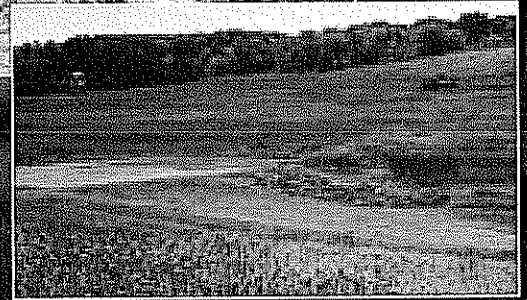
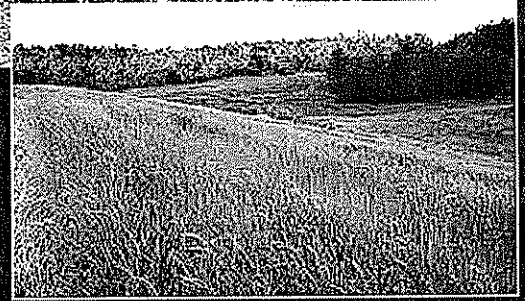
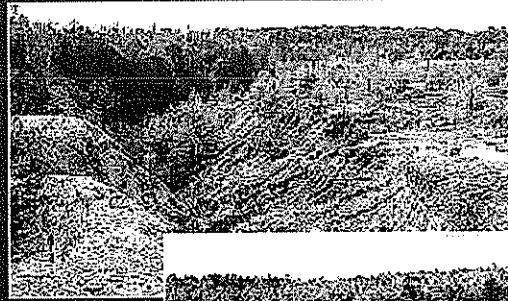
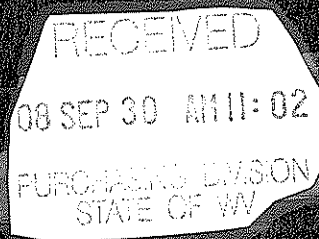


**Expression of Interest for:
Engineering and Construction
Monitoring Services
Heather Run #2
Requisition # DEP 14389**



**Submitted to:
West Virginia Department of
Environmental Protection**

September 30, 2008



Engineers, Architects and Planners



Buchart Horn, Inc.
Suite 110
400 Tracy Way
Charleston, WV 25311

(304) 346-1127
(800) 274-2224
Fax (304) 346-7295

Charleston, WV
Morgantown, WV
Pittsburgh, PA

September 30, 2008

West Virginia Department of Environmental Protection
Abandoned Mine Lands and Reclamation
c/o State of West Virginia Department of Administration
Purchasing Division
2019 Washington Street, East
Charleston, WV 25305-0130
Attn: Chuck Bowman, Buyer

**Expression of Interest – Engineering Services for Heather Run #2
Requisition # DEP14389**

Dear Mr. Bowman:

Buchart Horn Inc. (BH) is pleased to present our Expression of Interest for engineering and construction phase services related to the Heather Run #2 project in Preston County. We have reviewed your project announcement and reviewed the project requirements. Based on our understanding of this information and a preliminary assessment of potential project solutions, we are very confident in our team's ability to provide you quality, cost efficient service for this assignment.

BH is a full-service engineering and architectural firm with offices in Charleston, Morgantown and 20 other locations in the eastern United States and Germany. We have strong experience in site stabilization and remediation design. Our local staff includes registered Professional Engineers and individuals with experience in the AML program, specifically with site reclamation and mine portal excavation and closure. Our team also includes Novel GeoEnvironmental Services, a subconsultant firm that specializes in soils engineering and site characterization. G. Joseph Crittenden will serve as our Project Manager. Mr. Crittenden brings over 25 years of site design experience, including portal closure and remediation projects. At Mr. Crittenden's disposal are over 350 professionals including specialists in site and civil engineering, structural, geological, and hydrological engineering, planning, mapping, and site surveying.

In accordance with the instructions outlined in your Request for Expressions of Interest, this package contains a completed copy of the DEP AML Consultant Confidential Qualification Questionnaire. We have also provided additional details on our firm, recent relevant projects, and our proposed project team.

Should you have any questions concerning the information presented herein, please do not hesitate to contact me. We look forward to your favorable review of our Expression of Interest and the opportunity to serve the West Virginia Department of Environmental Protection.

Very truly yours,
BUCHART HORN, INC.

A handwritten signature in black ink that reads 'Kenneth D. Bryant, Jr.' The signature is written in a cursive, flowing style.

Kenneth D. Bryant, Jr. PE, PS
Regional Manager
KDB:wrl:3879



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

Request for Quotation

RFQ NUMBER:
 DEP14389

PAGE:
 1

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

RFQ COPY
 TYPE NAME/ADDRESS HERE

VENDOR

Buchart Horn, Inc.
 400 Tracy Way, Suite 110
 Charleston, WV 25311

SHIP TO

ENVIRONMENTAL PROTECTION
 DEPARTMENT OF
 OFFICE OF AML&R
 601 57TH STREET SE
 CHARLESTON, WV
 25304 304-926-0499

DATE PRINTED	TERMS OF SALE	SHIP VIA	FOB	FREIGHT TERMS
08/21/2008				

BID OPENING DATE: 09/30/2008 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT NO	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	JB		906-29		
<p>HEATHER RUN #2 DESIGN</p> <p>EXPRESSION OF INTEREST</p> <p>THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, IS SOLICITING EXPRESSIONS OF INTEREST FOR PROFESSIONAL ENGINEERING DESIGN SERVICES AND CONSTRUCTION MONITORING SERVICES AT THE HEATHER RUN #2 PROJECT IN PRESTON CO, WEST VIRGINIA, PER THE FOLLOWING BID REQUIREMENTS AND ATTACHED SPECIFICATIONS.</p> <p>BANKRUPTCY: IN THE EVENT THE VENDOR/CONTRACTOR FILES FOR BANKRUPTCY PROTECTION, THIS CONTRACT IS AUTOMATICALLY NULL AND VOID AND IS TERMINATED WITHOUT FURTHER ORDER.</p>						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE <i>Kenneth D. Buchart</i>	TELEPHONE (304) 346-1127	DATE September 30, 2008
TITLE Regional Manager	FEIN 23-1498326	ADDRESS CHANGES TO BE NOTED ABOVE

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

Contents

Section 1 Project Overview

Section 2 Corporate Qualifications

Section 3 Project Management and Design Team

Section 4 Relevant Experience

Section 5 WVDEP AML Consultant Confidential Qualification Questionnaire AML and Related Experience Matrix

Section 6 Affidavit

Project Overview / Approach

The Heather Run #2 Mine Site includes sixteen deep mine portals in four areas. Two of the areas contain highwalls of a total length of approximately 2000 feet and an average height of approximately 20 feet. Six of the portals are only partially collapsed and are discharging with flows ranging from 2 gpm to approximately 200 gpm. The scope of work at the four sites will include the installation of wet mine seals at 10 portals, installation of bat gates at 6 portals, reclamation of the highwall areas and reestablishing the site contours, construction of drainage channels and underdrains to move water off site, removing any structures and equipment, and regrading, covering and reconditioning the impacted areas.

Buchart Horn's project approach will follow, but not necessarily be limited to the following items. Buchart Horn, Inc. will record comments from any meetings and distribute them in a memorandum format to the Department for review and approval.

Prior to beginning the work, Buchart Horn will schedule a site visit with Department personnel. The site visit will assure the project team is in agreement with the scope of work and project limits.

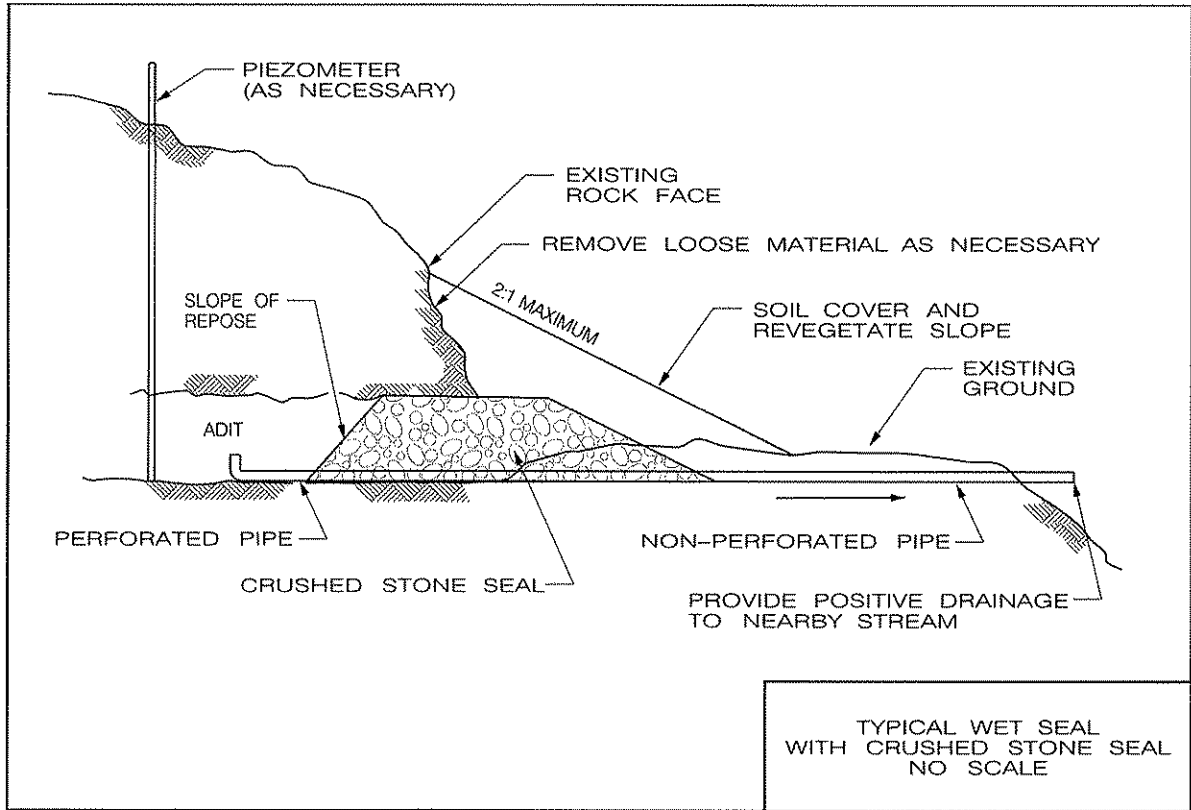
Second, the team will mark the project boundaries, locate and flag the mine portals, and begin mapping the site. The mapping will have sufficient accuracy to develop grading, drainage, wet seal, vandal resistant bat gates, structure demolition plans, access upgrades, culvert cleaning and erosion control plans with quantities. If aerial mapping is used to develop the plans, field check sections will verify the accuracy. In addition, the team will establish sufficient referenced control points that allow the contractor to reestablish any disturbed monuments. During this phase, Buchart Horn will evaluate the site and attempt to determine if there is sufficient spoil material to use as backfill of the highwalls. If sufficient material is unavailable, then Buchart Horn will evaluate excavating the highwalls to produce the desired stable slope. In either case, Buchart Horn intends to use a geomorphic reclamation approach. Typical details for wet seals, bat gates and highwall reclamation follow this section.

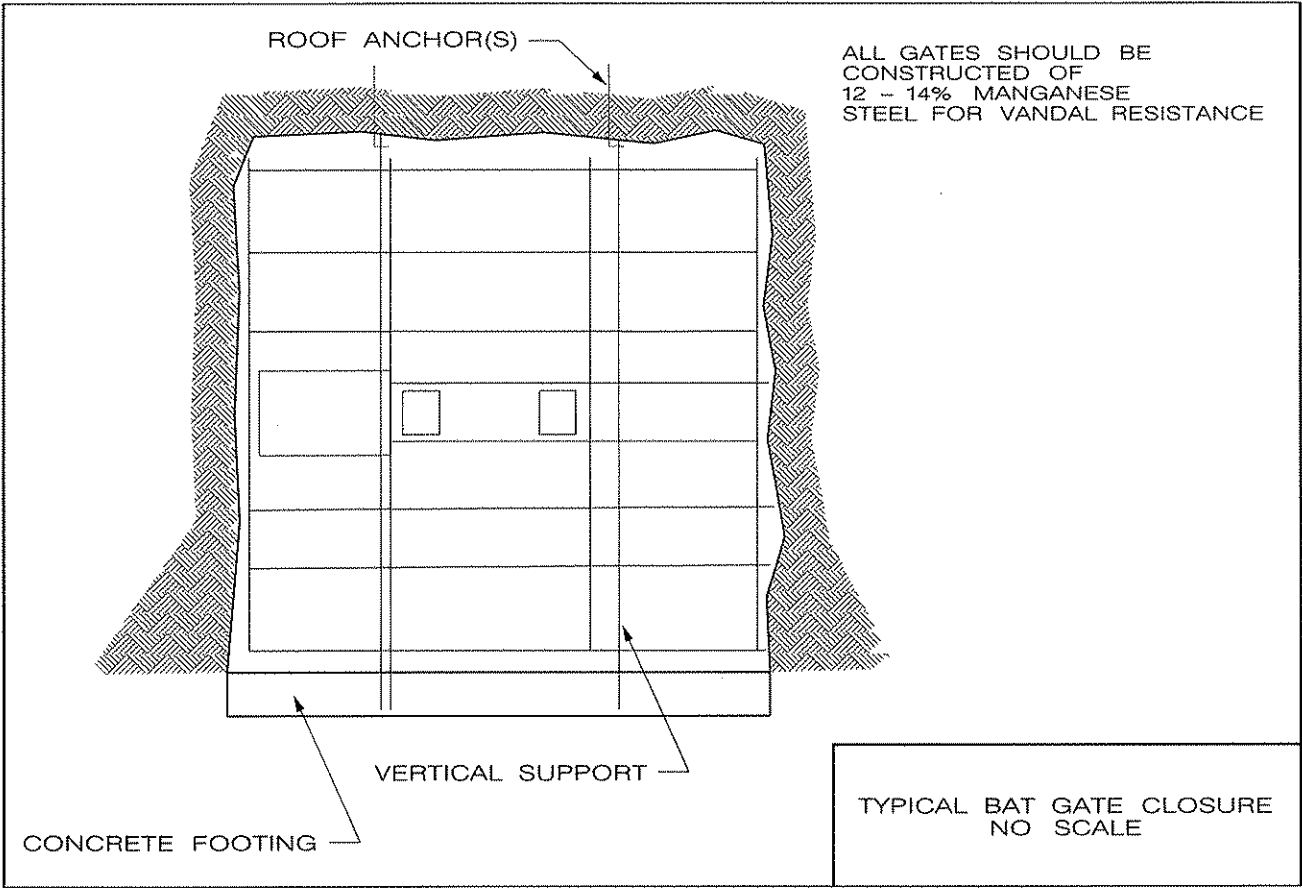
Geomorphic Reclamation is landscape reconstruction that attempts to come close to the original surface forms surrounding the mined area, thereby mimicking the natural drainage patterns of a natural landscape. The final goal of this procedure is to have a finished site that is in a stable hydrologic equilibrium (minimizing soil erosion) while at the same time being visually appealing.

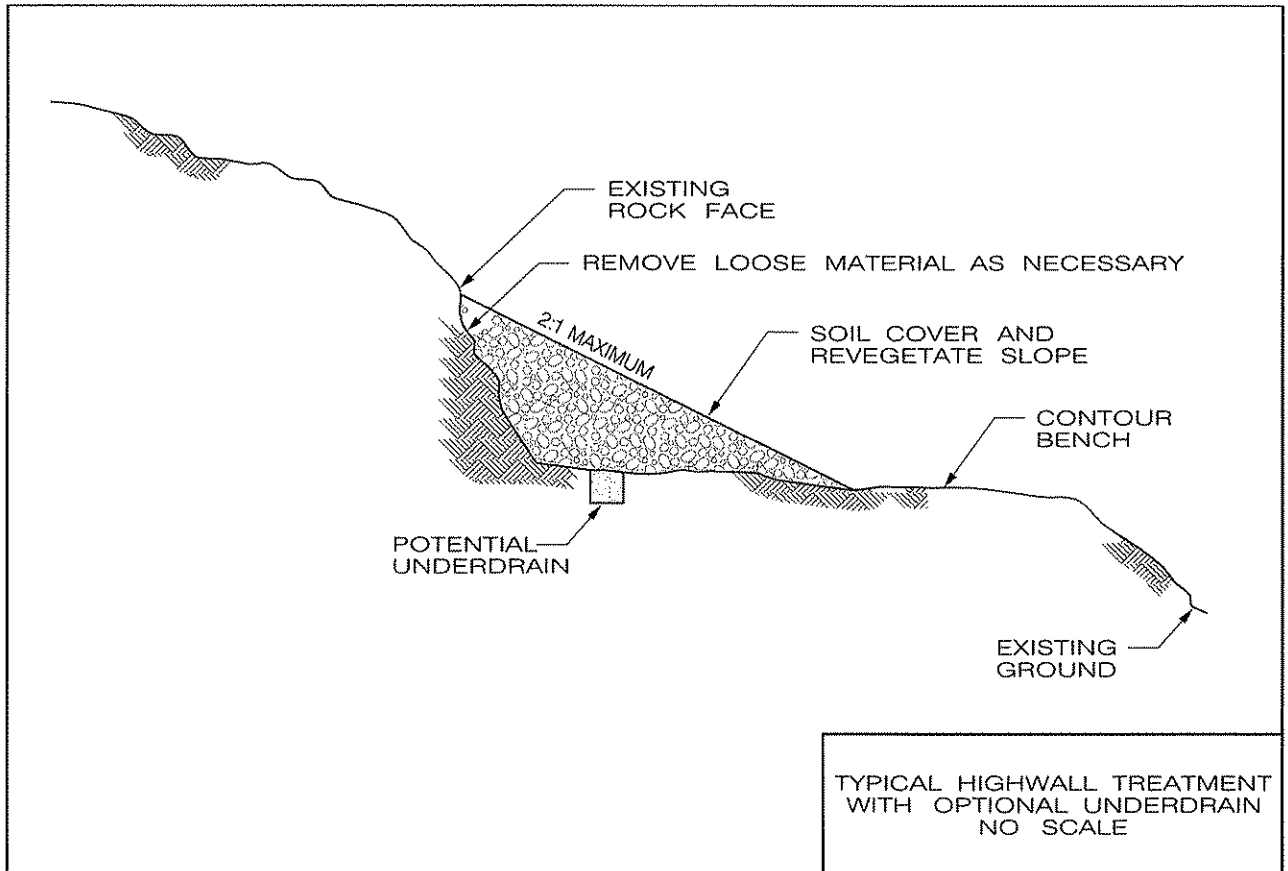
Third, the team will begin subsurface investigation layout, water sampling/testing locations, refuse sampling/testing locations, and if deemed appropriate locations to install piezometer(s).

Fourth, the design team will assemble the test data and present the preliminary design to the Department.

Fifth, the design team will finalize the design and prepare the contract documents for bidding purposes.







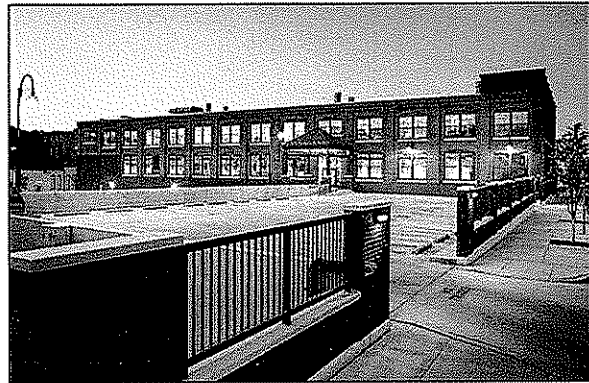
For more than 63 years, **Buchart Horn, Inc. Engineers, Architects and Planners** has managed and successfully completed multi-disciplinary design projects throughout the eastern United States. As a full-service architectural and engineering firm that serves our clients through 20 operating offices, we are well positioned to assist our clients with any project.

Engineering News Record ranks Buchart Horn among the top 200 environmental firms and the top 200 international design firms. With more than 330 professional and support personnel, we have the ability to meet the most aggressive schedule.

Locations

Our firm serves public and private clients around the world from these locations:

- West Virginia: *Charleston, Morgantown*
Pennsylvania: *York, Coatesville, Harrisburg, Hershey, King of Prussia, New Cumberland, Pittsburgh, State College, Stroudsburg*
Florida: *Pensacola*
Germany: *Frankfurt/Main, Kaiserslautern*
Louisiana: *Baton Rouge*
Maryland: *Baltimore*
Mississippi: *Olive Branch*
New Jersey: *Marlton*
Tennessee: *Memphis, Nashville*



BH redeveloped this abandoned brownfield site to Class A office space.

Services

We specialize in designing, improving, and solving infrastructure and structure problems and in helping our clients comply with environmental, life safety, and other codes and regulations. We provide:

- ↳ Civil/Site development
- ↳ Architecture
- ↳ Landscape architecture design
- ↳ Environmental planning, engineering, compliance
- ↳ Surveys/mapping
- ↳ HVAC, plumbing, energy conservation
- ↳ Construction Management
- ↳ Electrical systems and computer wiring
- ↳ Structural design
- ↳ Geographic Information Systems (GIS)
- ↳ Hazardous and toxic substances
- ↳ Highways, roads, streets
- ↳ Bridges
- ↳ Traffic and traffic management
- ↳ Recreation parks and trails
- ↳ Schools
- ↳ Telecommunications
- ↳ Telemetry and SCADA control systems
- ↳ Vulnerability assessments
- ↳ Wastewater treatment and systems
- ↳ Water treatment and systems

Professional Services

With complete in-house capabilities, we can assemble a team from our full-service staff to match each client's particular needs.

Planning



In our firm, planning is not a separate discipline. It is an important component in assisting our clients in making knowledgeable project and programming decisions. We provide planning for the following types of projects:

- ✧ Comprehensive planning
- ✧ Economic feasibility
- ✧ Environmental planning
- ✧ Facilities planning
- ✧ GIS/mapping
- ✧ Land planning
- ✧ Landscape architecture
- ✧ Master planning
- ✧ Public meetings
- ✧ Recreational planning
- ✧ Space planning
- ✧ Zoning and subdivision ordinances

Civil Engineering

Buchart Horn's civil engineering group matches sophistication and execution to complex, project-specific, and regulatory requirements to leverage the latest technological and computer advances.

- ✧ Flood studies
- ✧ Grading and drainage design
- ✧ Parking studies and design
- ✧ Right-of-way services
- ✧ Sediment and erosion control
- ✧ Signalization
- ✧ Site development
- ✧ Stormwater management
- ✧ Traffic studies and analyses
- ✧ Utilities design



Environmental Engineering

Our environmental engineering services range from water treatment to sludge management and disposal. Our staff is familiar with code regulations. Services available include:

- ↳ Comprehensive planning
- ↳ Environmental assessments/impact studies
- ↳ Environmental auditing
- ↳ Environmental compliance: CAA, CWA, RCRA, UST, CERCLA/SARA, PCB, Asbestos, HMTA
- ↳ Environmental site assessments (Phases I-IV)
- ↳ Financial analysis/funding assistance
- ↳ Geological engineering
- ↳ Geophysical investigations
- ↳ Groundwater contamination investigations
- ↳ Highway noise analysis
- ↳ Hydrogeological studies
- ↳ Industrial and hazardous waste management
- ↳ Infiltration/inflow studies
- ↳ Instrumentation, telemetering, and controls
- ↳ Permitting and government regulations
- ↳ Pollution prevention plans
- ↳ Remedial action design and implementation
- ↳ Soil contamination studies
- ↳ Solid waste/air quality management
- ↳ Stormwater management/NPDES permitting
- ↳ Underground storage tank investigation
- ↳ Water and wastewater collection/treatment systems
- ↳ Water and sewage facilities planning
- ↳ Water distribution/storage systems
- ↳ Wetlands delineation and permit applications





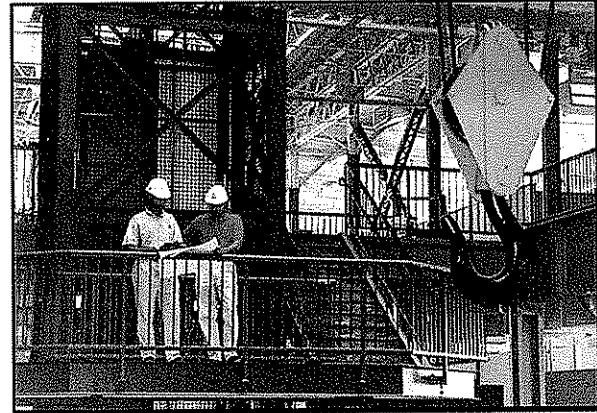
Transportation

Our Transportation Division offers a full range of transportation-related experience including:

- ↳ Airport design
- ↳ Bridge design and inspection
- ↳ Dam design and inspection
- ↳ Flood studies and hydrological analyses
- ↳ General structural design
- ↳ Highway design
- ↳ Railroad and railroad bridge design
- ↳ Site grading, drainage, and stormwater design
- ↳ Traffic studies

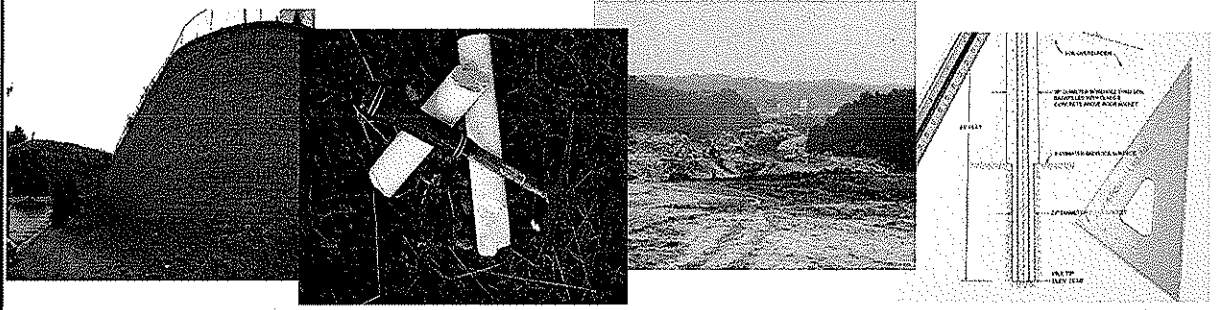
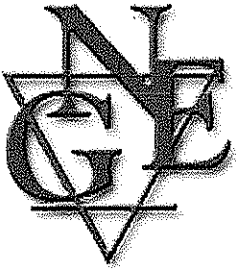


Construction Management



Our construction management engineers and inspectors serve as representatives of the client/owner, providing liaison with contractors so that construction complies with contract documents. We provide the full spectrum of construction phase services for all types of architectural and engineering projects including:

- ↳ Construction inspection
- ↳ CPM scheduling and evaluation
- ↳ Claims/change order management
- ↳ Constructability analysis
- ↳ Construction audits
- ↳ Construction management
- ↳ Contract administration
- ↳ Design/build
- ↳ Equipment start-up
- ↳ Grants administration
- ↳ Materials/equipment procurement
- ↳ Material sampling and testing
- ↳ Permit processing
- ↳ Specialized testing
- ↳ Videotaping



Company Overview

Novel Geo-Environmental, PLLC (NGE) is a full-service geotechnical and environmental engineering firm with offices located in St. Albans, West Virginia, and Pittsburgh, Pennsylvania. Led by an experienced management team, NGE provides quality geotechnical services to a variety of clients in both the private industry and government sectors.

In business since 2002, NGE is one of the fastest growing engineering consulting firms in the country.

Who is NGE?

Our staff includes professional engineers, geologists, scientists, construction managers, and foremen with experience in a broad range of technical disciplines. Our management team averages 15+ years of experience per person.

Why NGE?

NGE is large enough to fulfill the needs of our client in-house, yet small enough to provide the personal focus each client deserves. With smaller overhead than larger companies, NGE can provide exceptional services at lower cost.

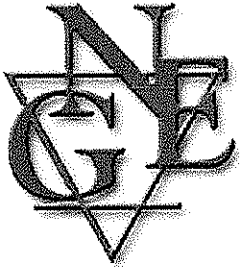
NGE is a Certified Disadvantaged Business Enterprise (DBE) in West Virginia, Pennsylvania, Ohio, Maryland, and New Jersey and is certified by the Small Business Administration as an 8(a) Small Disadvantaged Business.

West Virginia Office

806 B Street
St. Albans, WV 25177
(304) 201-5180
(304) 201-5182 (fax)
Contact: John E. Nottingham, P.E.
jnottingham@novel-ge.com

Pennsylvania Office

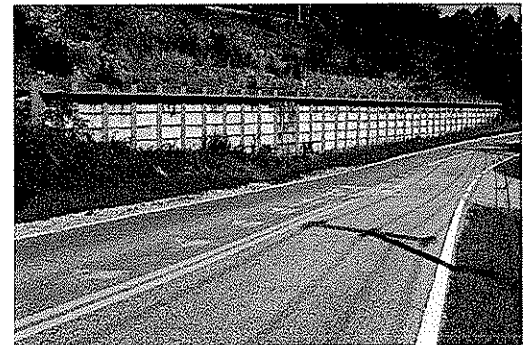
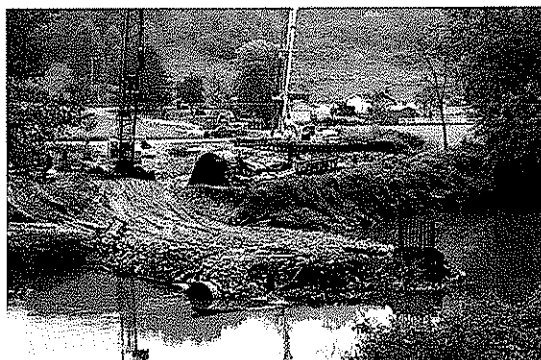
100 Commercial Street, Suite 101
Bridgeville, PA 15017
(412) 838-0115
(412) 838-0120 (fax)
Contact: Amy L. Veltri, P.E.
aveltri@novel-ge.com

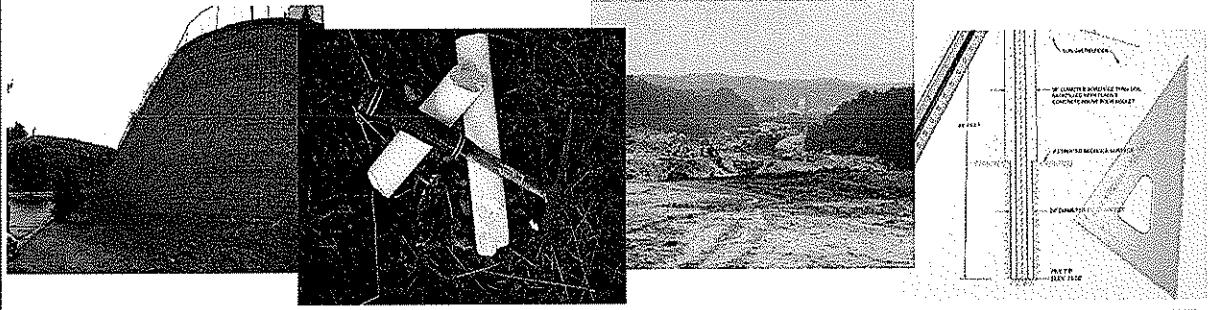
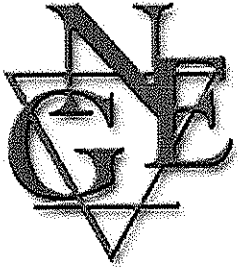


Geotechnical Engineering

The natural complexity and variability present in the subsurface requires a specialized expertise to ensure reliable results. NGE investigates and evaluates subsurface soil, rock, and groundwater conditions to analyze their response to the needs of a given project, whether they be foundation loads, site grading operations/slope configuration, or retaining wall design. A sampling of the geotechnical services NGE provides includes the following:

- Foundation investigations - commercial/residential construction, WVDOH bridge and roadway, airport geotechnical design, public and private utilities (water storage tanks, communications towers, etc.)
- Landslide investigations/remediation - slope design, retaining wall design
- Forensic Engineering/Insurance investigations
- Mine subsidence investigations/ground stabilization
- Dam design/rehabilitation
- Pavement analysis and design
- Groundwater seepage analysis and design

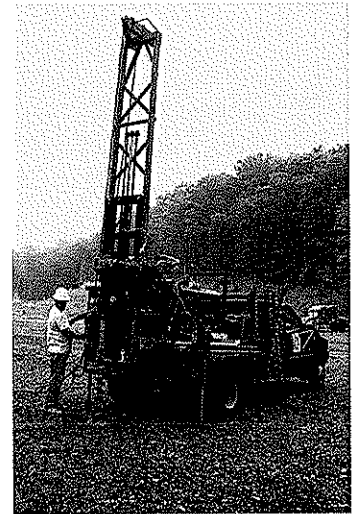




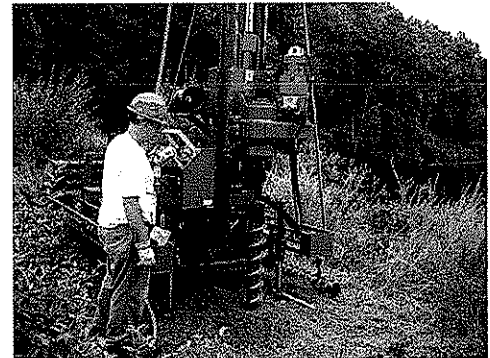
Drilling Services

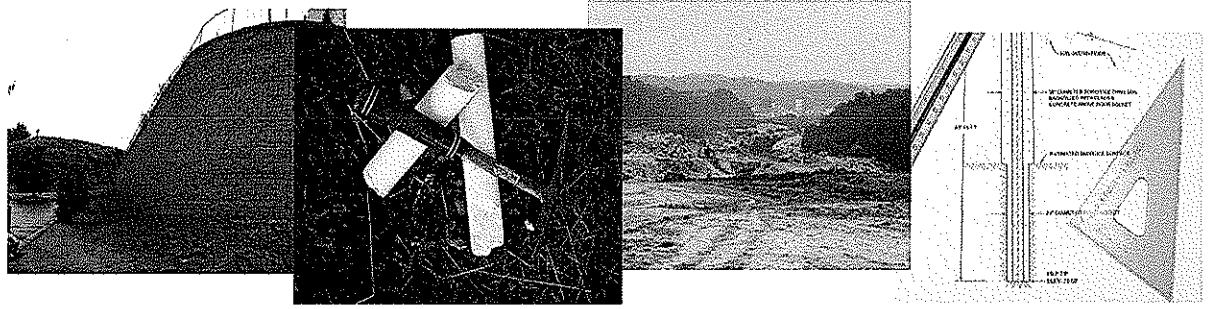
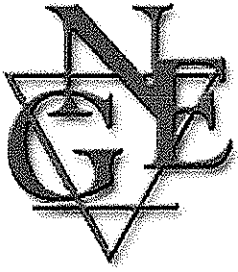
NGE is equipped with a variety of versatile drilling equipment to meet the demands of our clients even in the most demanding of environments. This includes:

- Truck-mounted rotary drill rig equipped with hollow stem augers used primarily for Standard Penetration Testing (SPT). It can also be used for conventional rock coring.
- Custom manufactured state-of-the-art track-mounted rotary drill rig, also equipped with hollow stem augers for SPT sampling. This machine is also equipped for wire-line coring and is uniquely designed to access hard-to-reach areas (such as rugged terrain or limited access) with a minimum of disturbance.
- Portable Tri-Pod drill able to perform SPT sampling in areas that are inaccessible to conventional drilling equipment.
- Dynamic Cone Penetrometer - portable device designed to provide comparable SPT "N-values" in areas with very limited access



NGE also provides monitoring well installation services that meet the requirements for the State of West Virginia Certified Monitoring Well Driller program.

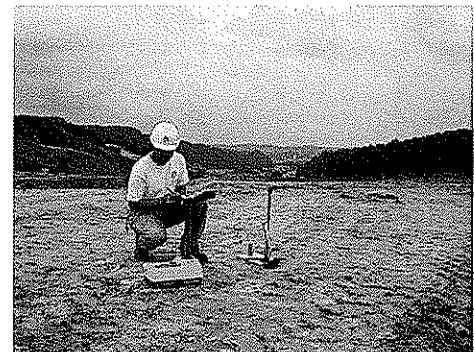


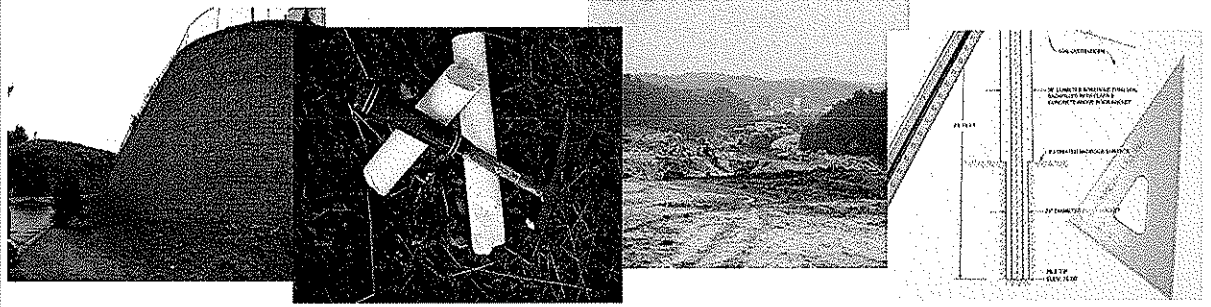
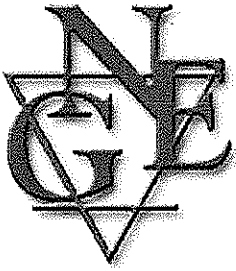


Construction Monitoring and Inspection Services

NGE offers inspection services to support a wide variety of construction projects, including highway, building, and airport. Our technicians are qualified and certified in a variety of services and will meet the specific needs of the client in an efficient and competent manner. NGE is also a West Virginia certified DBE firm as well as a federal Disadvantaged Business (8[a]). NGE can provide and manage the following services:

- Materials Testing and Analysis (concrete, asphalt, fill placement)
- Independent Construction Inspection
- Contractor Submittal and Shop Drawing Review
- Documentation and Process Verification
- Bidding Assistance and Analysis
- Cost Estimating and Cost Control Monitoring
- Design Review
- Value Engineering
- Project Partnering
- Quality Assurance Monitoring





Laboratory Testing Services

NGE can provide laboratory geotechnical testing in accordance with ASTM standards under controlled conditions to further estimate the engineering properties of soil and rock materials. Typical laboratory testing includes soil classification, compaction, compressibility, swell potential, and permeability.



Crosshole Sonic Logging (CSL)

NGE provides Crosshole Sonic Logging (CSL) to test the integrity of drilled concrete shafts. CSL testing is a non-destructive method that checks the homogeneity and integrity of concrete in a deep foundation by sending ultrasonic pulses through the concrete from one probe to another. The test measures the propagation time and relative energy of the ultrasonic pulse between parallel access tubes (access tubes typically consist of 2-inch diameter steel tubes attached to the drilled shaft reinforcement cage). The pulse arrival time (a.k.a. first arrival time (FAT)) and energy are affected by the concrete. Uniform concrete yields consistent arrival times with reasonable wave speed and energy. Non-uniformities such as zones of poor quality concrete, honeycombing, voids, and soil inclusions exhibit delayed arrival times with corresponding reduced signal energy.

NGE's broad range of experience in each of the previously listed services enables us to provide our clients with high-quality geotechnical engineering, remediation and construction services while meeting budgets and deadlines.

Project Management and Staffing

We believe that the goal of every successful project is a fully satisfied client and workable, cost effective solutions to problems. The element that enables a successful project is the *people* – skilled and experienced technical personnel committed to a successful project and supported by the management and owners of the firms. We have assembled an exceptional group of professionals to work on the design of the Heather Run #2 project.

George J. Crittenden will serve as Project Manager and Technical Lead. Joe brings more than 30 years of civil and site design experience, including 7 years of experience with the AML program. His specific project experience includes obtaining **404/401 permitting** from the U.S. Army Corps of Engineers as well as technical and design work on the Marrowbone Waterline Extension in Mingo County, the Ragland-Delbarton Water Supply project in Mingo County, and the Glen Fork / Sabine AML Feasibility and Waterline Extension Study in Wyoming County.

His project responsibilities for this assignment will include:

- ↪ Formulating the Project Work Plan.
- ↪ Establishing the Project Schedule.
- ↪ Ensuring that all project milestones are met through the coordination and monitoring of the project schedule and budget for the entire project team.
- ↪ Conducting meetings with WV DEP to document decisions or open items (project issues) and to publish meeting minutes that document those decisions/open items.
- ↪ Identifying and monitoring all open items/project issues so that all key project information is acted upon/ responded to in a timely and professional manner.
- ↪ Participating with the team in site visits in order to assess existing conditions and to collect and verify all appropriate program needs and requirements.
- ↪ Confirming that all work is being performed in accordance with the project scope and guidelines.
- ↪ Coordinating and monitoring of project engineers/ architects to ensure consistency and quality of work via regular meetings.
- ↪ Communicating among all members of the project team to ensure the consistent application of all project standards, schedules and date decisions.

Other key members of our project team include:

Kenneth D. Bryant, Jr., PE, PLS will serve as **QA/QC Manager** for this assignment. Ken brings more than 25 years of experience in mining engineering, including several years of experience with the AML program, and roadway engineering. He is a registered Professional Engineer in West Virginia. Ken oversees all our work in West Virginia, including both environmental and engineering projects.

Tony B. Kitzmiller, PE brings over 37 years of experience in the design of water distribution systems, drainage systems, mine engineering, and civil engineering. He has experience with the supervision of design and construction for coal mining in Northern West Virginia, including water discharges, slurry, and refuse construction. He is intimately familiar with mining conditions and construction, including the design of portal closures and seals. He has experience in managing and construction of methane drainage wells.

Donald Newman, PE brings over 25 years of environmental and site design experience. He has been involved with several AML projects for the Pennsylvania DEP, including work at the 75 acre McIntyre Mine site and the 55 acre Sherwood Drive site. He has also performed hydrologic and hydraulic analysis for a stream relocation due to potential AMD impacts at a generating station in Homer City, PA.

Jason M Boyd, PE, MBA brings over eight years of civil engineering experience. This includes drainage design, culverts, storm drains, and stormwater management for multiple WVDOT projects.

Thomas T Dancsecs, PE has over 19 years of experience in all aspects of hydrology and hydraulics, including the design of drainage and stormwater management systems. This experience includes work with WVDOT.

Novel Geo-Environmental Services, PLLC, (NGE) is a full-service geotechnical and environmental engineering firm with offices in St. Albans, WV and Bridgeville, PA. Led by an experienced management team, NGE provides quality geotechnical services to a variety of private sector and government clients. In business since 2002, NGE is one of the fastest growing engineering consulting firms in the country.

NGE is a Certified Disadvantaged Business Enterprise (DBE) in West Virginia, Pennsylvania, Ohio, Maryland, and New Jersey and is certified by the Small Business Administration as an 8 (a) Small Disadvantaged Business.

Perry P. Sgrignoli, Chief of Surveys, directs, coordinates and supervises field and office support personnel in GPS surveys, ground control for aerial mapping, property, topographical, and right-of-way surveys, construction stakeout, legal descriptions, cost estimates, street and drainage designs, right-of-way plats, and stormwater management.

**Engineering & Construction Monitoring
Heather Run #2
West Virginia Department of
Environmental Protection**

Principal-in-Charge

Charles L Kinney, Jr., PG

QA/QC Manager

Kenneth D Bryant, Jr., PE, PS

Project Manager

George J Crittenden

Project Engineer

**Jason M Boyd, PE, MBA
Donald H Newman, PE**

Hydrology

Thomas T Dancsecs, PE

Geotechnical/Materials Testing

**Novel Geo-Environmental Services,
PLLC**

Surveys

Perry P Sgrignoli, PLS

Construction Monitoring

**Travis M Rose
Jerry R Linn, PE**

Mineshaft/Portal Engineer

Tony B Kitzmiller, PE

Technical support staff of over 300, including structural, civil, and cost estimating.

George J Crittenden

Project Manager and Technical Lead

Education:

Coursework/Tennessee State University

Coursework/Kentucky State University

Years' Experience:

Total: 30

Mr. Crittenden's more than 30 years in design technical services and surveying for mine land reclamation projects, water supply, subdivisions, and highways include: **Minden Mine Dump, Fayette County, WV.** Laid out surveys and subsurface investigation, requested and analyzed laboratory test results, and produced grading plans with details, project specifications and bid documents to install wet seals to permanently lower the mine water levels, to establish positive drainage to a nearby stream, to excavate and regrade the refuse piles, and to provide soil cover and revegetate all disturbed areas.

Marrowbone Water Line Extension, Mingo County, WV. Laid out survey work and subsurface investigation, requested and analyzed laboratory test results, and produced grading plans with details, specifications and bid documents to extend a water line into the Marrowbone area where the groundwater was contaminated by mining activities.

Ragland-Delbarton Water Supply, Mingo County, WV. Laid out surveys and subsurface investigation, requested and analyzed laboratory test results, and produced grading plans with details, project specs and bid documents to extend a Ragland Public Service District water line to serve approximately 150 customers affected by AML-related water supply degradation.

Scott Tipple, Barbour County, WV. Laid out surveys and subsurface investigation, requested and analyzed laboratory test results, and produced grading plans with details, project specifications and bid documents to correct two areas impounding water and coal refuse.

Glen Fork/Sabine Area Phase II Abandoned Mine Lands Water Feasibility Study and Water Line Extension, Wyoming County, WV. Interviewed residents about the quantity/quality of their water source and updated business/residence maps to support an AML&R grant request for water lines in these areas.

Little Slate Creek Refuse Pike, McDowell County, WV. Laid out surveys and subsurface investigation, requested and analyzed laboratory test results, and produced grading plans with details, project specifications and bid documents to regrade the refuse pile to establish stable slopes and establish drainage to a nearby stream.

- Section 404 Permit, Rowlesburg Railroad Truss, Preston County, WV, for temporary crossing of Saltlick Creek.
- Section 404/401 and NPDES Permits, Spring Creek Bridge, Roane County, WV, for Permanent Construction Features within OHW of Spring Creek.
- Section 404/401 NPDES Permits, Honey Creek Bridge, Fayette County, WV, for temporary crossing of Honey Branch.

All three projects included the following tasks, as required: project narrative; before, during, and after hydraulic models; determining OHW and concrete, excavation, and embankment quantities (permanent and temporary) below OHW; bank stabilization, estimating construction footprint, temporary construction dewatering; and sizing structure openings that would allow normal operation of Spring Creek; producing location map, plan view, profiles, cross sections, required quantities; and stream restoration drawings for the crossing removal.

Kenneth D Bryant, Jr., PE, PS

QA/QC Manager

Education:

BS/Civil Engineering/West Virginia University

Registrations:

Professional Engineer

Professional Surveyor

Years' Experience:

Total: 25

Professional Affiliations:

American Society of Civil Engineers

American Highway Engineers Association

West Virginia Association of Land Surveyors

As Regional Manager of the firm's Charleston and Morgantown, WV offices, Mr. Bryant has overview responsibility for all projects being conducted through West Virginia office operations. He also assumes project management responsibility on select projects.

Mr. Bryant has over 24 years of experience in highway design, surveying and roadway planning. Mr. Bryant is accomplished in a variety of civil and site engineering areas including drainage and stormwater design, hydrology and hydraulics, utility relocations including waterline relocations, pavement delineation, guide rail, slope stabilization, curbing and mass excavation. Mr. Bryant is well versed with AASHTO, WVDOH and West Virginia DEP requirements.

Abandoned Mine Reclamation Program, Various Locations, WV. Project Engineer for various AML projects through south central West Virginia. Responsible for Construction Management, water quality control, erosion and sediment control plans, environmental permitting and site inspections.

Upper Mud River Soil Conservation Service Dam, Lincoln County, WV Project Engineer responsible for the preparation of construction plans to several county roads for relocation out of the reservoir's flood plain. Duties included horizontal and vertical geometry, drainage design, grading design and estimate of quantities and cost estimates.

Summersville Hydroelectric Project, Summersville Dam, Summersville, WV Chief Engineer for the development of the Powerhouse Lift drawings. Duties included combining various engineering discipline drawings into a single set of construction drawings. Disciplines included; structural mechanical, electrical and site development. Cost estimating and quantity take off's were also performed.

A partial listing of Mr. Bryant's relevant project experience includes the study and design for major highway projects including utility coordination and development of criteria and specifications related to waterline relocations for the following:

I-81 Tabler Station Interchange, Martinsburg, WV.

Appalachian Corridor H, Grant County, WV.

Appalachian Corridor D, Wood County, WV.

King Coal Highway, Mingo County, WV.

Charles L Kinney, Jr., PG
Principal-in-Charge

Education:

BS/Geology/Allegheny College

Graduate

*Coursework/Business
Administration/University of
Houston*

Registrations:

Professional Geologist

Years' Experience:

Total: 25

Professional Affiliations:

*American Association of
Petroleum Geologists*

*Association of Groundwater
Scientists & Engineers*

*National Ground Water
Association*

As the Principal-in-Charge on this project, Mr. Kinney will meet regularly with the Project Manager to monitor schedules and budgets. He will also periodically contact you to confirm that you are satisfied with the progress being made and with our performance throughout the course of this project. Mr. Kinney is available to discuss any aspect of this project with you at your request. He will also review project performance reviews prepared by the QA/QC Managers and coordinate with the Project Managers and QA/QC Managers action to be taken to maintain excellent performance standards.

U.S. Army Corps of Engineers, A/E IDQ Contract, Tobyhanna Army Depot, PA. General multi-disciplined A/E open-end services for alteration, maintenance, repair, and new construction projects; renovation; replacement of utility plants and systems; and site work including roads, pavements, drainage structures, and other land improvements. Program Manager, Principal-in-Charge and QA/QC Manager responsible for geological and civil services. Responsible for meeting regularly with the Project Manager to monitor schedules and budgets.

Loucks Mill Road Plant Remediation , Northrop Grumman Corporation, York, PA. Preparation of a Statewide Health Standard Final Report for Act 2 Closure of the Metso Property, former Cole Steel Facility; analysis of soils to be excavated to determine if hazardous or non-hazardous for off-site disposal; and construction oversight during stream bank remediation. Project Manager

Harley Davidson Environmental Engineering Support, York, PA. Open-end services to assist Harley Davidson staff with wastewater plant operations including development of O & M manual, recertifications, and study of plant redesign. Geologist responsible for development of work instructions for ISA-14001 Compliance Certification.

ESAB Group, Hanover, PA. Completion of an Act 2 cleanup using Statewide Health Standards for soil and Site Specific Health Standards for groundwater.

Guilford Township Water Authority, Annual Retainer Services, Franklin County, PA. Retainer services to provide long-term improvement programs, assistance with development of water sources, and design of water mains, tanks, pumping stations and chemical treatment facilities. Senior Staff Geologist

Jason M Boyd, PE, MBA
Project Designer

Education:

*MBA/Business
Administration/Marshall
University*

*BS/Civil Engineering/West
Virginia University*

Registrations:

Professional Engineer

Years' Experience:

Total: 8

Mr. Boyd's civil engineering experience includes roadway design, right of way, geometric layouts, utility relocation design, maintenance of traffic, signing and marking, plan preparation/presentation, quantity/cost estimates, drainage design, hydrologic procedures, pavement/deck drainage, inlet spacing computations, channels, culverts, storm drains, and stormwater management.

Mr. Boyd's project experience includes the following:

WV Route 10, Logan County, WV. Design Team Member for the preliminary and final design of a 4.2-mile section of divided arterial through mountainous terrain. This project was comprised of nine construction projects and one right-of-way project. This project had total project construction cost estimates over \$100M and included major grading, paving, major and minor drainage, water and sewer line relocations for Logan PSD, and many other aspects of roadway design. Responsible for the preparation of right-of-way and signing/markings plans.

I-64 Widening Design Study, Putnam County, WV. Design Team Member for this 3.48-mile long design study of a major interstate. This project consisted of widening the current interstate from four lanes of traveled way to six lanes of traveled way. Preliminary construction cost estimate for this project is around \$33 million but will not be finalized until an alternate is chosen. Assisted in the layout of the downstream horizontal and vertical alignments for the Nitro Intersection. Responsible for the preliminary maintenance of traffic design for each alternate for the entire length of the project.

Allensville Low Water Crossing Design Study, Berkeley County, WV. Lead Design Engineer for the roadway portion of the design study of the rural low water crossing replacement of County Route 312. The compilation of the design study entailed roadway design, major drainage, right-of-way, preliminary cost estimates, and plan preparation.

WVDOT, I-81 Tabler Station Interchange, Martinsburg, WV. Study, design, and preparation of construction contract plans and related documents for the new Tabler Station Connector Road including modification of ramps, replacement of overpass bridge and design of an industrial access road. Project Engineer

WVDOT, Corridor H, Section 4, Final Design, Grant County, WV. Design and development of construction documents for a four-lane divided highway with two major structures and a minor third structure including drainage and specialized erosion and sediment control due to the project location and sensitivity of Greenland Gap.

Donald H Newman, PE
Project Designer

Education:

*MS/Water Pollution
Control/Water Quality Mgmt./
Env. Health Pla/University of
Pittsburgh*

*AB/Environmental
Engineering/The Johns
Hopkins University*

Registrations:

Professional Engineer

Years' Experience:

Total: 30

Professional Affiliations:

*Air & Waste Management
Association*

*American Association of
Advancement of Science*

*American Society of Civil
Engineers*

*American Water Resources
Association*

*American Water Works
Association*

*Engineers' Society of Western
Pennsylvania*

*National Ground Water
Association*

*National Trust for Historic
Preservation*

Preservation Pittsburgh

United States Golf Association

*Western Pennsylvania
Conservancy*

Mr. Newman has management responsibilities for the activities of professional and technical personnel for work on environmental engineering projects in the areas of water supply, sewage, stormwater, solid waste and industrial waste management. During his 24-year career, he has successfully executed over 350 engineering projects. Additional responsibilities include technical input, quality control and the planning/scheduling of engineering services. He is also experienced in the siting and engineering of conveyance, treatment and disposal facilities, as well as related areas of comprehensive planning, sediment control, stormwater management, route and option assessment, occupancy/easement/regulatory permits, facility closure, geotechnical engineering, and cost estimating. In addition, he has extensive experience in complex environmental/natural resource/cultural resource assessments and transportation related environmental activities.

Mr. Newman directed the preparation of site grading and reclamation plans, facility design, construction documents, and permitting under contract by PADEP Abandoned Mines Lands (AML) program for the 75-acre McIntyre and the 55-acre Sherwood Drive refuse sites. He directed periodic site inspections and monitored progress during the construction phase. The Sherwood Drive design incorporated design and compaction requirements for the construction of a new interchange for the Pennsylvania Turnpike on part of the site.

He developed specific alternative soil cover designs and revegetation procedures from general protocols developed for soil cover variances for six disposal sites. The project included cropping, physiochemical, and soil texture evaluations preparatory for regulatory applications. He also secured regulatory approvals and subsequently provided QA/QC testing and oversight during site operations.

Mr. Newman also participated in the project selection and design for a wetlands compensation proposal to PADEP including the delineation and evaluation of existing resources. Four candidate projects were culled from AML, State Game Lands, and Parks needs lists, and Western Pennsylvania Conservancy critical habitats maps among other sources. Proposed projects included wetland construction, lakefront stabilization, and enhancement on abandoned mines land.

Caparo Steel Company. Technical lead for conceptual engineering study to permit the restart of idled production units by the installation of a treatment system to treat the oily/wastewater discharges that will result from their operation. The project incorporated water reuse, oil reclaim, and minimized discharge and waste generation in treating naphthenic distillates, Mineral Oils, Petroleum Distillates, Detergents, collected yard drainage, and entrained metal filings, grit and solids via a dissolved air flotation (DAF) clarifier and a hydroclone followed by a polishing tube filter before discharge to an NPDES permitted outfall.

Tony B Kitzmiller, PE
Mineshaft/Portal Engineer

Education:
BS/Civil Engineering

Registrations:
Professional Engineer

Years' Experience:
Total: 37

Professional Affiliations:
*American Association of
Petroleum Geologists*

*Association of Groundwater
Scientists & Engineers*

*National Ground Water
Association*

Mr. Kitzmiller has over 37 years of experience in the design of water distribution systems, drainage systems, mine engineering, and civil engineering. He has experience with the supervision of design and construction for coal mining in Northern West Virginia, including water discharges, slurry, and refuse construction. He is intimately familiar with mining conditions and construction, including the design of bridges and roadways near mines. He has experience in managing and construction of methane drainage wells.

He has experience in obtaining mine subsidence permits, well permits for longwall mining, and shaft permits for drilling and conventional sinking.

Mr. Kitzmiller's coal mining experience includes:

- Chief Engineer at the Blacksville Division
- Supervisor of Design and Construction of Northern West Virginia Region, overseeing 13 surveyors and resident engineers
- Obtaining permits for PA mine subsidence, well permits for longwall mining through oil and gas wells, water discharges, slurry and refuse construction, along with new shaft permits for drilling and conventional sinking.
- Designed bridges and roads and helped resolve underground mining problems.
- Managed methane drainage wells, including construction of new methane drainage wells.
- Project Manager for outside construction.

Thomas T Dancsecs, PE

Hydrology

Education:

BS/Civil Engineering/
Pennsylvania State University

Registrations:

Professional Engineer

Years' Experience:

Total: 19

Professional Affiliations:

American Society of Highway
Engineers

Mr. Dancsecs has over 19 years of experience in the field of hydraulics and drainage design. His background includes design of drainage and stormwater management systems for a variety of transportation projects, as well as experience in hydraulic modeling and permitting. He is familiar with the drainage design standards for numerous state transportation departments and agencies. In addition to drainage design for roadways, Mr. Dancsecs' abilities include hydraulic modeling for bridge projects over waterways, floodplain analysis, design of detention/retention ponds, scour analysis, design of underground detention systems, culvert design and analysis, stream encroachment permitting, and NPDES permitting.

Final Design for Full-Depth Turnpike Reconstruction, Mileposts 213.9 to 227, PA Turnpike, Cumberland County, PA. Construction drawings, right-of-way needs, and utility coordination to reconstruct the Pennsylvania Turnpike roadway bridges between Mileposts 213.9 and 227. Task Manager responsible for final design of stormwater management facilities at the PA Turnpike Carlisle Interchange. Tasks included complete design of two detention ponds to meet township requirements. Proposed ponds were also designed to function as sediment basins during construction in accordance with PADEP standards.

PennDOT District 1-0, Open End Environmental and Engineering Services, Northwestern Pennsylvania. The services required under this Contract encompass a wide range of environmental studies and engineering efforts with the possibility of several different types of projects with short completion schedules being assigned concurrently. Project Engineer

Vince Lombardi Service Area, NJ Turnpike Authority, Ridgefield, NJ. Preliminary and final design and preparation of contract documents for the construction of improvements at the Vince Lombardi Service Area including additional truck parking spaces and the construction of a new truckers' facility building. Highway Engineer responsible for assistance with construction services.

South Branch Brandywine Creek Riverwalk, Redevelopment Authority of the City of Coatesville, PA. Buchart Horn provided design, bid/award, construction phase services, and preparation of construction cost estimates for a riverwalk along the Brandywine Creek. The design was prepared in conjunction with the proposed mixed-use redevelopment of a former steel manufacturing plant site. Services were performed on behalf of the City of Coatesville, as its contribution to the private developer's effort. Task Manager responsible for hydraulic modeling of West Branch Brandywine Creek using HEC-RAS to determine impacts of proposed riverwalk and associated retaining wall upon floodplain and FEMA floodway.

Travis M Rose
Construction Monitoring

Education:

BS/Industrial Technology/West Virginia University, Institute of Technology

AS/Civil Engineering Technology/West Virginia University, Institute of Technology

Years' Experience:

Total: 9

Mr. Rose has more than nine years of experience as a transportation designer. His experience includes:

- Development of construction documents and right-of-way plans
- Property map layout and descriptions
- Project design
- Mapping
- Coordination with Department of Transportation personnel and subcontractors

I-81 Tabler Station Interchange, West Virginia DOT, Martinsburg, WV. Study, design, and preparation of construction contract plans and related documents for the new Tabler Station Connector Road including modification of ramps, replacement of an overpass bridge, and design of an industrial access road. Senior Designer

Corridor H Final Design, WVDOT, Grant County, WV. Design and development of construction documents for a four-lane divided highway with two major structures and a minor third structure including drainage and specialized erosion and sediment control due to the project location and ecological sensitivity of Greenland Gap.

Jones and Laughlin Overpass Bridge, WVDOT, Martinsburg, WV. Replacement of the Jones and Laughlin Overpass Bridge located approximately 0.48 mile northwest of the intersection of WV 19 and Berkeley County Route 45/4. Senior Designer

Jerry R Linn, PE

Construction Monitoring

Education:

*BS/Civil Engineering/
Pennsylvania State University*

Registrations:

Professional Engineer

Years' Experience:

Total: 33

Professional Affiliations:

*American Society of Civil
Engineers, Fellow*

*American Society of Certified
Engineering Technicians*

*Chi Epsilon - National Civil
Engineering Honor Society*

Mr. Linn has over 33 years of diverse experience in the field of civil engineering. He is responsible for managing a variety of municipal construction projects, which include new and upgraded wastewater treatment facilities, landfills, dam rehabilitation, wetland mitigation, sanitary sewer collection systems, and potable water distribution networks and elevated/underground water tanks. Mr. Linn has also worked on projects for industrial clients such as Kelloggs, SCM, and General Motors. His duties include staff supervision, contract administration, monitoring of construction activities, design modifications, and liaison with the client, local, and State officials. Mr. Linn also co-authored the Construction Review Manual for the Pennsylvania Office of Budget, and conducts project reviews throughout the State for that agency.

Mr. Linn has also worked for over three years in our Technical Services Division, preparing construction cost estimates and bidding document specifications for a variety of projects including: new and renovated water/wastewater facilities, pumping stations, pipeline systems, road and bridge repair, several County parks, courthouse renovations, turnpike plaza upgrades/renovations, parking garage renovations, prison expansion, and military housing, for projects up to \$45 million dollars.

River Park Improvements, Borough of Columbia, PA. Preliminary and final design, land development submittal, bidding and construction phase assistance, resident representation, and other related services for park improvements including roads, parking, and river access.

PA DGS, Preconstruction CM Services for Convocation Center, Indiana University of PA. Cost estimating and constructability reviews in preparation for construction of new Convocation Center.

Riverfront Park: Riverbank Stabilization and Flood Control Design and Construction Management, City of Sunbury, PA. Preliminary assessments and studies, schematic and final engineering designs, and bidding and construction phase services for the riverfront park and associated facilities, including design of appropriate stabilization and restoration measures for the riverbank and preserving the structural integrity of the existing levee/floodwall system.

Raw Water Transmission Line and Water Treatment Facility, The Pennsylvania State University, University Park, PA. Design of new Water Treatment air stripping facility to remove low-level PCE contamination as well as 3500 LF of 16" raw water transmission main and new finished water distribution main line.

PA Department of General Services, Fish Passageway at Flat Rock Dam, Schuylkill River, Lower Merion Twp., PA. Design of a reinforced concrete fish passageway at DEP's Flat Rock Dam that includes flow features attractive to anadromous fish, primarily shad, that live in salt water but return to fresh water to spawn; flow controls, safety features, an Environmental Assessment, obtaining permits, and construction phase support.

Novel Geo-Environmental Services, PLLC

Novel Geo-Environmental Services, PLLC, (NGE) is a full-service geotechnical and environmental engineering firm with offices in St. Albans, WV and Bridgeville, PA. Led by an experienced management team, NGE provides quality geotechnical services to a variety of private sector and government clients. In business since 2002, NGE is one of the fastest growing engineering consulting firms in the country.

NGE is a Certified Disadvantaged Business Enterprise (DBE) in West Virginia, Pennsylvania, Ohio, Maryland, and New Jersey and is certified by the Small Business Administration as an 8 (a) Small Disadvantaged Business.

Perry P Sgrignoli, PLS
Surveying

Education:

*Coursework/Architectural
Drawing and Engineering
Studies/Harrisburg Area
Community College*

*Coursework/Mechanical
Engineering Studies/University
of Pittsburgh at Titusville*

Registrations:

Professional Land Surveyor

Years' Experience:

Total: 25

Professional Affiliations:

*Pennsylvania Society of Land
Surveyors*

As Chief of Surveys for Buchart Horn, Mr. Sgrignoli directs, coordinates and supervises field survey crews, office designers and CADD operators for the following types of work: GPS surveys, ground control for aerial mapping, property surveys, topographical surveys, construction stakeout, right-of-way surveys, legal descriptions, cost estimates, street and drainage designs, right-of-way plats, stormwater management, recreational and industrial park designs, office building site plans, parking lots.

**Wastewater Treatment Plant Upgrade and Expansion, Coatesville, PA. PA
American Water**

**Aerial Mapping, Defense Distribution Depot, Susquehanna, New Cumberland,
PA. Defense Distribution Center**

**Eagle Hotel Assessment, West Chester Mixed-Use Project, West Chester, PA.
Stan Zukin Properties**

**Six-Lane Widening of I-76 & I-276, Montgomery County, PA. PA Turnpike
Commission**

**Lackawanna Valley Industrial Highway, Lackawanna County, PA, PennDOT
District 4-0. Design Technician responsible for details, quantities, and estimates
for both the East Leg (\$26.17 million est.) and the South Leg (\$55.01 million est.)
of this project located in an area honeycombed by abandoned anthracite mines.
Other responsibilities: design details, checking and maintaining pavement
type/composition, frequent cross-checking during design.**

**S.R. 0030, Lancaster County, PA. PennDOT District 8-0. Survey Coordinator,
Party Chief, Rodman, and Instrumentman responsible for scheduling surveys on 2
miles of roadway and connecting side roads. Duties also involved coordinating
with a subconsultant for hydrologic and hydraulic surveys for Little Conestoga
Creek and an unnamed tributary. In addition, scheduled and coordinated
monumentation of the right-of-way break points for the project.**

**S.R. 0083, Exits 14 and 15 (Old Exits 4 and 5), York County, PA, PennDOT
District 8-0. Survey Coordinator responsible for time budgets, scheduling, and
reconnaissance of the primary survey control for this 5.5-mile roadway study. This
project required two traverse control loops, each totaling approximately five miles.
Responsible for maintaining coordination between two separate field crews,
checking both traverse control loops, and coordinating activities between the field
crews and the design group.**

**S.R. 0322, Section B01, "Missing Link," Mifflin County, PA, PennDOT District
2-0. Survey Coordinator and Party Chief responsible for scheduling and
completing the monumentation of right-of-way break points. Involved locating and
setting 115 monuments for 5.6 miles of roadway. Duties included coordinating
with the contractor to avoid production delay and installing the right-of-way fence.**

John E. Nottingham, P.E., P.S.



Mr. Nottingham has served as lead Geotechnical Engineer on numerous government and commercial design and construction projects. His responsibilities on these projects include direction and coordination of all geotechnical engineering activities. Duties on these projects have included foundation investigation report production, foundation and retaining wall design, fill embankment and cut slope design, dam design and analysis, slope stability analysis, pavement design, design of drainage systems, supervision of subsurface drilling programs, field activity coordination, laboratory data computation and processing, performance of field work, client relations, and supervision of staff and project level geotechnical engineers.

Fields of Competence

- Highway & Airport Geotechnical Design
- Foundation Investigations
- Pavement Analysis and Design
- Landslide Analysis & Remedial Design
- Ground Water and Seepage Analysis & Design
- Retaining Wall Design
- Mine Subsidence Investigations
- Forensic & Insurance Investigations
- Construction Monitoring
- Personnel Management
- Project Management (schedule and budget)
- Project Estimating

Education

- B.S., Civil Engineering, West Virginia University - 1987
- M.S., Civil Engineering, West Virginia University - 1995

Registration/Certifications

- Registered Professional Engineer in West Virginia. Registration No. 12357 (since 1994)
- Registered Professional Surveyor in West Virginia. Registration No. 1495 (since 1995)

Employment History

- November 2002 - Present
Branch Manager, Novel Geo-Environmental, LLC
- 1997 - November 2002
Geotechnical Services Manager, Triad Engineering, Inc.
- 1996 - November 2002
Senior Engineer, Triad Engineering, Inc.
- 1993 - 1996
Project Engineer, Triad Engineering, Inc.
- 1988 - 1993
Staff Engineer, Triad Engineering, Inc.

Site Grading Plan, Acid Drainage Mitigation, Abandoned Strip Mine, Buckeye Run

Clearfield County, Pennsylvania

Client:

*Pennsylvania Department of
Environmental Protection*

As part of a U.S. Office of Surface Mining site restoration, Buchart Horn, Inc. designed a site grading plan for the surface-mined, 67 acre Buckeye Run area in southwestern Clearfield County, PA. The area had been abandoned for over 40 years. In addition, we prepared grading plans, soil erosion control plans, and specifications for the 191 acre Buckeye Run Abandoned Surface Mine. Primary concerns on this project were the dangerously steep slopes and the Stormwater runoff infiltration through the mined surface to the groundwater. An Earth Disturbance Permit was granted for this project.

The runoff discharged from the mined area contained high levels of dissolved iron and aluminum sulfates in conjunction with pH values less than 4.5 (acidic). It is produced when oxygen dissolved in water reacts with pyritic (iron sulfide) materials found in association with most coal deposits. Acid mine drainage (AMD) degrades the water quality of streams and water supplies, often to the point of eliminating all biological activity within the AMD-contaminated stream.

In addition to the pollutants, there were also several dangerous highwalls and spoil piles remaining from the final cut of the surface mining operation. Buchart Horn developed regrading /erosion and sediment control plans to eliminate the highwalls, the low points, and various spoil piles. Stormwater and normal surface water were conveyed in vegetated swales to tributaries of Buckeye Run. The vegetated swales prevent erosion and further assist in keeping runoff away from potentially acidic materials.

WVDOT, I-81 Tabler Station Interchange

Martinsburg, West Virginia

Client:
WVDOT

Buchart Horn is providing services for the study, design, and preparation of construction contract plans and related documents for the new Tabler Station Connector Road including modification of ramps, replacement of overpass bridge and design of an industrial access road. The project includes expansion of the existing Tabler Station Interchange on I-81 just south of Martinsburg, replacement of the structure carrying Route 32 over I-81, widening of Route 32 between I-81 and Route 11, and service and access roads.



WVDOT, Corridor H, Section 4, Final Design

Greenland Gap, West Virginia

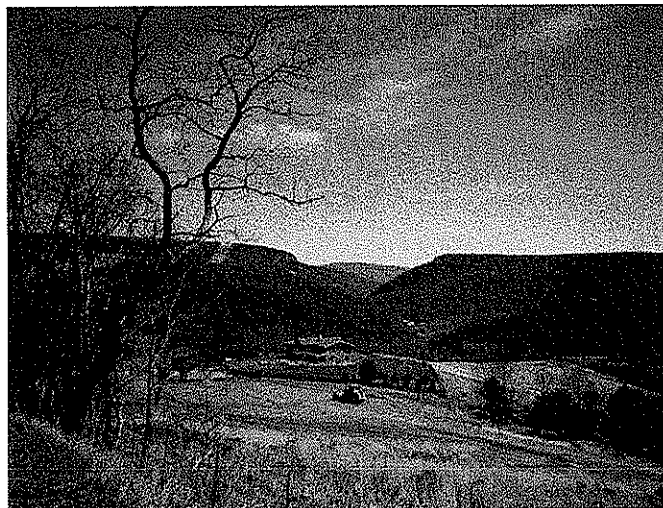
Client:
WVDOT

Buchart Horn provided preliminary and final design services for an approximately two mile segment of Corridor H near Greenland Gap in Grant County, WV. The project also included two major bridges and one minor stream crossing.

Initially, we were responsible for a watershed-based study of the effects of several alignment alternatives on a major four-lane highway on new alignment. The project site was in a naturally sensitive area surrounded by historic rural residential villages, dense old growth forests, vast agricultural lands, pristine high quality streams, habitat for rare and endangered species, and a unique geological feature – the Greenland Gap.

Buchart Horn evaluated the existing preferred alternative and compared it to two options on an environmental basis. This study not only looked at the direct impact to the immediate surroundings but also looked at the impacts each alternative would have on the entire watershed and sub-watersheds. The technical report generated from this study was an in-depth evaluation of each watershed and sub-watershed and how it would respond to various alignment options. The results were recommendations on how to avoid environmentally and culturally damaging impacts associated with the project.

Subsequent to the initial study, Buchart Horn advanced the project through the preliminary engineering phase and performed final design.



Drainage and Other Water-Related Projects Under A/E IDQ Contract

Tobyhanna, Pennsylvania

Client:

Tobyhanna Army Depot

This three-year open-end contract included general multi-disciplined A/E services for alteration, maintenance, repair, renovation, and new construction projects; renovation or replacement of utility plants and systems; and site work. Reports, studies, design criteria, design and other general architecture/engineering services, as well as detailed land surveys, stormwater management, and sedimentation and erosion control were also required. The contract was administered by the Corps of Engineers Baltimore District and, although intended primarily for services at Tobyhanna Army Depot, was used throughout the District.

Order #1 Olyphant Flood Control, Scranton, PA. Buchart Horn proposed a system of inlets and closed pipe to intercept runoff that would pond behind the levees being considered to protect the Borough of Olyphant, Lackawanna County, PA. The Corps had originally suggested a large concrete channel, but the inlets and closed pipe achieved the same result with greater safety and at lower cost.

The system as collects runoff from storm events up to and including a 100-year storm for a drainage area of approximately 80 acres in the area of Garfield Avenue, near Scranton, to the Lackawanna River. The system included 1,415 feet of pipe ranging from 36 to 60", and 33 concrete inlets.

Delivery Order #3 Scranton Flood Control, Scranton, PA. Using preliminary plans prepared by the Corps of Engineers, Buchart Horn finalized design and prepared plans, specifications, and contract documents for a one mile flood control project along the Lackawanna River in Scranton. Major project features are levees, mechanically stabilized earth (MSE) walls, concrete floodwall, closure structures, interior drainage structures, and removal of a railroad bridge to achieve design protection against a 100-year flood.

Delivery Order #6 Bridge Replacement/Seepage Investigation. Designed and prepared construction documents for a new bridge over the Barney's Lake outfall. Our design included replacing the box culvert that carries the stream discharge; an evaluation of the degree of surface water infiltration in the earthen dam embankment, and a determination of the geotechnical characteristics of the subgrade beneath the proposed box culvert.

Delivery Order #16 Stormwater Study. Site investigation, field survey and engineering analysis to address flooding in the vicinity of Area 700 and Maple Street; included design modification to detention basin.

Water System Improvements, Oakland Public Service District

Weirton, West Virginia

Client:
Oakland Public Service District

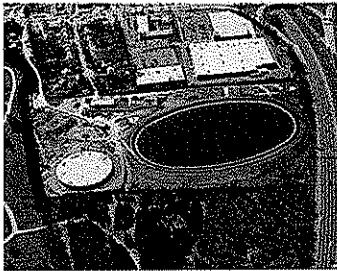
Buchart Horn performed improvements to the Oakland Public Service District Water System in the following areas:

- ↳ water storage tank rehabilitation or replacement
- ↳ removal of iron and manganese from the system source water
- ↳ a waterline extension along Chapman Road

New Pikesville Reservoir Tanks, Baltimore County Bureau of Engineering

Pikesville, Maryland

Client:
Baltimore County Bureau of
Engineering



Buchart Horn provided design, bidding, and construction phase services for the replacement of the existing 21 million gallon uncovered Pikesville Finished Water Reservoir with two prestressed wire-wound concrete storage tanks. A 5.0 million gallon tank was constructed adjacent to the existing reservoir and put into service. The existing reservoir was then demolished, and a 15.0 million gallon tank constructed in its place. The 15.0 million gallon tank was fully buried within the existing reservoir footprint because the stormwater system to which the site drains does not have capacity for the runoff generated from the two new covered storage tanks. Additionally there was very limited space at the site for the construction of stormwater management ponds.

Both tanks have column supported flat roofs and mat foundation type floor slabs. Soil conditions at the site and the need for a large number of columns to support the soil cover on the large tank resulted in the mat foundation being the most cost effective design.

The project design also included:

- ↻ More than 2,000 feet of 36-inch pipe
- ↻ 18 valve and equipment vaults
- ↻ Three 30-inch magnetic flow meters
- ↻ Two 30 inch altitude valves
- ↻ Two 36-inch hydraulically-operated ball valves for reservoir isolation
- ↻ Extensive upgrades to the electrical and instrumentation/controls and SCADA
- ↻ Modification of the existing gas chlorination system to accommodate the new equipment
- ↻ Addition of piping to facilitate the pending conversion to sodium hypochlorite disinfection
- ↻ Two stormwater management ponds
- ↻ Extensive demolition and earthwork



Buchart Horn worked closely the Water Analyzer's Office (Baltimore County) to ensure that the single tank was adequate during construction of the second tank and that both tanks were incorporated into the overall distribution system to the greatest advantage. We also assisted the County in obtaining MDE approval for the new storage tanks.

Harley Davidson, Various Environmental Services *York, Pennsylvania*

Client:

*Harley Davidson Motor
Company Operations, Inc.*



Environmental Consulting. Since 1998, Buchart Horn, Inc. has been the environmental and regulatory consultant for the York, Pennsylvania facility of Harley-Davidson Motor Company Operations, Inc. We address any issues that arise related to solid waste (residual and hazardous), air quality, and water quality.

Specific reporting requirements and services provided include the following:

- ↳ Preparation of Pennsylvania Department of Environmental Protection (PADEP) annual and biennial residual waste reports
- ↳ Preparation of Environmental Protection Agency (EPA) biennial hazardous waste report
- ↳ Preparation of EPA Toxic Chemical Release Inventory Form R Report
- ↳ Preparation of Pennsylvania Department of Labor & Industry Bureau of Pennsafe Tier II Report
- ↳ Preparation of EPA Air Information Management System (AIMS) Report
- ↳ Preparation of Pennsylvania Department of Labor & Industry Bureau of Pennsafe Hazardous Substance Survey Form (HSSF)
- ↳ Aboveground and underground storage tank monitoring
- ↳ Annual update of Preparedness Prevention and Contingency (PPC) Plan, Spill Prevention Control and Countermeasure (SPCC) Plan, and Off-site Response (OSR) Plan
- ↳ Preparation of PADEP 25R Source Reduction Strategies
- ↳ Monthly Audits of facility's air, waste management, and storage tank



- provisions to ensure environmental compliance
- ✦ Preparation of Discharge Monitoring Reports (PADEP) and Self-Monitoring Reports (Springettsbury Township)
- ✦ Preparation of Quarterly volatile organic compounds (VOC) emission reports for PADEP submittal
- ✦ Management of projects relating to environmental compliance and awareness
- ✦ Prepared Title V Air Quality permit and managed the associated monitoring program
- ✦ Review of environmental regulations to determine the potential impacts to the facility
- ✦ Assistance with efforts to obtain ISO 14001 certification

Phase I Environmental Site Assessment of Two Sites. Buchart Horn Inc. performed Phase I Environmental Site Assessments on two sites in accordance with ASTM standard E1527-00. The assessments determined whether potential contamination sources exist.

One site, the Tri-Plas, Inc. Facility on Board Road in Emigsville, contains a 40,000 square-foot structure utilized for light manufacturing and warehousing. A gasoline underground storage tank (UST) was removed in 1990; a heating oil UST remains on site. Floor drains are located within the facility. The site was believed to be connected to public water but uses an on-lot septic system for sewage discharge.

The other site, the Record Club of America facility on North George Street Extended in Manchester Township, consists of 64 acres and contains an 86,000 square-foot structure utilized for light manufacturing, warehousing, and offices. A diesel underground storage tank and associated pump island are located on the site.

Our services for both sites included determining the background and history of the sites from a review of aerial photographs of Sanborn Insurance Maps; a deed review; interviews of people familiar with the sites; reviews of any applicable documentation pertaining to work previously completed at the sites; visual descriptions of site conditions; description of the physical setting of the sites, including topographic features, nearest surface water body(s), soils, and geology; and investigation of the environmental history of the sites through regulatory checks, visual observations of the sites, and visual observations of adjacent properties.

Regulatory checks included interviews with regulatory officials having jurisdiction over the sites; review of Pennsylvania Department of Environmental Protection files pertaining to the sites; checking federal and state databases including USEPA NPL; CERCLIS; RCRA Transport, Storage, and Disposal (TSD) Facilities list; RCRA CORRACTS List; RCRA Small and Large Quantity Generators Listing; ERNS Listing; Registered Storage Tanks and Leaking Registered Storage Tanks; and using a commercially available environmental database.

The Tri-Plas facility, also required determination of the discharge location of the floor drains, using various geophysical tracing techniques. This work was performed by EnviroScan, Inc.

Buchart Horn, Inc.



Environmental Engineering Support. Open-end services to assist Harley Davidson staff with wastewater plant operations including development of O & M manual, recertifications, and study of plant redesign.

Facility Relocation Study. Buchart Horn provided the following services for the Facility Relocation Study:

- ↳ Performed an evaluation and prepared construction cost estimates for expanding or relocating the industrial wastewater treatment facility, tank farm, hazardous waste facilities, and car wash facility;
- ↳ Performed an evaluation of the sanitary sewer conveyance system, including televising all of the pipes to determine size, condition, and integrity. Provided a report and a drawing that showed all of the problem areas.

Wastewater Treatment Plant Settling Basin Evaluation. Evaluation of damage at Harley Davidson's wastewater treatment plant and design of related repairs to a crack between two settling tanks.

Hazardous Materials Evaluation. Prepare a Comprehensive Hazardous Materials Inspection with field inspections, sampling, analytical services, remedial cost estimates report.

Permit Support. Environmental support to owner in coordinating environmental considerations during major plant expansion.

Wastewater Treatment Plant Operations and Maintenance Manual Updates. Update of Operations and Maintenance Manual for 60,000GPD industrial wastewater treatment facility.

Howard Road Outfall Stormwater Planning & Facility Design *Germantown, Tennessee*

Client:
*City of Germantown,
Tennessee*

This project consisted of a stormwater management plan and design of retention and detention facilities to protect a downstream residential area from flooding. Protection was for rainfall events up to the 100-year return interval.

This project resulted in the design and construction of the Howard-McVay Detention Basin, as well as other needed drainage improvements within the Howard Road Outfall drainage basin. The Stout Road Detention Alternative Study, a part of the Howard Road Outfall Alternate Detention Basin Study, involved development of alternatives to stop flooding in a residential area currently drained by a concrete-lined channel that was sized for a storm event expected to arrive approximately every four years. This area experiences frequent flooding due to the under-capacity channel. Alternatives studied included rebuilding and enlarging the existing channel, bypassing the existing channel with a box culvert, and building a detention basin upstream of this area in order to slow the drainage entering into the existing undersized channel. All of the alternatives would require a Stormwater Pollutant Prevention Plan (SWPPP) for construction.

The Stout Road Detention Alternative Study, a part of the Howard Road Outfall Alternate Detention Basin Study, involved development of alternatives to stop flooding in a residential area currently drained by a concrete-lined channel sized for a storm that arrives approximately every four years. This area experiences frequent flooding due to the under-capacity channel. Alternatives studied included rebuilding and enlarging the existing channel, bypassing the existing channel with a box culvert, and building a larger detention basin for slower drainage into the existing channel. All of the alternatives would require a Stormwater Pollutant Prevention Plan (SWPPP) for construction.

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 AML CONSULTANT CONFIDENTIAL QUALIFICATION QUESTIONNAIRE Attachment "B"

PROJECT NAME
**Heather Run #2
 DEP14389**

DATE (DAY, MONTH, YEAR)
September 30, 2008

FEIN
 23-1498326

1. FIRM NAME
 Buchart Horn, Inc.

2. HOME OFFICE BUSINESS ADDRESS
 445 W. Philadelphia St., York, PA 17401

3. FORMER FIRM NAME

4. HOME OFFICE TELEPHONE
 (717) 852-1400

5. ESTABLISHED (YEAR)
 1946

6. TYPE OWNERSHIP
 Corporation

6a. WV REGISTERED DBE
 (Disadvantaged Business Enterprise) XX NO

7. PRIMARY AML DESIGN OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. AML DESIGN PERSONNEL EACH OFFICE
 400 Tracy Way, Suite 110, Charleston, WV, 25311, (304) 346-1127, Kenneth D. Bryant, Jr., PE, PS, 7

8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM
 Brian S. Funkhouser, P.E., President
 Bruce A. Yerger, Vice President, Finance & Administration

8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS
 see attached

9. PERSONNEL BY DISCIPLINE

60 ADMINISTRATIVE	1 ECOLOGISTS	5 LANDSCAPE ARCHITECTS	14 STRUCTURAL ENGINEERS
24 ARCHITECTS	0 ECONOMISTS	11 MECHANICAL ENGINEERS	6 SURVEYORS
4 CADD OPERATORS	11 ELECTRICAL ENGINEERS	0 MINING ENGINEERS	1 TRAFFIC ENGINEERS
0 CHEMICAL ENGINEERS	7 ENVIRONMENTALISTS	4 PHOTOGRAMMETRISTS	6 TRANSPORTATION ENGINEERS
59 CIVIL ENGINEERS	1 ESTIMATORS	1 PLANNERS: URBAN/REGIONAL	8 OTHER
42 CONSTRUCTION INSPECTORS	4 GEOLOGISTS	13 SANITARY ENGINEERS	
28 DESIGNERS, HIGHWAY	0 HISTORIANS	0 SOILS ENGINEERS	
27 DRAFTSMEN	1 HYDROLOGISTS	1 SPECIFICATION WRITERS	
			339 TOTAL PERSONNEL

TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: 5
 *RPEs other than Civil and Mining must provide supporting documentation that qualifies them to supervise and perform this type of work.

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

8a. NAME, TITLE, & TELEPHONE NUMBER - OTHER PRINCIPALS
(continued)

Jack V. Scherer, P.E., Vice President Southern Region (901) 363-6355, 3150 Lenox Park Blvd., Suite 300, Memphis, TN 38115
(662) 563-1299, 103-4 Woodland Road, Batesville, MS 38606
(225) 293-1111, 9100 Bluebonnet Centre Blvd., Suite 502, Baton Rouge, LA 70809
(615) 256-3991, 209 10th Avenue South, Suite 345, Nashville, TN 37203

Anthony J. Shinsky, R.A., AIA, LEED[®] AP, Vice President of Facilities (717) 852-1400, 445 West Philadelphia St., York, PA 17401
(610) 380-7036, 237 Harmony Street, Coatesville, PA 19320
(717) 232-5140, 112 Market Street, Harrisburg, PA 17101
(717) 533-0935, 431 East Chocolate Avenue, Hershey, PA 17033-1324

R. Scott Sternberger, Vice President Transportation Division, (717) 852-1400, 445 West Philadelphia St., York, PA 17401

Ulrike Page, A.K.H., Prokuristin, 011-49-0631-3037254, Flickerstal 5, 67657 Kaiserslautern, Germany
11-49-6196-9312300, Frankfurter Strasse 21-25, D-65760, Eschborn, Germany

Glen R. DeWillie, P.E., Executive Vice President (717) 852-1400, 445 West Philadelphia St., York, PA 17401

Charles L. Kinney, P.G., Vice President (717) 852-1400, 445 West Philadelphia St., York, PA 17401
(304) 296-1127 235 High Street Room 714, Morgantown, WV 26505
(410) 247-3501, 3700 Koppers Street, Suite 305, Baltimore, MD 21211,
(717) 533-0935, 431 East Chocolate Avenue, Hershey, PA 17033-1324

Michael A. Schober, P.E., Vice President (717) 852-1400, 445 West Philadelphia St., York, PA 17401

Dwain J. Thomas, P.E., CCM (610) 265-2415, 660 American Avenue, Suite 103, King of Prussia, PA 19406

Christopher D. Dwyer, P.E. (856) 797-4300, 4A Eves Drive, Suite 114, Marlton, NJ 08053-3127

Earl E. Clouser, P.L.S. (717) 774-7488, Capital City Airport - Building 2, 108 Airport Road, New Cumberland, PA 17070

Robert T. Zulick, P.E. (412) 261-5059, 2200 Liberty Avenue, Suite 300, Pittsburgh, PA 15222-4502

David J. Polatnick, AIA (570) 213-0082, 600 Main Street, Suite 110, Stroudsburg, PA 18360

Scott E. Russell, P.E. (814) 237-7111, 1200 West College Avenue, State College, PA 16801-2824

11. OUTSIDE KEY CONSULTANTS/SUB-CONSULTANTS ANTICIPATED TO BE USED. Attach "AML Consultant Confidential Qualification Questionnaire".

<p>NAME AND ADDRESS: Novel Geo-Environmental, PLLC 806 B Street St. Albans, WV 25177</p>	<p>SPECIALTY: Geotechnical Services and Materials Testing</p>	<p>WORKED WITH BEFORE ___X___ Yes ___ ___ No</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE ___ ___ Yes ___ ___ No</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE ___ ___ Yes ___ ___ No</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE ___ ___ Yes ___ ___ No</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE ___ ___ Yes ___ ___ No</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE ___ ___ Yes ___ ___ No</p>
<p>NAME AND ADDRESS:</p>	<p>SPECIALTY:</p>	<p>WORKED WITH BEFORE ___ ___ Yes ___ ___ No</p>

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

XXX YES Description and Number of Projects: Buchart Horn has performed complete design for the Reclamation of the Buckeye Run Abandoned Surface Mine in Clearfield County, PA. In addition, we offer extensive experience in water distribution and storage, stormwater and drainage, land remediation, sliip repair and grading.

NO

B. Is your firm experienced in Soil Analysis?

XXX YES Description and Number of Projects: Buchart Horn's Earth Sciences group brings experience in the soils evaluations and analysis. We have existing relationships with a number of qualified soils testing laboratories who provide our professional engineers and geologists with quantitative data from which we can provide analysis and recommendations.

NO

C. Is your firm experienced in hydrology and hydraulics?

XXX YES Description and Number of Projects: Through our work in providing bridge and roadway design for the West Virginia Department of Transportation Division of Highways, we have extensive experience in the development of Hydrologic and Hydraulic Plans and Reports.

NO

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

XXX YES Description and Number of Projects: Buchart Horn has an in-house aerial mapping group. We have performed developed contour mapping from aerial photography for hundreds of water line, sewer line, roadway, and bridge projects, in support of our in-house design efforts and as a subconsultant to other firms.

NO

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

XXX YES Description and Number of Projects: Buchart Horn has performed the design of hundreds of waterline projects, including distribution systems, booster stations, storage facilities, and treatment plants.

NO

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

YES Description and Number of Projects: _____

XXX NO Buchart Horn has not performed abatement design for acid mine drainage. We have provided designs for related groundwater treatment systems related to industrial runoff, airport runway deicing facilities, underground storage tanks and contaminated soils cleanup.

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

NAME & TITLE (Last, First, Middle Int.) Charles L Kinney, Jr., PG, Principal-in-Charge; QA/QC Manager	YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 15	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 5
	Brief Explanation of Responsibilities As the Principal-in-Charge on this project, Mr. Kinney will meet regularly with the Project Manager to monitor schedules and budgets. He will also periodically contact you to confirm that you are satisfied with the progress being made and with our performance throughout the course of this project. Mr. Kinney is available to discuss any aspect of this project with you at your request. As QA/QC Manager, he will coordinate with the Project Manager to verify that the project plan is followed and that all work meets local, state, and federal codes as well as Buchart Horn policy.		

EDUCATION (Degree, Year, Specialization) BS/1981/Geology/Allegheny College Graduate Coursework/1988/Business Administration/University of Houston	REGISTRATION (Type, Year, State) 1991/PG/DE/571 1994/PG/PA/PG-000836
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS American Association of Petroleum Geologists, Association of Groundwater Scientists & Engineers, National Ground Water Association	

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

NAME & TITLE (Last, First, Middle Int.) Kenneth D Bryant, Jr., PE, PS Project Engineer	YEARS OF AML DESIGN EXPERIENCE: 4	YEARS OF EXPERIENCE YEARS OF AML RELATED DESIGN EXPERIENCE: 4	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0
	Brief Explanation of Responsibilities Mr. Bryant's project experience includes mining engineering, familiarity with the AML program, development of criteria and utility coordination related to new and relocated water lines, and roadway design.		

EDUCATION (Degree, Year, Specialization) BS/1982/Civil Engineering/West Virginia University	
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS American Society of Civil Engineers; American Highway Engineers Association; West Virginia Association of Land Surveyors	REGISTRATION (Type, Year, State) 1994/PE/WV/12346 1998/PE/OH/60969 1996/PS/WV/1683

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.) George J Crittenden; Project Designer		YEARS OF AML DESIGN EXPERIENCE: 7	YEARS OF AML RELATED DESIGN EXPERIENCE: 7
YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 4			
<p>Brief Explanation of Responsibilities</p> <p>Mr. Crittenden has 30 years of experience in providing design, technical services, and surveying for mine land reclamation projects, water and wastewater lines, airports, residential subdivisions, and highways.</p> <p>His experience includes extending a water line into the marrowbone area; producing designs and plans to extend a Ragland Public Service District water line to approximately 150 customers; Senior Design Technician responsible for mitigating problems in two impoundments containing water and coal refuse at Scott Tipple; and Senior Design Technician responsible for design and contract documents for grading, installation of wet seals, establish positive drainage, refuse pile regarding, and soil cover and seeding at Minden Mine Dump.</p> <p>EDUCATION (Degree, Year, Specialization) Drainage Workshop, WVDOT/2005 PSMJ Marketing Workshop/2005 PSMJ Project Manager's Boot Camp/2004 Sediment Control Design, WVDOT/2004 Right of Way Plan Development/2001, 2002 and 2003 Development of Signing, Marking and Maintenance of Traffic Plans, WVDOT/2001</p>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATION		REGISTRATION (Type, Year, State) National Institute for Certification in Engineering Technologies (NICET), 1993	
13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR AML PROJECT DESIGN (Furnish complete data but keep to essentials)			
NAME & TITLE (Last, First, Middle Int.) Jason M Boyd, PE, MBA, Project Designer		YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 5
YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0			
<p>Brief Explanation of Responsibilities</p> <p>Mr. Boyd's civil engineering experience includes roadway design, right of way, geometric layouts, utility relocation design, maintenance of traffic, signing and marking, plan preparation/presentation, quantity/cost estimates, drainage design, hydrologic procedures, pavement/deck drainage, inlet spacing computations, channels, culverts, storm drains, and stormwater management.</p> <p>EDUCATION (Degree, Year, Specialization) MBA/2003/Business Administration/Marshall University BS/1999/Civil Engineering/West Virginia University</p>			
MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS		REGISTRATION (Type, Year, State) PE/WV/2004/15984	

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

NAME & TITLE (Last, First, Middle Int.) Donald H Newman, PE, Project Designer	YEARS OF AML DESIGN EXPERIENCE: 3	YEARS OF AML RELATED DESIGN EXPERIENCE: 15	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 10
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Brief Explanation of Responsibilities
 Mr. Newman has management responsibilities for the activities of professional and technical personnel for work on environmental engineering projects in the areas of water supply, sewage, stormwater, solid waste and industrial waste management. During his 24-year career, he has successfully executed over 350 engineering projects. Additional responsibilities include technical input, quality control and the planning/scheduling of engineering services. He is also experienced in the siting and engineering of conveyance, treatment and disposal facilities, as well as related areas of comprehensive planning, sediment control, stormwater management, route and option assessment, occupancy/easement/regulatory permits, facility closure, geotechnical engineering, and cost estimating. In addition, he has extensive experience in complex environmental/natural resource/cultural resource assessments and transportation related environmental activities.

EDUCATION (Degree, Year, Specialization)
 MS/1977/Water Pollution Control/Water Quality Mgmt./Env. Health Pla/University of Pittsburgh
 AB/1975/Environmental Engineering/The Johns Hopkins University

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 Air & Waste Management Association; American Association of Advancement of Science; American Society of Civil Engineers; American Water Resources Association; American Water Works Association; National Ground Water Association; National Trust for Historic Preservation

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

NAME & TITLE (Last, First, Middle Int.) Thomas T Dancsecs, PE Hydrology	YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 19	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0
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Brief Explanation of Responsibilities
 Mr. Dancsecs has more than 19 years of experience in the field of hydraulics and drainage design. His background includes design of drainage and stormwater management systems for a variety of transportation projects, as well as experience in hydraulic modeling and permitting. He is familiar with the drainage design standards for numerous state transportation departments and agencies. In addition to drainage design for roadways, Mr. Dancsecs' abilities include hydraulic modeling for bridge projects over waterways, floodplain analysis, design of detention/retention ponds, scour analysis, design of underground detention systems, culvert design and analysis, stream encroachment permitting, and NPDES permitting.

EDUCATION (Degree, Year, Specialization)
 BS, 1989, Civil Engineering, Pennsylvania State University

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
 American Society of Highway Engineers

REGISTRATION (Type, Year, State)
 PE, 1994, Pennsylvania
 PE, 2001, Maryland
 PE, 2003, New Jersey

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

NAME & TITLE (Last, First, Middle Int.) Travis M. Rose Construction Monitoring	YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 9	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 0
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Brief Explanation of Responsibilities
Mr. Rose has more than nine years of experience as a transportation designer. His experience includes: development of construction documents and right-of-way plans; property map layout and descriptions; project design; mapping; coordination with Department of Transportation personnel and subcontractors.

EDUCATION (Degree, Year, Specialization)
BS, 1999, Industrial Technology, West Virginia University, Institute of Technology
AS, 1997, Civil Engineering Technology, West Virginia University, Institute of Technology

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
REGISTRATION (Type, Year, State)

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

NAME & TITLE (Last, First, Middle Int.) Perry P. Sgrignoli, PLS Surveying	YEARS OF AML DESIGN EXPERIENCE: 0	YEARS OF AML RELATED DESIGN EXPERIENCE: 20	YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE: 15
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Brief Explanation of Responsibilities
As Chief of Surveys for Buchart Horn, Mr. Sgrignoli directs, coordinates and supervises field survey crews, office designers and CADD operators for the following types of work: stormwater management, street, roadway, and other drains, GPS surveys, ground control for aerial mapping, property surveys, topographical surveys, construction stakeout, right-of-way surveys, legal descriptions, cost estimates, right-of-way plats, recreational and industrial park designs, office building site plans, parking lots.

EDUCATION (Degree, Year, Specialization)
Coursework, Architectural Drawing and Engineering Studies, Harrisburg Area Community College
Coursework, Mechanical Engineering Studies, University of Pittsburgh at Titusville

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
REGISTRATION (Type, Year, State)
PLS, 2004, Pennsylvania SU053114

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

NAME & TITLE (Last, First, Middle Int.) Tony B Kitzmiller, PE Mineshaft/Portal Engineer	YEARS OF EXPERIENCE		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
	YEARS OF AML DESIGN EXPERIENCE: 37	YEARS OF AML RELATED DESIGN EXPERIENCE: 37	0

Brief Explanation of Responsibilities
Mr. Kitzmiller has over 37 years of experience in the design of water distribution systems, drainage systems, mine engineering, and civil engineering. He has experience with the supervision of design and construction for coal mining in Northern West Virginia, including water discharges, slurry, and refuse construction. He is intimately familiar with mining conditions and construction, including the design of bridges and roadways near mines. He has experience in managing and construction of methane drainage wells.

EDUCATION (Degree, Year, Specialization)
BS, Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
REGISTRATION (Type, Year, State)
PE, WV
PE, PA

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

NAME & TITLE (Last, First, Middle Int.) Jerry R. Linn, PE Construction Monitoring	YEARS OF EXPERIENCE		YEARS OF DOMESTIC WATERLINE DESIGN EXPERIENCE:
	YEARS OF AML DESIGN EXPERIENCE: 33	YEARS OF AML RELATED DESIGN EXPERIENCE: 33	33

Brief Explanation of Responsibilities
Mr. Linn has over 33 years of diverse experience in the field of civil engineering. He is responsible for managing a variety of municipal construction projects, which include new and upgraded wastewater treatment facilities, landfills, dam rehabilitation, wetland mitigation, sanitary sewer collection systems, and potable water distribution networks and elevated/underground water tanks.

EDUCATION (Degree, Year, Specialization)
BS, Civil Engineering

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS
REGISTRATION (Type, Year, State)
PE

15. CUR T ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATE ENGINEER OF RECORD

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Tabler Station Connector, Berkeley County, WV	West Virginia DOT 1900 Kanawha Blvd. East Building Five Charleston, WV 25305	design & engineering services	\$9,600,000	50
Linden Water Line Replacement, Linden, NJ	New Jersey American Water 1025 Laurel Oak Road P.O. Box 1770 Voorhees, NJ	design & engineering services	\$2,600,000	80
Blue Ball PRV Project, Abandoned Mine Lands, Clearfield County, PA	PA American Water 4 Wellington Boulevard Wyomissing Hills, PA	design & engineering services	\$10,000 fee	36
Yield Analysis Tool Scoping, Statewide, PA	Susquehanna River Basin Commission 1721 North Front Street Harrisburg, PA	development of a GIS-based tool to perform water resources-related Yield Analysis Function	\$210,000 fee	95
Drane Area Extension of Water Distribution System Abandoned Mine Lands, Clearfield County, PA	PA American Water 4 Wellington Boulevard Wyomissing Hills, PA	design & engineering services	\$94,100 fee	84
Interconnection between Elizabethtown and Jamesburg Water Systems	New Jersey American Water 1025 Laurel Oak Road P.O. Box 1770 Voorhees, NJ	design & engineering services	\$2,200,000	99
Point Township Tank and Main, Point Township, PA	PA American Water 4 Wellington Boulevard Wyomissing Hills, PA	design & engineering services	\$1,000,000	86
Route 24 Corridor Intersection Improvements, York County, PA	Pennsylvania DOT Engineering District 8-0 2140 Herr Street Harrisburg, PA 17103	design & engineering services	\$4,500,000	20
Open end Contract for Roadway, Bridge and Environmental Services	Pennsylvania DOT Engineering District 5-0 1713 Lehigh Street Allentown, PA 18103	design & engineering services	\$1,500,000 fee	40
WV DOT, Corridor H, Grant County, WV	West Virginia DOT 1900 Kanawha Blvd. East Building Five Charleston, WV 25305	design & engineering services	\$40,800,000 fee	90
PA Turnpike, Final Design for Full-Depth Turnpike Reconstruction, MP 213.9 to MP 227, Cumberland County, PA	Pennsylvania Turnpike Commission P.O. Box 67676 Harrisburg, PA 17106-7676	design & engineering services	\$2,700,000 fee	95

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Bolivar-Hardeman County Airport Design and Construction Services	Hardeman County Courthouse Bolivar, TN 38008	design & engineering services	\$35,000 fee	100
Taxiway Widening Nashville International Airport, Nashville, TN	Metro Nashville Airport Authority One Terminal Drive Nashville, TN 37214	design & engineering services	\$1,400,000	95
Open End Contract Airport Planning and Design Services, Harrisburg, PA	Susquehanna Area Regional Airport Authority One Terminal Drive, Suite 300 Middletown, PA 17057	design & engineering services	varies by assignment	on-going
New LEED Certified CVI Maintenance Facility, Davis, WV	Canaan Valley Institute P.O. Box 673 Davis, WV 26260	design & engineering services	\$800,000	60
Bus Garage and Maintenance Facility Expansion Huntington, WV	Tri-State Transit Authority 1120 Virginia Avenue Huntington, WV 25704	design & engineering services	\$2,000,000	25
Huse Memorial Park Mausoleum, Maintenance Facility and Administrative Facilities, Fayetteville, WV	Town of Fayetteville 125 North Court Street Fayetteville, WV 25840	design & engineering services	\$120,000 fee	99
US Postal Service Facilities Renovations and Additions Open End various locations	U.S. Postal Service 10500 Little Patuxent Parkway Columbia, MD 21044-3515	design & engineering services	\$1,500,000 fee to date	60
Jones and Laughlin Bridge Berkeley County, WV	West Virginia DOT 1900 Kanawha Blvd. East Building Five Charleston, WV 25305	design & engineering services	\$1,700,000	99
Open End Contract for Bridge, Roadway and Environmental Services Northwestern PA	Pennsylvania DOT Engineering District 1-0 255 Elm St., P.O. Box 398 Oil City, PA 16301	design & engineering services	\$1,000,000 fee	25
Heth's Run Bridge Replacement, Pittsburgh, PA	Pennsylvania DOT Engineering District 11-0 45 Thoms Run Road Bridgeville, PA 15017	design & engineering services	\$4,200,000	45
Group C Bridge Designs Allegheny County, PA	Allegheny County Department of Public Works 542 Forbes Avenue, Room 501 Pittsburgh, PA 15219	design & engineering services	\$6,000,000	60

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

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESPONSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
Etna Borough Water and Sewer System GIS Development, Pittsburgh, PA	Borough of Etna 437 Butler Street Etna, PA 15223	Sewer system GIS & mapping	\$100,000 fee to date	on-going
Sewer System GIS Development and Mapping Pittsburgh, PA	McCandless Township Sewer Authority 416 Arcadia Drive Pittsburgh, PA 15237	Sewer system GIS & mapping	\$150,000 fee to date	on-going
Longvue Wastewater Treatment Plant Expansion Pittsburgh, PA	McCandless Township Sewer Authority 416 Arcadia Drive Pittsburgh, PA 15237	design & engineering services	\$6,000,000	99
Treatment Plant Capacity Evaluation, Marietta, PA	Marietta-Donnegal Joint Authority P.O. Box 167 Marietta, PA 17547	engineering study	\$50,000 fee	99
Groundwater Treatment Alternatives Assessment, Chambersburg, PA	Guilford Water Authority 115 Spring Valley Road Chambersburg, PA 17201	engineering study	\$25,500 fee	85
Wastewater Treatment Expansion & Upgrade, Coatesville, PA	PA American Water Company 4 Wellington Blvd. Wyomissing Hills, PA 19610	design & engineering services	\$10,000,000 estimated	35
Water Treatment Systems Studies, Oakland, WV	Oakland Public Service District	engineering study and grant assistance	\$47,000 fee	60
TOTAL NUMBER OF PROJECTS: The above projects are merely a representation, as we are currently working on over 1,000 projects.			TOTAL ESTIMATED CONSTRUCTION COSTS: Over \$150,000,000 all projects.	

16. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS SERVING AS A

-CONSULTANT TO OTHERS

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
HUD Funded Elderly Housing Design Services Lancaster, PA	Structural Design	A+E Group Inc. 140 Maffett Street Wilkes Barre, PA 18705		\$500,000	\$25,800
Taxiway B&D Improvement Design Shreveport Airport Shreveport, LA	Site Layout and Design	Purtle and Associates 701 Texas Street Shreveport, PA 71101	5-2006	\$500,000	\$50,000
Remington Wastewater Plant BNR Upgrade Warrenton, VA	Electrical Design	O'Brien & Gere Engineers, Inc. 8201 Corporate Dr. Suite 1000 Landover, MD 20785		Not known at this time	\$7,843
Route 9 Hazardous Waste Investigation Ocean County, NJ	Environmental Impact Studies and Assessments	Edwards & Kelcey, Inc. 299 Madison Avenue P.O. Box 1936 Morristown, NJ 07962-1936	On Hold	\$30,000 fee to date	\$30,021
Route U.S. 206, Section 15N Site Investigation, NJ	Site investigation and associated services to determine presence of contaminants in soil	Harold E. Pellow & Assoc. 17 Plains Road Augusta, NJ 07822	On Hold	\$133,303 fee to date	\$133,323
Route 18 Noise Walls New Brunswick, NJ	Design	Gannett Fleming 1001 S. Durham Ave Plainfield, NJ 07080-2305	7-2008	\$6,000,000	\$310,668
Marlton Circle Elimination Marlton, NJ	Utility & Drainage Eng. Oversight, Hazardous Waste Investigation, Retaining Walls, and Highway Access	Urban Engineers, Inc. Kevon Office Ctr. 2500 McClellan Ave Suite 200 Pennsauken, NJ 08109-4698	12-2010	\$25,000,000	\$364,125 to date
Marshall/The Plains Wastewater Treatment Plant Fauquier County, VA	Electrical and control instrumentation design	O'Brien & Gere Engineers, Inc. 8201 Corporate Dr. Suite 1000 Landover, MD 20785		Not known at this time	\$100,924

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

PROJECT NAME, TYPE AND LOCATION	NATURE OF FIRMS RESPONSIBILITY	NAME AND ADDRESS OF OWNER	ESTIMATED COMPLETION DATE	ESTIMATED CONSTRUCTION COST	
				ENTIRE PROJECT	YOUR FIRMS RESPONSIBILITY
Woodson High School Fairfax County, VA	Mechanical/ Electrical Design	Architecture, Inc. 1801 Alexander Bell Drive Suite 640 Reston, VA 20191		\$53,000,000	\$13,250,000
Dallastown Elementary School York County, PA	Mechanical/ Electrical/Site/ Civil Design	Crabtree, Rorhbaugh, & Associates 401 East Winding Hill Road Mechanicsburg, PA 17055		Unavailable	\$185,000 fee
Susquehanna Township High School Additions Harrisburg, PA	Mechanical/ Electrical/Design	Hayes Large Architects LLP 75 South Houcks Road Suite 300 Harrisburg, PA 17109		\$5,300,000	\$158,000 fee
Susquehanna Township Middle School Additions Harrisburg, PA	Mechanical/ Electrical Design	Hayes Large Architects LLP 75 South Houcks Road Suite 300 Harrisburg, PA 17109		\$3,900,000	\$136,000
Columbia Market House Restoration Columbia, PA	Site Design	John Milner Associates 535 North Church Street West Chester, PA 19380		Unavailable	\$25,000 fee
CN Johnson Rail Yard Relocation Memphis, TN	Site Design	HDR, Inc. 8550 West Byrn Mawr Avenue Suite 900 Chicago, IL 60631		Unavailable	\$750,000
Creek Restoration Memphis, TN	Design Support	Fuller, Mossbarger, Scott & May 1901 Nelson Miller Parkway Louisville, KY 40223		\$2,500,000	\$50,000 fee

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIR		AS THE DESIGNATED ENGINEER OF RECORD		
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
Howell Demand Center, Howell Township, New Jersey	New Jersey American Water 1025 Laurel Oak Road P.O. Box 1770 Voorhees, NJ	\$2,500,000	2006	YES
New Pikesville Reservoir Tanks, Pikesville, MD	Baltimore County Bureau of Engineering 111 West Chesapeake Avenue Towson, MD 21204	\$18,300,000	2008	under construction
Five Forks Water Treatment Facility, Williamsburg, VA	James City Service Authority PO Box 8784 Williamsburg, VA 23187	\$12,500,000	2005	YES
Arkansas State Highway & Transportation Department, Task Order #2, AR	Arkansas State Highway & Transportation Department 10324 Interstate 30 Little Rock, AR 72203-2261	\$840,193 (Fee)	2004	YES
Arkansas State Highway & Transportation Department, Task Order #1, AR	Arkansas State Highway & Transportation Department 10324 Interstate 30 Little Rock, AR 72203-2261	\$291,511 (Fee)	2005	YES
PennDOT District 8-0, Route 30 Widening, Lancaster, PA	PennDOT District 8-0 2140 Herr Street Harrisburg, PA 17103-1699	\$64,000,000	2004	YES
Derry Township, Route 743 Corridor Study, Hershey, PA	Township of Derry Board of Supervisors 235 Hockersville Road Hershey, PA 17033-2057	\$495,000 (Fee)	2005	NO
Derry Township, Route 422 and Lingle Avenue Improvement Project Dauphin County, PA	Township of Derry Board of Supervisors 235 Hockersville Road Hershey, PA 17033-2057	\$624,000 (Fee)	2005	YES
City of Harrisburg, Seventh Street Widening Harrisburg, PA	City of Harrisburg 123 Walnut Street, Suite 212 Harrisburg, PA 17101	\$471,820 (Fee)	2006	YES
Whitehaven Street Improvements, Memphis, TN	City of Memphis Div. Engineering Suite 644 125 North Main Street Memphis, TN 38103	\$1,500,000	2004	YES

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD				YEAR	COMPLETED (YES OR NO)
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST			
Winchester/Perkins Interchange, Memphis, TN	City of Memphis Div. Engineering Suite 644 125 North Main Street Memphis, TN 38103	\$5,600,000		2004	YES
Southern Avenue Study and Design, Memphis, TN	City of Memphis Div. Engineering Suite 644 125 North Main Street Memphis, TN 38103	\$1,900,000		2005	YES
Tennessee DOT, Design of Five Miles of SR-385 Shelby County, TN	Tennessee DOT James K. Polk Building 505 Deaderick Street Nashville, TN 37243-0348	\$20,000,000		2004	YES
Perry Street, Lincoln Avenue and North Clinton Avenue Intersection Design Trenton, NJ	City of Trenton Div. Traffic/Plan. City Hall Annex 319 East State Street Trenton, NJ 08608	\$89,350 (Fee)		2004	YES
New Jersey DOT, Route 40/322, Section 2F Egg Harbor Township, NJ	New Jersey DOT 1035 Parkway Avenue P.O. Box 600 Trenton, NJ 08625-0600	\$523,179 (Fee)		2004	YES
Yeager Airport, Transportation Security Administration Offices, Charleston, WV	Central West Virginia Regional Airport Authority 100 Airport Road Suite 175 Charleston, WV 25311-1080	\$1,250,000		2004	YES
Reading Regional Airport, Design of Taxiway C and Reconstruction of North Apron, Reading, PA	Reading Regional Airport Authority 2501 Bernville Road Reading, PA 19605-9611	\$4,500,000		2004	YES
Taxiway Yankee Extension Memphis Shelby County Airport, Memphis, TN	Memphis/Shelby County Airport Authority 2491 Winchester Road Suite 113 Memphis, TN 38116	\$60,000,000		2006	YES
Anne Arundel County Truck Wash Facility, Pasadena, MD	Anne Arundel County DPW 2662 Riva Road Heritage Office Complex Annapolis, MD 21401	\$49,803		2004	YES

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD					
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CC (YES OR NO)	DUCTED (YES OR NO)
Various Projects Baltimore City Public Schools Baltimore, MD	Baltimore City Public Schools 200 East North Ave., Rm. 407 Baltimore, MD 21218	\$631,100+	2006		YES
Activity Center City of Coatesville Coatesville, PA	City of Coatesville One City Hall Place Coatesville, PA 19320	\$3,500,000	2005		YES
Construction Management, Police Headquarters City of Lancaster Lancaster, PA	City of Lancaster 120 North Duke Street P.O. Box 1599 Lancaster, PA 17603	\$296,450	2005		YES
Renovation Dauphin County Courthouse Harrisburg, PA	County of Dauphin Commissioners Front & Market Streets P.O. Box 1295 Harrisburg, PA 17108	\$106,000	2004		YES
Montebello Maintenance Shop and Storage Building City of Baltimore DPW Baltimore, MD	City of Baltimore DPW 800 Abel Wolman Municipal 200 N. Holliday Street Baltimore, MD 21202	\$5,700,000	2004		YES
Muncy State Correctional Institution, Muncy, PA	Commonwealth of PA, DGS 18th and Herr Streets Harrisburg, PA 17125	\$1,200,000	2004		YES
Spring Garden Township Municipal Building, York, PA	Spring Garden Township 558 South Ogontz Street York, PA 17403-5709	\$7,500,000	2004		YES
Kanawha County Courthouse Renovation Charleston, WV	Kanawha County Commission P.O. Box 3627 Charleston, WV 25336	\$9,000,000	2005		YES
West Virginia DOT, Star City-Osage Road Project, Monongalia County, WV	West Virginia DOT 1900 Kanawha Boulevard East Building Five Charleston, WV 25305-0430	\$42,000,000 \$1,824,595 fee	2005		YES

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD					
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CC (YES OR NO)	DUCTED (YES OR NO)
Virginia DOT, Route 58 Bridge Replacement, Gate City, VA	Virginia DOT 870 Bonham Road Bristol, VA 24201	\$20,500,000 \$763,452 fee	2004		YES
City of Scranton Bridge Reinspection, Scranton, PA	City of Scranton, City Hall 314 North Washington Avenue Scranton, PA 18503	\$85,964	2004		N/A
Replacement of United States Avenue Bridge New Jersey DOT Lindenwold, NJ	New Jersey DOT 1035 Parkway Avenue P.O. Box 600 Trenton, NJ 08625-0600	\$336,874	2004		YES
New Jersey DOT Inspection of 39 Conrail Orphan Bridges, Trenton, NJ	New Jersey DOT 1035 Parkway Avenue P.O. Box 600 Trenton, NJ 08625-0600	\$320,571	2005		N/A
New Jersey DOT Inspection of 36 Off-system NJ DEP Bridges, Various Parks in NJ	New Jersey DOT 1035 Parkway Avenue P.O. Box 600 Trenton, NJ 08625-0600	\$166,885	2005		N/A
New Jersey DOT, Inspection of 47 On-System State Owned Bridges, Group M015, Central NJ	New Jersey DOT 1035 Parkway Avenue P.O. Box 600 Trenton, NJ 08625-0600	\$329,084	2005		N/A
Tennessee DOT Five Bundled Bridges, TN	Tennessee DOT James K. Polk Building 505 Deaderick Street Nashville, TN 37243-0348	\$350,000	2004		YES
Special Inspection of 30 Fracture-Critical Member Welded Bridges New Jersey DOT	New Jersey DOT 1035 Parkway Avenue P.O. Box 600 Trenton, NJ 08625-0600	\$446,685	2004		N/A
Derry Township Safety and Mobility Initiative, Dauphin County, PA	Township of Derry 235 Hockersville Road Hershey, PA 17033	\$245,127	2004		N/A

17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD					
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	COMPLETED (YES OR NO)	COMPLETED (YES OR NO)
McAlevy's Fort Corridor Improvement Study Pennsylvania DOT District 9-0 Huntingdon County, PA	PennDOT - District 9-0 1620 North Juniata Street Hollidaysburg, PA 16648	\$406,840	2005		NO
Twin Boroughs Sanitary Authority GIS Needs Assessment, Phase 3, Mifflin, PA	Twin Boroughs Sanitary Authority One River Drive P.O. Box 118 Mifflin, PA 17058	\$15,000	2004		N/A
Pittsburgh Water and Sewer Authority Vulnerability Assessment, Pittsburgh, PA	Pittsburgh Water & Sewer Authority 441 Smithfield Street Pittsburgh, PA 15222	\$110,000 (Fee)	2003		N/A
Bolivar-Hardeman County Airport Design and Construction Services	Hardeman County Hardeman County Courthouse Bolivar, TN 38008	\$35,000 fee	2007		YES
Valley Forge Service Plaza Improve Stormwater Management Using a Swale to Divert Stormwater into a Culvert.	Pennsylvania Turnpike Commission Harrisburg East Interchange P.O. Box 67676 Harrisburg, PA 17106-7676	\$79,705 fee	2005		YES
Runway/Taxiway Extension and Improvements. Required Extensive Earthwork, Drainage/Stormwater Management, and Stormwater Management Plan due to Highly Erodible Soils Dyersburg Municipal Airport.	City of Dyersburg P.O. Box 1358 425 Highway 51 Bypass South Dyersburg, TN 38025	\$1,051,811	2003		YES

17. C	LETTED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIK	AS THE DESIGNATED ENGINEER OF RECORD		
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST		
		YEAR		
		CONSTRUCTED (YES OR NO)		
Streambank Restoration, Stabilization and Erosion Prevention, New York Wire, Mount Wolf, PA	New York Wire 152 Main St. P.O. Box 0866 Mt. Wolf, PA 17347	\$8,900 fee	2007	YES
Stormwater BMPs and Design of Demonstration Project on Harrisburg Area Community College Campus, Gettysburg, PA	Adams County Office of Planning and Development Suite 101 19 Baltimore St. Gettysburg, PA 17325	\$15,000 fee	2008	YES
Stream/Wetland Assessment, Mitigation, Restoration, Planned Residential Development, Cumberland County, PA	Delta Development Group, Inc. Wuite 200 2000 Technology Parkway Mechanicsburg, PA 17050	\$31,416 fee	2007	YES
Codorus Creek River Conservation Plan, York, PA	Codorus Creek Watershed Association P.O. Box 2881 York, PA 17405	\$35,588 fee	2005	YES
Conewago Creek Watershed Conservation Plan, York County, PA	PA Environmental Council Central PA Regional Office Suite 200 130 Locust Street Harrisburg, PA 17101	\$96,000 fee	2007	YES
Open-End Quality Assurance/Control, Stormwater Pollution Prevention Plan Preparation, Erosion Prevention and Sedimentation Control Services, Tennessee statewide.	TDOT James K. Polk Building 505 Deaderick Street Nashville, TN 37243	\$2,000,000 fee	2007	YES
Incorporation of Stormwater BMP Measures in Intersection Improvements to Facilitate Safe Traffic Flow, New High School, York, PA	Central York School District 775 Marion Rd. York, PA 17402	\$2,000,000 \$449,700 fee	2007	YES
Site Design, Livestock Exhibition Hall. Site stormwater management System Included Porous Paving on 3 acres of Parking Lots and Access Roads to Improve Recharge and Minimize Runoff York, PA.	York County Agricultural Society 334 Carlisle Ave. York, PA 17404	\$86,975 fee	2003	YES

***NOTE: The above projects are a representation, as we have completed over 10,000 projects in the last ten years**

18. () COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS RESPONSIBLE		HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE)			
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
Lisburn Road SR0015 A12 Southcentral PA	Michael Baker, Jr., Inc., 4431 N. Front St. 2nd Floor Harrisburg, PA 17110	\$21,000,000 \$769,876 fee	2005	YES	Michael Baker, Jr., Inc.
Lanier Middle School Renovations Fairfax, VA	Architecture, Inc. 1801 Alexander Bell Dr. Reston, VA 20191	\$13,300,000 \$410,900 fee	2005	YES	Architecture, Inc.
Northern Dauphin County Government Recycling Center Dauphin County, PA	Rettew Associates, Inc. 3020 Columbia Ave. Lancaster, PA 17603-4089	\$73,000 fee	2003	YES	Rettew Associates, Inc.
University Park Airport T-Hangars Design State College, PA	Poole Anderson Construction 2121 Old Gatesburg Road State College, PA 16801	\$2,104,800 \$49,800 fee	2006	YES	Poole Anderson Construction
EZ Pass Coordination Princeton, NJ	Washington Group International 510 Carnegie Center P.O. Box 5287 Princeton, NJ 08543-5287	\$14,000 fee	2003	YES	Washington Group International
Route 18 Noise Walls New Brunswick, NJ	Gannett Fleming 1001 S. Durham Ave Plainfield, NJ 07080-2305	\$6,000,000 \$310,668 fee	2008	YES	Gannett Fleming
Marlton Circle Elimination Marlton, NJ	Urban Engineers, Inc. Kevon Office Ctr. 2500 McClellan Ave Suite 200 Pennsauken, NJ 08109-4698	\$25,000,000	2004	YES	Urban Engineers, Inc.
Lafayette Street Extension Norristown, PA	Pinto Engineering 1041 S. Queen St. York, PA 17403	\$56,000 fee	2003	YES	Pinto Engineering
Remington Wastewater Plant BNR Upgrade Warrenton, VA	O'Brien & Gere Engineers, Inc. 8201 Corporate Dr. Suite 1000 Landover, MD 20785	Not known at this time	2003		O'Brien & Gere Engineers, Inc.

18. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM HAS BEEN A SUB-CONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK FOR WHICH YOUR FIRM WAS RESPONSIBLE)						
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH	
Taxiways B and D Improvements Design Shreveport Airport Shreveport, LA	Purtle and Associates 701 Texas Street Shreveport, LA 71101	\$500,000 \$50,000 fee	2006	YES	Purtle and Associates	
Susquehanna Township High School Additions Harrisburg, PA	Hayes Large Architects LLP 75 South Houcks Road Suite 300 Harrisburg, PA 17109	\$5,300,000 \$158,000 fee	2006	YES	Hayes Large Architects LLP	
Susquehanna Township Middle School Additions Harrisburg, PA	Hayes Large Architects LLP 75 South Houcks Road Suite 300 Harrisburg, PA 17109	\$3,900,000 \$136,000 fee	2006	YES	Hayes Large Architects LLP	

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.

Buchart-Horn, Inc. is a multi-disciplinary organization that provides architectural, engineering, environmental, planning, project management, construction services, and administrative services. Our experience and resources facilitate cost effective solutions. Our "strong Project Manager" approach clarifies project responsibilities and promotes project communication.

Established in 1946, Buchart Engineering Corporation evolved into Buchart-Horn, Inc., Consulting Engineers, Architects, and Planners. Today, *Engineering News Record* ranks us among the top consulting firms.

We specialize in designing, improving, and solving the problems of infrastructure and structures, and in helping our clients comply with environmental, life safety, and other codes and regulations. Our work includes:

Airports; Architecture; Bridges; Civil/Site development; Construction services; Electrical systems and computer wiring; Energy conservation; Environmental planning, engineering, compliance; Geographic Information Systems (GIS); Hazardous and toxic substances; Highways, roads, streets; Landscape architecture design; Mechanical systems-HVAC, plumbing, energy conservation; Recreation parks and trails; Schools; Structural design; Surveys/mapping; Telecommunications; Telemetry and SCADA control systems; Traffic and traffic management; Wastewater treatment and systems; and Water treatment and systems.

Given our corporate experience, our people, and our company-wide voice and data network, we are able to quickly identify the in-house experts best suited to assist you. And because we can send CAD, text, data, or voice across our network, we can mobilize and focus this expertise on your challenge without the delay and expense of travel. We thus have the flexibility to meet the most aggressive schedules, and are able to quickly marshal skilled professionals to meet your needs.

20. The foregoing is a statement of facts.

Signature: *Kenneth D. Bryant*

Printed Name: Kenneth D. Bryant, Jr., PE, PS

Title: Regional Manager

Date: September 30, 2008



BUCHART HORN, INC. STANDARD EQUIPMENT

The following lists equipment typically used by Buchart Horn that will be made available as needed for this project.

ITEM JOB TITLE

NO.

Sampling & Testing Equipment

- 1 American Sigma Tipping Bucket Rain Gage
- 2 American Sigma Depth/Velocity Flow Meter
- 3 American Sigma 800SL discrete/composite sampler
- 4 American Sigma Stormwater discrete/composite sampler
Minimum 1 week rental
- 5 Electronic well probe
- 6 Dissolved oxygen meter and field probe
- 7 Portable pH meter
- 8 Portable conductivity meter
- 9 Geo Pump Peristaltic Pump
- 10 Field filtration filters (disposable)
- 11 Field decontamination equipment
- 12 Deionized Water
- 13 COLIWISSA, composite liquid waste sampler (disposable)
- 14 Bailers (disposable)
- 15 Soil Gas Sampling Equipment
- 16 Soil Gas (expendable) tip & tubing
- 17 Soil scoops (disposable)
- 18 Stainless steel soil scoops
- 19 Bucket auger
- 20 Split spoon sampler
- 21 Up-Z-Dazy Submersible Pump Puller
- 22 4" Submersible pump
- 23 2" Submersible pump
- 24 Electric Generator
- 25 Infiltrometer System
- 26 Hermit Environmental Data Logger
- 27 Transducer (each)
- 28 ISCO Flow Poke
- 29 6" V-Notch Weir
- 30 8" V-Notch Weir
- 31 10" V-Notch Weir
- 32 12" V-Notch Weir
- 33 15" V-Notch Weir
- 34 6" Cherne Muni-Ball Plug
- 35 8" Cherne Muni-Ball Plug
- 36 10" Cherne Muni-Ball Plug
- 37 12" Cherne Muni-Ball Plug
- 38 15" Cherne Muni-Ball Plug



ITEM JOB TITLE
NO.

Sampling & Testing Equipment (contd)

- 39 Solinist Interface probe
- 40 Balmac Model 216D Vibration Analyzer and Chart Recorder
(4 hour min. charge)
- 41 Terrameter & leads
- 42 Stream Velocity Meter
- 43 Slump Cone
- 44 Electronic Paint Dry Film (DFM) Gauge
- 45 Troxler 3440 Surface Moisture-Density Gauge
- 46 NJDEP VOC Soil Sampling Kit

Field Safety Equipment

- 47 Photofionization detector
- 48 Facepiece assembly respirator
- 49 Organic vapor cartridges (max. 1 day use - disposable)
- 50 Vinyl gloves - pair (disposable)
- 51 Coveralls - set (disposable) (Tyvek)
- 52 Sensidyne Pump
- 53 Drager Tubes
- 54 Homelite Blower - 3 HP Gasoline with 20' hose
- 55 Tripod
- 56 LEL/O₂ Monitor
- 57 Confined Space Entry Equipment, Complete
- 58 Air Sampler, Personal

Video Equipment

- 59 Video Camera and Records (Tapes not included)

Field Vehicles

- 60 Four-wheel drive field vehicles



BUCHART HORN, INC. STANDARD SOFTWARE

Fiscal Year 2008

The following water-related software is licensed to Buchart Horn and available for use.

<u>SOFTWARE</u>	<u>DESCRIPTION</u>
ABSCOUR	CALCULATES BRIDGE ABUTMENT SCOUR
AIRVAC	CALCULATES HEADS IN VACUUM SEWER NETWORK
CULVERTMASTER	CULVERT DESIGN & ANALYSIS
EC-DESIGN	STORM WATER MGNT & EROSION CONTROL
ECMDS	EROSION CONTROL MATERIAL DESIGN
FIRE HYDRANT RATING	FIRE HYDRANT RATING
FLOWMASTER	HYDRAULIC TOOLBOX
HEAD LOSS	PIPE SYSTEM HEAD COMPUTATIONS
HEC-1	FLOODPLAIN AND HYDROGRAPH ANALYSIS
HEC-2	WATER SURFACE PROFILES
HEC-6	SEDIMENT TRANSPORT MODEL
HEC-FDA	FLOOD DAMAGE ANALYSIS
HEC-HMS	HYDROLOGIC MODELING SYSTEM
HEC-RAS	RIVER ANALYSIS SYSTEM
HMR52	PROBABLE MAX STORM
HY22 VURBAN	URBAN DRAINAGE DESIGN
HY-8	CULVERT DESIGN & ANALYSIS
HYDRAFLOW HYDRAGRAPH	ANALYSIS OF DRAINAGE BASINS
HYDRAFLOW STORM SEWERS	HYDRAULIC GRADE LINE
HYDRAIN	HIGHWAY DRAINAGE
HYDROCAD	STORMWATER MODELING
HYDRO-CD	CONTAINS 60 PUBLIC DOMAIN STORMWATER PROGRAMS
IRRACALC	IRRIGATION SCEHDULE
KENTUCKY MODEL (KYPIPE)	MODELING OF PIPE DISTRIBUTION NETWORK
LA DOT HYDRAULIC PROGRAMS	HYDRAULIC DESIGN PROGRAMS FOR LA DOT
NETWK	PIPE NETWORK ANALYSIS
PCSWMM	SUPPORT PROGRAM FOR EPA SWMM4 MODEL
RAINCAD	IRRIGATION/LANDSCAPE
SANITARY SEWER MODEL	SANITARY SEWER ANALYSIS
SANSYS	SEWER SYSTEM MODELING
SCOUR AT BRIDGES HY-9	SCOURING ANALYSIS
STORMCAD	STORM SEWER DESIGN
TR-20	HYDROLOGIC ANALYSIS OF A WATERSHED
TR-55	URBAN HYDROLOGY FOR SMALL WATERSHEDS
VISUAL MODFLOW PRO	GROUNDWATER & CONATMINANT MODELING
VTPSUHM	VA TECH/PENN STATE URBAN HYDOLOGY MODEL
WATERCAD	WATER NETWORK MODELING
WATERGEMS FOR GIS	WATER NETWORK MODELING
XP-SWMM	STORMWATER AND WASTEWATER MGNT MODEL