murray City AMD and Art Project:	Reclamation design for abandoned portals discharging Acid Mine Drainage. Topographical Surveying; Mapping; Subsurface Investigation (Piezometer Installation and Soils Testing); Passive Acid Mine Drainage Treatment System including two (2) SAPS, two (2) Precipitate Ponds, One (1) Flush Pond, Mine Pool Stabilization Pond and Overflow Treatment Pond; Design and Hydrologic and Hydraulic Studies for Construction in Floodway (Local Flood Plain Coordination and Permit), thirteen (13) Ditches and six (6) Spillways; Design of a Wet Mine Seal; Incorporation of Art Component to Satisfy Funding; Interim Grading Plan to allow relocation of a high pressure gas line; Sediment Control Plan; Revegetation Design; Environmental Permits; Construction Plans and Specifications; Calculation Brief with Quantity Calculations; Engineers Cost Estimate; Initial On-Site, 50%, 90%, Check Set, and Final Design Meetings; Monthly Reports and Invoicing.
Nutters Tipple D-716:	Reclamation design of a 7.2 Acre Bond Forfeiture Coal Tipple Site; Surveying; Geotechnical (Slope Stability) Investigation; Coal Analysis; HazMat Materials (2 UST'S, 8 AST's, R-R Ties, 55–Gallon Drums, Refrigerators, Stained Soil); Debris Removal Plan; Design and Hydrologic and Hydraulic Studies for Subsurface Drain; two (2) Ditches, and a Channel Design; Sediment Control Plan; Revegetation Plan; Calculation Brief with Quantity Computations; Engineers Cost Estimate; Construction Plans and Specifications; Initial, 50%, 90%, Final Design Meetings; Monthly Reports and Invoicing.
Hodgesville PSD Waterline Feasibility Study – I.D. No. 275:	1.2 Mile Waterline Extension Feasibility Study – I.D. No. 275, involving Seventeen (17) Residents. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.
McElwain Waterline Feasibility Study – I.D. No. 271:	0.64 Mile Waterline Extension Feasibility Study – I.D. No. 271, involving One (1) Resident. Surface and Ground Water Testing and Reporting; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Water Analyses Interpretation and Evaluation; Ground Water Contamination Mitigation Alternatives with Estimated Construction Costs; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.

TUNNELTON (DILLSWORTH) LANDSLIDE
Gabion Basket Wall Installation behind Dillsworth Residence

SAULS RUN STRIP AND LANDSLIDE
AML related slip threatening residences along Sauls Run

12. A. (Cont.)	Is your firm experienced in Abandoned Mine Lands Remediation / Mine Reclamation Engineering?				
[X] Yes [ ] No	Description and Number of Projects: **Corporate Experience: 45+ Projects**				
Fairmont (Hendrickson) Subsidence:	Subsidence investigation of Hendrickson Residence involving Geologic Subsurface Investigation; review and compilation of three previous reports; Field Surveying; Public and Private Record Search; Hydrologic and Geologic Field and Record Investigation and Report; Structure and Support Area Mitigation Alternatives; and Initial On-Site Meeting, Preliminary Report, Final Report, Monthly Reports, and Invoicing.				
Flint Run East Acid Mine Drainage Reclamation:	Phase I Reclamation design of a 171-Acre Coal Refuse Area, design reclamation of spoil piles, treatment and discharge plan for ponds and lakes filled with AMD, passive AMD treatment design, including a SAPS, Wetland, Limestone Bed, Steel Slag Leach Beds, and Open Limestone Channels. GPS, Topographic Surveying; supplement of available aerial mapping; Design and Hydrologic and Hydraulic Studies for four (4) Channels, three (3) Ditches, and seven (7) Spillways, Design of eight (8) Impoundments (Three Flush Ponds, Sediment Pond, SAPS Pond, Fresh Water Pond, and Steel Slag Pond); Sediment Control Design; Revegetation Design; Environmental Permits; Construction Plans and Specifications, Calculation Brief with Quantity Calculations; Engineers Cost Estimate; Initial On-Site, 50%, 90%, Check Set, and Final Design Meetings; Monthly Reports and Invoicing.				
Danehart Acid Mine Drainage Reclamation:	Reclamation design on a 2.0 Acre Slope Failure Five (5) Feet from a Residence; Surveying (Property and Topographic); Geotechnical (Slope Failure) Investigation; Surface and Ground Water Testing; Mapping; Reclamation Design with Pier and Lag Retaining Wall Design; Design and Hydrologic and Hydraulic Studies for a Ditch, a Subsurface Drain, Culvert Design; Sediment Control Plan; Revegetation Plan; Calculation Brief with Quantity Computations; Engineers Cost Estimate; Construction Plans and Specifications; Initial, 50%, 90%, Check Set, and Final Design Meetings; Monthly Reports and Invoicing.				
Midvale Coal Number 7:	35 Acre Coal Tipple and Coal Refuse Disposal Fill Area; GPS and Topographic Surveying; Subsurface Investigation; Coal Analysis; Soil Borrow Analysis; HazMat Investigation (PCB's, Drums, Pails, Stained Soils); Mapping; Calculation Brief with Quantity Computations; Initial On-Site, 50%, 90%, Final Design Meetings; Monthly Reports and Invoicing.				
Tunnelton (Dillsworth) Landslide:	Reclamation of a landslide behind Dillsworth Residence by design of an 84 foot long by 18 foot high Gabion Basket Retaining Wall; Hydrologic and Hydraulic Studies and design for 214 feet of Subsurface Drains, two (2) Pipes, Manhole, and Drop Inlet; Traffic Control and Pavement Repair Plan; Sediment Control Design; and Revegetation Plan Topographic Surveying and Generation of Mapping; Subsurface Geological Investigation (two (2) piezometers installed); Surface and Groundwater Testing and Reporting; Reclamation Design with Earthwork Quantities; Sediment Control Design; and Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.				
Sauls Run Strip and Landslide:	Reclamation design of AML related slip behind the Love, Lee, Rohrbaugh, and Gregory Residences with 59,350 Yards of Earthwork; Hydrologic and Hydraulic Studies and design for 2,764 feet of Ditches, 500 feet of Subsurface Drains, five (5) Pipes, and two (2) Headwalls; Traffic Control and Pavement Repair Plan; Sediment Control; and 6.7 acres of Revegetation. Topographic Surveying and supplementation and generation of Mapping; Subsurface Geological Investigation (ten (10) piezometers installed); Surface and Groundwater Testing and Reporting; Sediment Control Design; and Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.				
Linden Acid Mine Drainage Bioremediation:	*Glen Castle Reclamation:*	*Misco Burning Gob:*	*Ferris Forfeiture:*	*Brown Subsidence:*	GPS and Topographic Surveying; Aerial Photography (Control and Mapping); Mapping.
Flint Run Acid Mine Drainage Reclamation:	Provided options with cost/benefit analysis to mitigate "worst" acid mine drainage in the State of Ohio. Project included two (2) month hydrologic investigation; impounded water and sediment investigation; chemical treatment option (AquaFix or hydrated lime) for AMD discharges; passive treatment options for AMD discharges included: eliminating AMD discharge sites through backfilling operations; reducing AMD flows by diverting up-gradient ground waters; cover high infiltration areas; alkaline amendment for coal refuse cover and to support vegetation; open limestone channels; steel slag leach beds; aerobic wetlands; limestone filter beds; limestone polishing leach bed; open limestone drainage ditches and channels; and vegetation plan.				

12. (Cont.)	Is your firm experienced in Abandoned Mine Lands Remed. n / Mine Reclamation Engineering?
X Yes No	Description and Number of Projects: **Corporate Experience: 45+ Projects**
Lake Milton Investigation:	220 Acre-foot Impoundment Investigation; GPS, Hydrographic and Topographic Surveying; Geotechnical (Pending Embankment Failure) Investigation; Surface and Ground Water Testing; Impounded Water and Sediment Investigation; Mapping; Aerial Photography (Control and Mapping); Reclamation Design Alternatives Report; Hydrologic and Hydraulic Studies for Ditch, Channel, Spillway Design; Sediment Control Design; Revegetation Plan; Calculation Brief with Quantity Computations; Engineers Cost Estimate; Initial On-Site, 50%, 90%, Final Design Meetings; Monthly Reports; Invoicing.

Lake Milton Embankment Piping Leak
LAKE MILTON - near Jackson, Jackson County, OH

Lake Milton Geotechnical Investigation
LAKE MILTON - near Jackson, Jackson County, OH

Related Abandoned Mine Lands Remediation / Mine Reclamation Engineering	
West Virginia Conservation Agency:	Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Krout Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Creek Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project, Coalwood Floodplain Improvement Project, Rachel Floodplain Improvement Project, Barkers Creek Stream Bank Protection Project, Reedsville Equipment Storage Building, Jackon's Mill Livestock Arena, Edgewood Stream Bank Stabilization Project, Pringle Road Landslide Remediation, Back Creek Natural Stream Restoration Project, Bunnell Run Stream Bank Stabilization Project, Deckers Creek Stream Bank Stabilization Project..

12. B. Is your firm experienced in Soil Analysis?	
X Yes No	Description and Number of Projects: **Numerous Projects Involving Physical Properties of Soil Including Soil Stability Investigations, Design of Soil Fill Slopes, as well as Chemical Properties of Soils including Revegetation Plans.** **CORPORATE EXPERIENCE:**
Slope Stability and Design of Fill Slopes	**AML** – Sauls Run (Carpenter) Landslide; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Sauls Run Strip and Landslide; Nutters Tipple D-716; Danehart Acid Mine Drainage; Lake Milton Investigation. **WVCA** – Fisher-Mill Creek Bank Stabilization; Harmons Creek Bank Stabilization; Parchment Valley Bank Stabilization; North Fork Hughes River Bank Stabilization. **Landfills** – Franklin County Sanitary Landfill Capping and Closure Plan; Bobmeyer Landfill Capping and Closure Plan; Fayette County Sanitary Landfill #3 Capping and Closure Plan; Hardin County Sanitary Landfill Capping and Closure Plan; Allied Sanitary Landfill Capping and Closure Plan; Triangle Landfill Capping and Closure Plan; Coshocton Landfill Capping and Closure Plan; B & E Landfill Capping and Closure Plan; Westerville Landfill Capping and Closure Plan. **Road Design** – U.S. Route 35 Couch to Coast Guard Station; Lawrence County Route 7; Corridor H, Section 6 Davis to Bismark; Williams Road Widening; Journal Street Extension; Frantz Road; Maxtown Road; Alum Creek Drive. **Quality Control / Quality Assurance Projects** – Glady Fork Permit D-35-82 Bond Forfeiture; ODNR Racine Docks; Fisher Mill Creek bank Stabilization; Hazelton Federal Prison; Clifford Hollow Bridge; Corridor H Job 123; Corridor H Job 125; Corridor H at Baker; Mon-Fayette Bridge; Glenville Federal Prison.
Revegetation Plans	**AML** – Tub Run Highwall and Refuse Phase I and II; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Birds Creek Number 4; Church Creek/Manown Highwall; Racine (Bradshaw) Portals; Howesville Sites, Sandy Run Portals; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Glady Fork Mining, Inc. D-35-82 Bond Forfeiture; Weaver Portals and Highwall Phase I and II; Nixon Run AMD; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Flint Run East Acid Mine Drainage Reclamation; Murray City AMD and Art Project; Flint Run Acid Mine Drainage Reclamation; Danehart Acid Mine Drainage; Midvale Coal Number 7; Nutters Tipple D-716; Lake Milton Investigation. **Landscape Architecture Projects (with soil and vegetation designs)** – Willowbrook Linear Parkway; Willowbrook Conceptual Park Plan; Northgate Commercial Development; Montgomery Park; Tartan Fields Golf Course; Hoff Woods Park; Meri-Mac Park; Bridlewood Park, Friendship Park.

12. C.	**Is your firm experienced in hydrology and hydraulics?**
[X] Yes [ ] No	Description and Number of Projects: **Numerous Projects Involving H & H Studies for Flood Plain Improvements, Impoundments, Road Bridges, Pipes, Culverts, Box Culverts, Ditches, Channels, and Channel Relocations and Restoration using Natural Stream Design Techniques.**
	CORPORATE EXPERIENCE:
H & H Studies for Flood Plain Improvements and Impoundments	**AML** – Weaver Portals and Highwall Phase I & II; Flint Run East Acid Mine Drainage Reclamation; Murray City AMD and Art Project; Flint Run Acid Mine Drainage Reclamation; Lake Milton Investigation. **SPEC REC** – Glady Fork Mining, Permit D-35-82, **NPDES and Waste Permits (Sediment Control Structures)** – C.J. Martin Enterprises; A.F. Wendling Inc.; Pope Properties; Deer Park Development; Fairfax Trucking (Corridor H); Mountaineer Grading (Upper Tract to Petersburg Road); Allwood Construction (Philippi Bypass); Odom Construction Job 123 (4 Waste Permits); Odom Construction Job 125 (1 Waste Permit); C.J. Martin Enterprises Waste Permit; Mountaineer Grading (Moorefield Junction Road). **WVCA** – Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project.
H & H Studies for Bridges	**SPEC REC** – Glady Fork Mining, Permit D-35-82, **Others** - Route 35 (Mason County); Mile Branch Bridge; Upper Tract bridge; Buffalo Creek Bridge; Sawmill Parkway Pedestrian Crossing; Southwest Dublin Traffic Calming; LAW-7-02.17; LIC-40-44.930; FRA-70-13.12; FRA-315-00.30R; SHE-CR-41-3.14; PER-93-33.26B; MEG-143-11.29; Children's Home Road Bridge; PIC/FRA-23-12.92/0.00; CR 23 over Elk Fork; HIG-138-24.36; Ranger Road over Georges Creek; CR24A over the Hocking River; CR24 over the Hocking River; HIG-28-2.80; PER-93-12.40; GUE-209-5.73; CR 41 over the Miami River; I670(S) over Conrail; B&O and N&W Railroads; 4th Street Connector over Conrail and B&O Railroads; I670 over Alum Creek; I670 over 5th Street.
H & H Studies for Pipes, Inlets, Culverts, Box Culverts	**AML** – Tub Run Highwall and Refuse Phase I and II; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Birds Creek Number 4; Church Creek/Manown Highwall; Racine (Bradshaw) Portals; Howesville Sites, Sandy Run Portals; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Weaver Portals and Highwall Phase I & II; Nixon Run AMD; Tunnleton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Flint Run East Acid Mine Drainage Reclamation; Murray City AMD and Art; Flint Run Acid Mine Drainage Reclamation; Danehart Acid Mine Drainage; Nutters Tipple D-716; Lake Milton Investigation. **SPEC REC** – Glady Fork Mining, Permit D-35-82. **Road Design** – U.S. Route 35; Lawrence Route 7; Corridor H, Section 6 Davis to Bismark; Williams Road Widening; Journal Street Extension; Frantz Road; Maxtown Road; Alum Creek Drive.
Stream Assessments and Restoration	404, 401 Certification and **Natural Stream Design** of over 72,000 lineal feet of streams; Racine (Bradshaw) Portals; Tub Run Highwall and Refuse Phase I; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Weaver Portals and Highwall; Pearce Mine, Mead/Coffin Mine, Circle Drive Mine, 300 Pit Mine, Big Valley Mine; Waterloo Coal Company, Inc – Winchester Mine, Westlake Mine, Mead/Sinn Mine, Allied Wets Mine; U.S. Rte. 35 600 linear feet. **WVCA** – Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal; Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project.

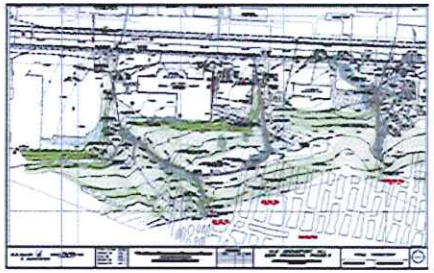
12. D. **Does your firm produce its own Aerial Photography and Develop Contour Mapping?**

[X] Yes
[ ] No

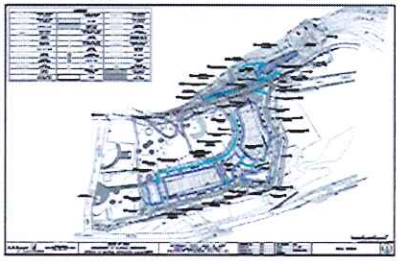
Description and Number of Projects: **Numerous Projects Developing Contour Mapping from Conventional and GPS Surveying. Aerial Photography and Associated Mapping Subcontracted to Aerocon Photogrammetric Services.**

CORPORATE EXPERIENCE:

Contour Mapping from Aerial Photography	**AML** – WVDEP North Mapping Contract, 21 Sites Totaling 1,700 Acres, WVDEP South Mapping Contract, 8 Sites Totaling 950 Acres.
Contour Mapping from GPS and Conventional Surveying Techniques	**AML** – Tub Run Highwall and Refuse Phase I and II; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Birds Creek Number Four; Church Creek/Manown Highwall; Racine (Bradshaw) Portals; Howesville Sites, Sandy Run Portals; Hampton Number Four Maintenance; Howesville Sites; Sandy Run Highwall and Portals; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Weaver Portals and Highwall, Phase I & II; Nixon Run AMD; Tunnleton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Fairmont (Hendrickson) Subsidence; Old Bridgeport Hill Mine Drainage, Phase II; Flint Run East Acid Mine Drainage Reclamation; Murray City AMD and Art Project; Flint Run Acid Mine Drainage Reclamation; Danehart Acid Mine Drainage; Nutters Tipple D-716; Lake Milton Investigation; Midvale Coal Number 7; Linden Acid Mine Drainage Bioremediation; Glen Castle Reclamation; Misco Burning Gob; Ferris Forfeiture; Brown Subsidence. **SPEC REC** – Glady Fork Mining, Permit D-35-82. **WVCA** – Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project. **NPDES and Waste Permits** - Odom Construction Job 123 (4 Waste Permits); Odom Construction Job 125 (1 Waste Permit); C.J. Martin Enterprises Waste Permit; Mountaineer Grading (Moorefield Junction Road). **Others** – Glenville Federal Prison Pistol Range; BBL Carlton State Office Consolidation Complex Site; West Virginia Wesleyan College Site; Unlimited Futures Site; Dollar Tree Site; Jim Waggle Site; John Jenkins Site.



Mapping generated from conventional surveying. OLD BRIDGEPORT HILL MINE DRAINAGE



Mapping generated from conventional and GPS survey techniques. MURRAY CITY AMD AND ART PROJECT

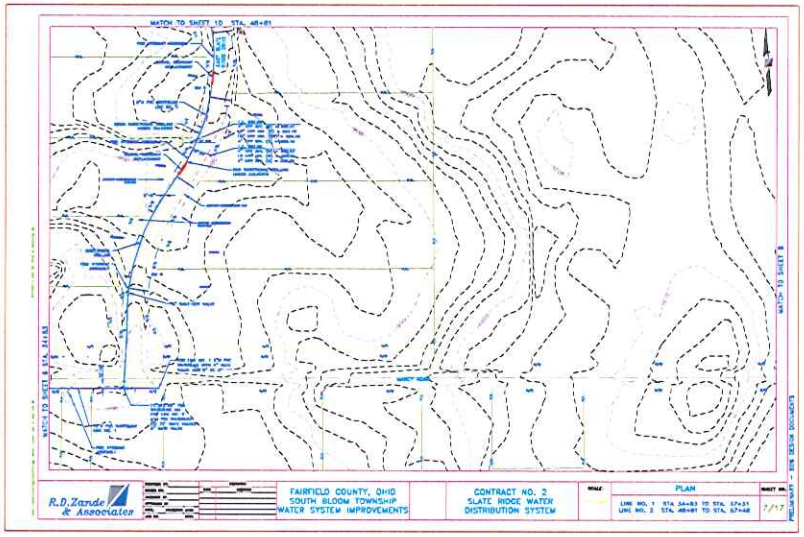
12. E. **Is your firm experienced in domestic waterline experience?** (Include experience your firm has in evaluation of aquifer degradation as a result of mining.)

[X] Yes Description and Number of Projects: **Numerous Domestic Waterline Experience Projects and Projects with Evaluation of Aquifers.**

[ ] No

CORPORATE EXPERIENCE:

Waterline Extension Feasibility Studies	**AML** – 1. Town of Newburg Waterline Feasibility Study - I.D. No. 392; 2. Webster Point Mountain Waterline Feasibility Study - I.D. No. 384; 3. Bergoo Waterline Extension Feasibility Study - I.D. No. 351; 4. Lewis County EDA Waterline Extension Feasibility Study - I.D. No. 374; 5. Scott Road and Findley Road Waterline Extension Feasibility Study - I.D. No. 356; 6. Wilsie-Rosedale Waterline Extension Feasibility Study – I.D. No. 324; 7. James and Amanda Taylor Waterline Extension Feasibility Study – I.D. No. 309; 8. Poplar Ridge/Morrison Ridge Waterline Feasibility Study – I.D. No. 298; 9. Summit Park PSD Waterline Extension Feasibility Study – I.D. No. 288; 10. Hodgesville PSD Waterline Extension Feasibility Study – I.D. No.275; 11. Charles L. and Donice J. McElwain Waterline Feasibility Study – I.D. No. 271. **SPEC REC** – Glady Fork Mining, Permit D-35-82.
Aquifer Degradation Investigation	**AML (Mining Related)** – Weaver Portals and Highwall; Flint Run Acid Mine Drainage Reclamation; Lake Milton Investigation; Danehart Acid Mine Drainage; **Other** – Remining in Ohio: Hydrologic Background Sampling Options; New Wellfield Development, Village of Frazeysburg; Wellfield Expansion, Village of Commercial Point; Groundwater Observation Well Network Evaluation and Improvements Statewide; Installation of Monitoring Wells, Columbus South Wellfield Improvements: RI/FS, Eau Claire Municipal Well Field.
Domestic Waterline Experience	**Private** - Pope Properties Cross Lanes; Odom Construction Corridor H Job 123. **Public** – Southwest Bloom Township Water Line Improvements; Alum Creek Pump Station; Lithopolis Water Treatment Plant; Kenton Water Treatment Plant; Frazeyburg Water Treatment Plant; Cedar Hill Road Waterline Study; Logan Water System Modeling; James Road Waterline; Dublin Road Waterline; Seeds-Zuber Road Waterline Extension; Young Road Waterline Extension; McKinley Avenue 48" Water Main Design; Madeira-Riverside Drive Waterline; U.S. Route 33 Water System Improvements-12" Waterline Extension; West Logan Lift Station Upgrade; Zahn's Corner Industrial Park Water System Improvements; Elevated Water Storage Tanks for various municipalities



Waterline distribution system design.

SOUTH BLOOM TOWNSHIP WATERLINE EXTENSION

Near South Bloom, Fairfield County, OH

12. F. Is your firm experienced in Acid Mine Drainage Evaluation and Abatement Design?	
[X] Yes [ ] No	Description and Number of Projects: **Corporate Experience – 10+ WVDEP AML Projects, Six (6) Ohio AML Projects; One (1) Ohio Watershed Organization**
CORPORATE EXPERIENCE:	
Glady Fork Mining, Inc. (Permit D-35-82) Bond Forfeiture	Active AMD Treatment Facility – Involved the design of a $3,000,000.00 AMD plant design that incorporated a single treatment train capable of handling 1,000 gallons per minute of alkaline mine drainage with 15 ppm of total iron and included necessary piping and seating for a second treatment train if future needs arise. The project also involved relining existing boreholes to eliminate mine discharge interruptions, design and construction of 2,500 linear feet of gravity fed plant intake line from the boreholes to the plant site, and an active chemical treatment plant. The treatment plant included an aeration basin (concrete), flocculator (concrete), chemical feed building, settling basin (concrete), sludge thickener (concrete), and geo-tube sludge disposal system with overflow catchment and re-treatment capabilities. Treated water limits are 0.50 ppm iron average, 0.75 ppm iron maximum.
Weaver Portals and Highwall, Phase I & II:	**WVDEP AML** – Twenty (20) collapsed portals contribute approximately 95 gpm of pH 3.2, 200 mg/l acidity, 10 mg/l iron, 20 mg/l aluminum, and 2 mg/l manganese to Beaver Creek. Designed passive acid mine drainage treatment systems consisting of Open Limestone Channels and six (6) Limestone Beds with engineered "Aluminator" piping systems. The project also included 97,000 Yards Earthwork, 20 Wet Mine Seals, 25 Ditches, 10 Pipes, Sediment Control Plan, and 35 acre Revegetation Plan. Construction Plans and Specifications; Engineers Cost Estimate, Bid Schedule, and Calculation Brief; Initial On-Site, Preliminary Design, Pre-Bid, and Pre-Construction Meetings; Monthly Reports and Invoicing.
Norton Highwall #1; Tub Run Highwall and Refuse Phase I and II; Greenbrier Hollow Refuse; Pageton (Lambert) Portals; Birds Creek Number Four, Church Creek / Manown Highwall, Racine, Howesville Sites, Sandy Run Highwall and Portals, Price Hill Airshaft / Buildings (Price Hill Complex), Nixon Run AMD, Old Bridgeport Hill, and Arlington (Cox) Drainage	**WVDEP AML** – Designed Mine Dewatering and AMD Discharge Treatment Plans.
Flint Run East Acid Mine Drainage Reclamation:	**Ohio AML – Phase I** – Designed passive acid mine drainage treatment system for "worst" acid mine drainage in the State of Ohio. Water Quality was pH 3.0, acidity from 1,600 to 6,000 mg/l, iron from 200 to 600 mg/l, aluminum from 30 to 250 mg/l, and manganese from 5 to 55 mg/l. Designs include Open Limestone Channels; Sediment Pond, SAPS Pond, Wetland, Horizontal Limestone Bed, Fresh Water Pond, Steel Slag Leach Bed, and three (3) Flush Ponds; up-gradient diversion of ground water around refuse fills; cover high infiltration areas, alkaline amendment for coal refuse cover and vegetation; sediment control design; vegetation design; environmental permits; Construction Plans and Specifications; Calculation Brief with Quantity Calculations; Engineers Cost Estimate; Initial On-Site, 50%, 90%, Check Set, and Final Design Meetings; monthly reports and invoicing.
Flint Run Acid Mine Drainage Reclamation:	**Ohio AML** – Report and Investigation with cost/benefit analysis to mitigate "worst" acid mine drainage in Ohio. Project included two (2) month hydrologic investigation; impounded water and sediment investigation; chemical treatment (AquaFix or hydrated lime) for AMD discharges; passive treatment options for AMD discharges: eliminating AMD discharge sites by backfilling operations; reducing AMD flows by diverting up-gradient ground waters; cover high infiltration areas; alkaline amendment for coal refuse cover and to support vegetation; open limestone channels; steel slag leach beds; aerobic wetlands; limestone filter beds; limestone polishing leach bed; open limestone drainage ditches and channels; and vegetation plan.

Danehart Acid Mine Drainage Reclamation:	**Ohio AML** – Acid mine drainage caused a failed slope in close proximity to Danehart residence. Design included earthwork mass balance, 75 foot long by 10 foot high pier and lag retaining wall design; subsurface drain to treat AMD; ditch and channel design; and vegetation plan.
Lake Milton Investigation:	**Ohio AML** – 220 Ac.Ft. Impoundment Investigation to mitigate embankment "piping" leak. Impounded water is lightly buffered AMD that required design of SAPS to mitigate impounded and discharged waters. Design included "pump and treat" and "gravity discharge and treat" options while repairing embankment and constructing SAPS. After repair, discharged waters were used to drive steel slag leach bed for additional alkaline addition to the watershed.
Nutters Tipple D-716:	**Ohio AML** – Alkaline amendment for coal refuse cover and vegetation; encapsulation of coal refuse by subsurface drains and surface diversions to reduce water contact and reaction with coal refuse and eliminate generation of AMD.
Linden AMD Bioremedaition:	**Ohio AML** – Developed mapping for design of AMD treatment systems.
Murray City AMD and Art Project:	**Monday Creek Restoration Watershed Group** – Geologic and hydrologic and hydraulic investigation to seat AMD passive treatment systems within and next to a floodplain. Water Quality was pH 2.8, acidity 608 mg/l, iron 106 mg/l, aluminum 47 mg/l, manganese 7 mg/l, and flow of 163 gpm. Design, construction plans, specifications, operating manuals for the Murray City AMD and Art Project including Wet Mine Seals, a Mine Pool Stabilization Pond, Overflow Treatment Pond, two stage SAPS Pond or Vertical Flow Wetland, two Precipitate Ponds, and a Flush Pond to passively treat AMD from two nearby deep mine portals, site drainage ditches and channels, cut/fill grading design, vegetation plan, environmental permits; Construction Plans and Specifications; Calculation Brief with Quantity Calculations; Engineers Cost Estimate; On-Site, 50%, 90%, Check Set, and Final Design Meetings; monthly reports and invoicing.

Bismark Strip and Drainage: Located near Mt. Storm Passive Acid Mine Drainage Treatment system shortly after construction.

SPEC REC: Glady Fork Mining, Permit D-35-82 Bond Forfeiture alkaline mine drainage active chemical treatment facility. Along Stonecoal Creek near Buckhannon West Virginia.

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	**YEARS OF AML RELATED DESIGN EXPERIENCE:**	**YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:**
Gaines, Richard, L., P.E. **Fairmont, WV Office**	3	25	25

Brief Explanation of Responsibilities: Project Manager- Will oversee all tasks under this contract.

WVAML Experience: Lenox/Cuzzart Waterline Extension Project ; Hudson to Stateline Waterline Extension Project

EOI Experience: Mr. Gaines has 25 years of experience in project management and civil engineering related to oil and gas development, land development, water systems and treatment, and sanitary sewer collection and treatment projects. His design experience includes layout, grading, drainage, erosion control and permitting for road entrances, access roads, well pads, pits and impoundments for multiple well pads and developments.

Education (Degree, Year, Specialization): B.S./Civil Engineering/Fairmont State College
A.S./Mechanical Engineering/Fairmont State College

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	Registration (Type, Year, State):
American Society of Civil Engineers; American Council of Engineering Companies	Registered Professional Engineer/17220–WV/2007 Registered Professional Engineer/035466–VA/2002

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Harris, Stan, P.E. **Cincinnati, OH Office**	10	30	

Brief Explanation of Responsibilities: Staff Engineer and Signatory – Hydrology, Site Design. Designer – AutoCAD, SurvCAD, and Haestads Operator. Specification Writer, Calculation Brief, Bid Estimate, Microsoft Word and Excel Operator.

AML Experience: Ohio AML Emergency Program; Little Storms Creek Road Reclamation Project, River Road Bank Stabilization; Center Hill Landfill Bank Stabilization

Related AML Design: Upper Creek WWTP; Symmes Road Extension

Education (Degree, Year, Specialization): B.S., 1994, Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	Registration (Type, Year, State):
BS in Civil Engineering, University of Kentucky, Lexington, Kentucky, 1980 MS in Civil Engineering, University of Kentucky, Lexington, Kentucky, 1982 Foundations and Earth Retaining Structures, University of Akron, Akron, Ohio, 2006 ODOT Office of Geotechnical Engineering Workshop, Columbus, Ohio, 2008 Ohio River Valley Soils Seminars, Various Topics, Cincinnati, Ohio, 2007	Professional Engineer #53083, State of Ohio

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	**YEARS OF EXPERIENCE**		
Banton, John, P.E. **Cincinnati, OH Office**	**YEARS OF AML DESIGN EXPERIENCE:** 15	**YEARS OF AML RELATED DESIGN EXPERIENCE:** 31	**YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:**

Brief Explanation of Responsibilities: Staff Engineer – Develop and perform quantity calculations; Develop Hydrologic and Hydraulic design data; Water, soil, coal, and hazmat sampling; Technical report and calculation brief preparation; Develop data for engineers estimate.

Ohio AML Experience: Stantec contracted to design and prepare plans and specifications to stop the effects of flooding, slope failure, erosion and acidic runoff on properties of nearby residents. Mr. Banton assisted in design of slopes, design of roads and drainage and design of artificial wetlands. He supervised surveying, assisted in research and created construction documents for the three-site project.

Related AML Design: Various Reclamation projects, Landslide projects, Subsidence Projects

Education (Degree, Year, Specialization):	BS, Civil Engineering, University of Kentucky, Lexington, Kentucky, 1995 Structural Geogrid Seminar, Cincinnati, Ohio, 2000 Underground Detention Designs for Stormwater Management, National Corrugated Steel Piple Association and American Iron and Steel Institute, Cincinnati, Ohio, 1998

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):**
	Professional Engineer #21645, Commonwealth of Kentucky Professional Engineer #65018, State of Ohio

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	**YEARS OF EXPERIENCE**		
Kistner, Eric, P.E. **Cincinnati, OH Office**	**YEARS OF AML DESIGN EXPERIENCE:** 14	**YEARS OF AML RELATED DESIGN EXPERIENCE:** 17	**YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:** 0

Brief Explanation of Responsibilities: Staff Engineer – Develop and perform quantity calculations; Develop Hydrologic and Hydraulic design data; Water, soil, coal, and hazmat sampling; Technical report and calculation brief preparation; Develop data for engineers estimate.

Ohio AML Experience: ODOT Abandoned Underground Mine inventory and Risk Assesments; Leon Subsidence; Rodgers Hallow Reclamation Project

Education (Degree, Year, Specialization):	BS, Civil Engineering, University of Cincinnati, Cincinnati, Ohio, 1996 Non-Destructive Testing of Drilled Shafts, Deep Foundations Institute (DFI) Specialty Seminar, Cincinnati, Ohio, 2004 Helical Foundations and Tiebacks, DFI Specialty Seminar, Cincinnati, Ohio, 2003 Design and Construction of Earth Retention Structures, DFI Specialty Seminar, Cincinnati, Ohio, 2000 Mechanically Stabilized Earth Walls, The University of Akron Continuing Education Seminar, Akron, Ohio, 1999 Various Topics, Ohio River Valley Soil Seminars, Cincinnati, Ohio, 2011
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):** Professional Engineer #18654, State of West Virginia Professional Engineer #24653, Commonwealth of Kentucky Professional Engineer #65507, State of Ohio

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Steele, Garland W., P.E., P.S. **Charleston, WV Office**	10	35	6

Brief Explanation of Responsibilities: Engineer of Record and Geotechnical Manger – Design and implement subsurface investigation work. In-field testing of physical properties of soil, rock, coal materials, and soil, rock, and coal samples for laboratory physical testing. Data entry and review slope stability analysis results, review physical testing laboratory results.

WVAML experience: Hampton Number Four Maintenance; Price Hill Airshaft/Buildings; Weaver Portals and Highwall, Phase I and II; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Arlington (Cox) Drainage; Sauls Run Strip and Landslide; Old Bridgeport Hill Mine Drainage, Phase II; Hodgesville Waterline Extension Feasibility Study (I.D. No. 275); Charles and Donice McElwain Waterline Feasibility Study (I.D. No. 271). As Director of the Materials Control and Soil and Testing Division of the WV Department of Highways, he coordinated several WVAML projects with WVDOH projects and goals.

Related AML Design: Director, Materials Control, Soil and Testing Division (1965 - 1977), WV Department of Highways, For 12 years, Mr. Steele managed this Division which had six major sections – Structural Steel, Concrete, Bituminous, Soils, Aggregates, and Administrative. The Division was responsible for all physical and chemical materials testing performed by the Department as needed by the Department's Construction, Maintenance, Traffic, Design, and Geotechnical Units. At its peak, Mr. Steele supervised a staff of 275, which included approximately 250 technical and professional personnel. Mr. Steele has made significant contributions to many professional organizations (ASTM, AASHTO, and TRB) involved with developing materials criteria. **SPEC REC:** Glady Fork Mining Permit D-35-82; **WVCA:** Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project.

Education (Degree, Year, Specialization): B.A., 1956, Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:
Member, American Society for Testing and Materials (Board of Director (1992 – 1994), Committee on Standards (Past Chairman), Concrete and Concrete Aggregates (Past Chairman), Road and Paving Materials (Chairman 1982-1983)
American Association of State Highway and Transportation Officials - Subcommittee on Materials (Past Vice-Chairman), Material Reference Laboratory Council (AMRL) (Past Chairman), Pipe, Culverts, Conduits, and Drains (Past Chairman)
Member, American Concrete Institute
Member, West Virginia Society of Professional Engineers
Member, National Society of Professional Engineers
Member, West Virginia Society of Civil Engineers
Member, American Society of Civil Engineers

Registration (Type, Year, State):
Registered Professional Engineer, 1960, West Virginia
Registered Professional Engineer, 1960, Virginia
Licensed Professional Surveyor, 1999, West Virginia

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	**YEARS OF EXPERIENCE**		
	YEARS OF AML DESIGN EXPERIENCE:	**YEARS OF AML RELATED DESIGN EXPERIENCE:**	**YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:**
Donnie Yost. **Buckhannon, WV Office**	2	8	1

Brief Explanation of Responsibilities: Staff Engineer – Develop and perform quantity calculations; Develop Hydrologic and Hydraulic design data; Water, soil, coal, and hazmat sampling; Technical report and calculation brief preparation; Develop data for engineers estimate; Develop CAD drawings.

WVAML experience: Norton Highwall #1; Tub Run Highwall & Refuse, Phase I & II; Town of Newburg Waterline Extension Feasibility Study; Webster County Commission Point Mountain Waterline Extension Feasibility Study (I.D. No. 384); Greenbrier Hollow Refuse Pile; Pageton (Lambert) Portals, WVDEP- CADD Services Open End Contract

Education (Degree, Year, Specialization): B.S., 2003, Civil Engineering Technology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):**

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	**YEARS OF EXPERIENCE**		
	YEARS OF AML DESIGN EXPERIENCE:	**YEARS OF AML RELATED DESIGN EXPERIENCE:**	**YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:**
Moody, Lacy D. **Buckhannon, WV Office**	2	8	0

Brief Explanation of Responsibilities: Staff Engineer – Develop and perform quantity calculations; Develop Hydrologic and Hydraulic design data; Water, soil, coal, and hazmat sampling; Technical report and calculation brief preparation; Develop data for engineers estimate and Drafting.

WVAML experience: Tub Run Highwall and Refuse Phase II; Tub Run Highwall and Refuse Phase I; Church Creek/ Manown Highwall.

Education (Degree, Year, Specialization): B.S., 2004, Civil Engineering Technology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):**
ASCE	

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Vincent, John, EI **Fairmont, WV Office**	2	5	5

Brief Explanation of Responsibilities: Design Support

AML Design: Lennox/Cuzzart Waterline Extension Project, Hudson to Stateline Waterline Extension Project

Education (Degree, Year, Specialization): BS: Civil Engineering/Fairmont State College/1994
AS/Architectural Technology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS: American Council of Engineering Companies, American Society of Highway Engineers

Registration (Type, Year, State):
Engineer Intern/WV/9200

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	YEARS OF AML RELATED DESIGN EXPERIENCE:	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
Hannah, Chris **Fairmont, WV Office**	1		1

Brief Explanation of Responsibilities: Design Support

WVAML experience: Lennox/Cuzzart Waterline Extension project; Hudson to Stateline Waterline Extension project

Education (Degree, Year, Specialization): MS/Civil Engineering/Fairmont State University/2009

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:

Registration (Type, Year, State):
Asbestos Inspector/WV/AI007020

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	**YEARS OF AML RELATED DESIGN EXPERIENCE:**	**YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:**
45 CADD Operators	7	Varies	Varies

Brief Explanation of Responsibilities: CADD Draftsperson including generation of topographic mapping or supplementation of existing mapping, cross sections, detail sheets, tax map overlays, Project Manager or Staff Engineer design compilation. AutoCAD, SurvCAD, and Haestads Operator. Calculation Brief Details and Drawings, Microsoft Word and Excel Operator.

WVAML experience: Norton Highwall #1 Design; Tub Run Phase I & II; Greenbrier Hollow Refuse; Bergoo Waterline Extension Feasibility Study, I.D. No. 351; Lewis County EDA Waterline Extension Feasibility Study, I.D. No. 374; Scott Road and Findley Road Waterline Extension Feasibility Study, I.D. No. 356; Birds Creek Number 4; WVDEP Mapping Contract – South Region; WVDEP Mapping Contract – North Region; Church Creek/Manown Highwall; Racine (Bradshaw) Portals; Hampton Number Four Maintenance; Howesville Sites, Sandy Run Highwall and Portals; Wilsie-Rosedale Waterline Extesion Feasibility Study – I.D. No. 324; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Weaver Portals and Highwall, Phase I and II; Old Bridgeport Hill Mine Drainage, Phase II; Nixon Run AMD; Arlington (Cox) Drainage; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Sauls Run Strip and Landslide; Taylor Waterline Extension Feasibility Study-I.D. No. 309; Poplar Ridge Waterline Extension Feasibility Study-I.D. No. 298; Summit Park Waterline Extension Feasibility Study-I.D. No. 288: Hodgesville PSD Waterline Extension Feasibility Study-I.D. No. 275; McElwain Waterline Feasibility Study-I.D. No. 271; Bridge Run; Camp Run; Philip Thorn Highwall; Rainelle AML; SCS Reclamation; Shegon Refuse Pile; Taylor Creek Tipple Complex; Tibbs Run Portal; Masontown AML.

Ohio AML Experience: Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Ferris Forfeiture; Flint Run Acid Mine Drainage Reclamation; Glen Castle Reclamation; Lake Milton Investigation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob; Nutters Tipple D-716.

Related AML Design: SPEC REC: Glady Fork Mining Permit D-35-82; **WVCA:** Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project. Various waste permits for Corridor H (15 permits), numerous topographic and property surveys, Pope Properties Waterline and Wastewater Extension, Nitro, WV

Education (Degree, Year, Specialization):	CADD Operators – B.S., varies, Civil Engineering Technology, 1 Operator – B.S. 1996, Engineering Technology, Others - Experience
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):** N/A

13. **PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML DESIGN** (Furnish complete data but keep to essentials)

NAME & TITLE (Last, First, Middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF AML DESIGN EXPERIENCE:	**YEARS OF AML RELATED DESIGN EXPERIENCE:**	**YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:**
39 Survey Crews	9	30+	30+

Brief Explanation of Responsibilities: Three (3) fully equipped survey crews can obtain field data to develop topographic mapping or to supplement available aerial mapping. These crews can also use GPS survey techniques to bring horizontal and vertical control to the Project site or control for aerial photography operations. All filed data is electronically gathered, to eliminate errors and blunders, and can be directly downloaded into our computer workstations. Field to finish modules of our SurvCADD software recognize field entered codes that control line work ensuring proper points are connected, proper break lines area established prior to contour generation, and greatly reduces CADD time.

WVAML experience: Norton Highwall #1 Design; Tub Run Phase I & II; Greenbrier Hollow Refuse; Birds Creek Number 4; WVDEP North Mapping Contract; WVDEP South Mapping Contract; Church Creek/Manown Highwall; Racine (Bradshaw) Portals; Hampton Number Four Maintenance; Howesville Sites, Sandy Run Highwall and Portals; Laurel Valley (Daniels) Landslide; Price Hill Airshaft/Buildings; Weaver Portals and Highwall, Phase I and II; Old Bridgeport Hill Mine Drainage, Phase II; Nixon Run AMD; Arlington (Cox) Drainage; Fairmont (Hendrickson) Subsidence; Tunnelton (Dillsworth) Landslide; Sauls Run Strip and Landslide; Taylor Waterline Extension Feasibility Study-I.D. No. 309; Poplar Ridge Waterline Extension Feasibility Study-I.D. No. 298; Summit Park Waterline Extension Feasibility Study-I.D. No. 288: Hodgesville PSD Waterline Extension Feasibility Study-I.D. No. 275; McElwain Waterline Feasibility Study-I.D. No. 271; Bridge Run; Camp Run; Philip Thorn Highwall; Rainelle AML; SCS Reclamation; Shegon Refuse Pile; Superior Hydraulics; Taylor Creek Tipple Complex; Tibbs Run Portal; Masontown.

Ohio AML Experience: Flint Run East Acid Mine Drainage Reclamation Project; Murray City AMD and Art Project; Danehart Acid Mine Drainage Reclamation; Ferris Forfeiture; Flint Run Acid Mine Drainage Reclamation; Glen Castle Reclamation; Lake Milton Investigation; Linden Acid Mine Drainage Bioremediation; Midvale Coal Number 7; Misco Burning Gob; Nutters Tipple D-716.

Related AML Design: SPEC REC: Glady Fork Mining Permit D-35-82; **WVCA:** Fisher-Mill Creek Bank Stabilization, Laurel Lake Sediment Removal, Kraut Creek H&H Investigation, Harmons Creek Bank Stabilization, Parchment Valley Bank Stabilization, North Fork Hughes River Bank Stabilization, Spencer Flood Plain Improvement Study, Logan County Flood Plain Improvement Project; various waste permits for Corridor H (15 permits), numerous topographic and property surveys, Pope Properties Waterline and Wastewater Extension, Nitro, WV

Education (Degree, Year, Specialization): 12 Party Chiefs – Associate Degrees Civil Engineering or Surveying Technology.

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:	**Registration (Type, Year, State):** N/A

14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILA : IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPL AML DESIGN SERVICES.
275 Computer Workstations
3 Robotic Total Stations and 18 Surveying Electronic Total Stations
18 Field Survey Data Collectors
6 Survey Grade GPS Survey Instruments (complete with base and 2 rovers each)
AutoCAD Versions2008, 2006, 2002, 2000I, Map 4.0, Map 5.0, version 14.0
SurvCADD versions 2008, 2006, XML2, CES, 98
Eagle Point Engineering Software
AutoCAD Land Development
Bentley MicroStation with InRoads
ESRI ArcView GIS (Version 3.2) and Mapping Software (Version 8.3)
KY Pipe Water and Sewer Line Software
Haestads Water CAD Water and Sewer Line Software
Haestads Culvert Master, Flow Master, Storm CAD
Terrain Navigator with seamless WV 7.5' USGS Quads and Sure Maps by Titan Systems
North American Green Erosion Control Blanket Software
Microsoft Office, including Word and Excel
Microsoft Project Scheduling Software
Primavera P3 Scheduling Software
Corel 98 Suite
Numerous HP, Canon, and Toshiba Ink Plotters and Printers
XSTABL version 5.2 Slope Stability Software

15. CURRENT AML 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**
Glady Fork Mining, Inc. (Permit D-35-82) Bond Forfeiture Near Buckhannon, Upshur and Lewis Counties, WV	Mr. Charles Miller West Virginia Department of Environmental Protection 209 South Main Street Philippi, WV 26416	Alkaline Mine Drainage Treatment Facility – $3,000,000.00 AMD plant design that incorporated a single treatment train capable of handling 1,000 gallons per minute of alkaline mine drainage with 15 ppm of total iron and included necessary piping and seating for a second treatment train if future needs arise. Relining existing boreholes to eliminate mine discharge interruptions, design and construction of 2,500 linear feet of gravity fed plant intake line from the boreholes to the plant site, and an active chemical treatment plant. The treatment plant included an aeration basin (concrete), flocculator (concrete), chemical feed building, settling basin (concrete), sludge thickener (concrete), and geo-tube sludge disposal system with overflow catchment and re-treatment capabilities. Treated discharge 0.50 ppm iron average, 0.75 ppm iron maximum.	$3,000,000	99%

16. CURRENT AML ACTIVITIES ON WHICH YOUR FIRM IS SEF G AS A SUB-CONSULTANT TO OTHERS.					
PROJECT NAME , TYPE, AND LOCATION	NATURE OF YOUR FIRM'S RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRM'S RESPONSIBILITY

17. COMPLETED AML WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS DESIGNATED THE ENGINEER OF RECORD.					
PROJECT NAME & TYPE	**LOCATION**	**NAME & ADDRESS OF OWNER**	**ESTIMATED CONSTRUCTION COST**	**YEAR**	**CONSTRUCTED (YES OR NO)**
Weaver Highwall and Mine Drainage, Phase I	Weaver, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$1,200,000	2008	Yes
Weaver Highwall and Mine Drainage, Phase II	Weaver, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$1,300,000	2008	Yes
Laurel Valley (Daniels) Landslide	Lost Creek, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$230,000	2008	Yes
Price Hill Airshaft and Buildings	Price Hill, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$575,000	2009	Yes
Sandy Run Highwall and Portals	Kingwood, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$493,000	2009	Yes
Howesville Sites	Howesville, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$575,000	2009	Yes
Hampton Number Four Maintenance	Clothier, Boone County, WV	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 850,000	2010	On-Going
Racine (Bradshaw) Portals	Racine, Boone County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 410,000	2010	Yes
Church Creek/Manown Highwall	Kingwood, Preston	WVDEP, Office of Abandoned Mine	$ 2,500,000	2011	On-Going

17. COMPLETED AML WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS DESIGNATED THE ENGINEER OF RECORD.					
PROJECT NAME & TYPE	**LOCATION**	**NAME & ADDRESS OF OWNER**	**ESTIMATED CONSTRUCTION COST**	**YEAR**	**CONSTRUCTED (YES OR NO)**
	County, West Virginia	Lands 601 57th St. SE, Box 20 Charleston, WV 25340			
WVDEP Mapping Contract –North Region	Northern Coal Producing Counties	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	N/A	2011	N/A
WVDEP Mapping Contract –South Region	Southern Coal Producing Counties	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	N/A	2011	Yes
Scott Road and Findley Road Waterline Extension Feasibility Study, I.D. No. 356	Norton, Randolph County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$259,600	2011	Awaiting Funding
Lewis County EDA Waterline Extension Feasibility Study, I.D. No. 374	Pricetown, Lewis County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$2,276,000	2011	No (Didn't Qualify for Funding)
Bergoo Waterline Extension Feasibility Study, I.D. No. 351	Bergoo, Webster County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$1,788,000	2011	No (Didn't Qualify for Funding)
Birds Creek Number Four	Kingwood, Preston County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 999,000	2011	Yes
WVDEP Mapping Contract –South Region	Southern Coal Producing Counties	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	N/A	2011	On-Going
Pageton (Lambert) Portals	Pageton, McDowell County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 1,100,000	2011	No
Sauls Run (Carpenter) Landslide	Weston, Lewis County,	WVDEP, Office of Abandoned Mine	$ 450,000	2011	Yes

17. COMPLETED AML WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS DESIGNATED THE ENGINEER OF RECORD.					
PROJECT NAME & TYPE	**LOCATION**	**NAME & ADDRESS OF OWNER**	**ESTIMATED CONSTRUCTION COST**	**YEAR**	**CONSTRUCTED (YES OR NO)**
	West Virginia	Lands 601 57th St. SE, Box 20 Charleston, WV 25340			
Greenbrier Hollow Refuse	McDowell, McDowell County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 712,000	2011	No
Webster County Point Mountain Waterline Extension Feasibility Study, I.D. No. 384	Webster Springs, Webster County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	N/A	2011	No (Didn't Qualify for Funding)
Town of Newburg Waterline Extension Feasibility Study, I.D. No. 392	Newburg, Preston County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	N/A	2011	Pending P.O. and "Notice to Proceed"
Tub Run Highwall and Refuse Phase I	Thomas, Tucker County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 2,300,000	2011	No
Tub Run Highwall and Refuse Phase II	Thomas, Tucker County, West Virginia	WVDEP, Office of Abandoned Mine Lands 601 57th St. SE, Box 20 Charleston, WV 25340	$ 2,800,000	2011	No

18. **COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONTRACTOR 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	CONTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH

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.*

Stantec can provide one-stop shopping for the West Virginia Abandoned Mine Lands Program. Work, including surveying, development of mapping from field surveys, site design, CADD operations, water testing, hazmat testing, calculations, plans, and specifications associated with this task order contract completed in-house. Stantec carefully selected sub-contractors, successfully used in the past, to perform drilling and chemical testing of soils, rock, and coal that have experience and are extremely familiar with WVAML Projects. Stantec has EOI-specific corporate and employee experience with highwall reclamation engineering, mine seals, drainage control structures and facilities, passive treatment of AMD, debris and waste handling and disposal plan, and revegetation of drastically disturbed areas. Stantec also has EOI-experience in surveying and mapping, subsurface investigations, H & H studies, construction plans and specifications, calculations, conducting associated bid meetings, and necessary reports and invoicing procedures. Stantec has corporate experience on 45+ WVAML Projects, and 10+ ODNR AML projects. In addition, Stantec has completed 8 AML Related projects for the West Virginia Conservation Agency. Stantec personnel stay abreast of current developments and technological advances in Abandoned Mine Lands reclamation and acid mine drainage by attending seminars and symposiums on the subjects. In the past, Stantec has attended the WV Surface Mining Task Force Symposium in Morgantown, WV; the National Association of Abandoned Mine Lands Symposium in Athens, OH; West Virginia University Natural Stream Restoration Program in Morgantown, WV; 404/401 Permit Training in Charleston, WV; and State and Local Mitigation Planning in Buckhannon, sponsored by FEMA and WVOES.

20. The foregoing is a statement of facts.

Signature:  **TITLE: Senior Associate** **DATE:** 3/28/2013

Printed Name: Richard L. Gaines, PE

AML AND RELATED PROJECT EXPERIENCE MATRIX

PROJECTS	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/Eval	Remining Evaluation	Mine/Refuse Fire Abatement	Subsidence Investigation Mitigation	Hazardous Waste Disposal	Project Specifications	Water Quality Evaluation/Mitigation/ Replacement	Construction Inspection/Management	Water Treatment	Equipment/Structure Removal	Stream Restoration	Geotechnical/Stability	Richard L. Gaines, PE	Donnie Yost	Mark Cvechko	Garland Steele, PE	Stan Harris, PE	John Barton, PE	Eric Kistner, PE	Hugo Aparicio, PE
Tub Run Highwall and Refuse Phase II	C	2	X		X	X			X		X	X	X				X		P	P					
Tub Run Highwall and Refuse Phase I	C	2	X		X	X			X		X	X	X				X		P	P					
Greenbrier Hollow Refuse	C	2	X		X	X			X		X	X	X				X		P	P					
Pageton (Lambert) Portals	C	2	X		X	X			X		X	X	X	X			X		P	P					
Birds Creek #4	C	2	X		X	X			X		X	X	X	X			X			P					
Church Creek/Manown Highwall	C	2	X	X	X	X			X		X	X	X	X			X			P					
Howesville Sites & Sandy Run Highwall & Portals	C	2	X	X	X	X			X		X	X	X	X			X			P					
Weaver Portals and Highwall, Phase I & II	C	2	X	X	X	X			X		X	X	X	X			X		P	P	P				
Abandoned Underground Mine Inventory and Risk Assessment Statewide Database Population	C	2					X		X								X					M	P	M	P
Wayne National Forest Abandoned & Inactive Mine Lands	C	2					X		X			X					X					M	M	P	P
Upper Coldwater Fork Stream Restoration	C	2								X		X	X	X		X									P
Oxford Mine Mitigation Monitoring	C	2					X		X	X				X		X						M	M	P	
Little Coal River Stream Restoration	C	2								X		X	X	X		X				P					
Little Coal Fish & Habitat Surveys	C	2										X	X	X		X				P					
Sauls Run Landslide	C					X					X		X				X			P	P				
Town of Newburg Waterline Extension Feasibility Study	C					X						X							P	P					
Racine (Bradshaw) Portals	C		X		X	X					X		X				X		P	P					
Hampton #4 Maintenance	C		X	X		X			X		X		X				X		P	P	P				
Lennox/Cuzzart Waterline Extension Project	C										X		X	X				M							
Hudson to Stateline Waterline Extension Project	C										X		X	X				M							

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