

# EXPRESSION OF INTEREST ARCHITECT/ENGINEERING SERVICES

RFQ No. DEFK11024

Proposal to Provide
Professional
Architectural/
Engineering
Design Sevices
for an
Access Road,
Utility Upgrades,
and Rough Site
Grading to the
Charleston
Armory Complex

January 25, 2011

# PREPARED FOR:

THE STATE OF WEST VIRGINIA
DEPARTMENT OF ADMINISTRATION
PURCHASING DIVISION
ON BEHALF OF
DIVISION OF ENGINEERING &
FACILITIES
WV ARMY NATIONAL GUARD



### PREPARED BY:

FOX Engineering, PLLC 101 North Court Street Ripley, WV 25271 www.FOXengineering.net

Setting Goals...Raising Standards

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January 25, 2011



Department of Administration Purchasing Division Building 15 2019 Washington Street, East Charleston, WV 25305-0130

# WV Army Nation Guard Access Road, Utility Upgrades, and Rough Site Grading

FOX Engineering, PLLC (FOX) is pleased to submit this expression of interest to the Department of Administration Purchasing Division for the WV Army National Guard access road project.

FOX was established in 2001 and with years of hard work and dedication, has grown to over 35 full time employees. FOX acquired John C. Giese Engineers of Clarksburg, WV and its experienced staff in 2008. With the recent addition of FOX Construction, a Company of FOX Engineering, FOX can now offer field to finish services to our clients handling all aspects of most projects from the engineering and planning phase through construction. FOX has offices in both Ripley and Fairmont, West Virginia, which allows convenient and prompt access to the entire Tri-State area.

FOX currently employs six registered professional engineers, two professional surveyors and the technical and administrative support staff necessary to tackle any assignment. Our engineering staff has been responsible for the design of over 500 bridges and highways in the State of West Virginia. FOX holds professional licensure in West Virginia, Ohio, Maryland, Indiana, South Carolina, North Carolina, Kentucky and Virginia. Our engineers are diverse and complimentary and have structural, highway, hydraulic, and site design experience. Our survey staff is equally diverse with experience in construction layout, boundary surveys, natural resource surveys and topographic surveys. We are proficient in both conventional survey methods as well as GPS surveying.

Our team of engineers, surveyors, and construction specialists are ready and willing to complete all desired aspects of this access road project. FOX is eager to provide a design complete with drawings and specifications, assist in the bidding process, and provide services during construction to ensure a successful and timely completion.

Please see the attached information detailing staff experience and example projects that demonstrate FOX's ability and past performance.

FOX Engineering holds a valid COA with the West Virginia Board of Professional Engineers (#C01241-00) and the Professional Surveyors (#8-5565).

FOX Engineering is a 100% Woman-owned business and is registered as a Certified Disadvantaged Business Enterprise with the West Virginia Department of Transportation's EEO Division for the following NAICS codes:

- > 541330 Engineering Consulting and Design Services
- > 541370 Surveying and Mapping Services
- > 237310 Highway, Street and Bridge Construction
- > 238910 Site Preparation Contractor
- > 238990 All Other Specialty Trade Contractors

FOX also holds the following diverse classifications and certifications.

- Service Disabled Veteran Owned Small Business
- Woman Owned Business
- HUBZone Business
- Small Business

At FOX Engineering we are continually "Setting Goals...and Raising Standards" in the engineering, surveying and construction communities. FOX Engineering strives to provide the highest level of customer service and client satisfaction.

We would appreciate your consideration to be short-listed so that we may discuss this project with the members of the selection committee. We will be available when needed and look forward to this endeavor.

Sincerely,

Daniel A. Metheny, P.E. Engineering Division Manager FOX Engineering, PLLC

#### Methods

If selected for this project, FOX will meet with WV Army National Guard officials to develop a detailed Scope of Work and a submission schedule to insure that both parties have a clear understanding of the work to be completed and the timeline for completing all aspects of work. Once the Scope of Work has been defined, FOX will prepare and submit a detailed Fee Proposal outlining fees for all aspects of work.

Upon issuance of Notice to Proceed, FOX survey crews will perform a topographic survey of the area in which the access road, utility upgrades and building site are to be constructed. Information gathered during the topographic survey will be utilized to prepare an existing ground surface model and a topographic map of the site. The proposed access road, utility upgrades and site grading design will be overlaid on the topographic map for presentation of the construction plans.

It is anticipated that the construction plans and specifications will be developed in accordance with the West Virginia Department of Transportation, Division of Highways *Standard Specifications for Roads and Bridges* and other applicable federal design guidelines.

# **Management**

FOX will assign one of our experienced Professional Engineers as Project Manager for this project. The project manager will be the sole point of contact and will coordinate all aspects of work with the WV Army National Guard.

#### **Design Philosophy**

The proposed access road will be designed in accordance with AASHTO A Policy on Geometric Design of Highways and Streets, 5<sup>th</sup> Addition. The horizontal and vertical alignments will be designed in conjunction with the proposed site grading to balance cut and fill quantities and meet project design criteria.

# **Construction Management**

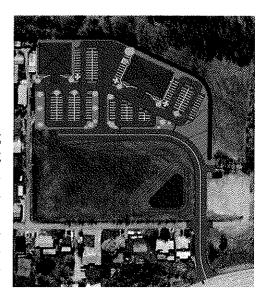
If construction management is required for this project, FOX has the experience and staff to provide construction management services including quality control and quality assurance ensuring adherence to the construction plans and specifications; as well as, construction layout survey and material testing.



# • Sterling Ridge Commercial Site Development

Owner: JGoots, Inc. 639 Pennsylvania Avenue Bridgeport, WV 26330 (304-669-5008)

FOX was responsible for the complete design, permitting and development of construction plans for the Sterling Ridge Commercial Site Development. The design included access road horizontal and vertical alignments, site grading, parking layout and utilities. Permits for this project included WVDOH R/W Encroachment Permit, WVDEP Storm Water Construction Permit and WVDHHR Permit to Construct, Alter or Renovate a Public Water Supply System.



# Kenna Ridge Business Park

Owner: Jackson County Development Authority

104 Miller Drive Ripley, WV 25271

Attention: Mr. Mark Whitley

(304-372-1151)



FOX provided site design services for the JCDA for the development of a wood truss manufacturing plant at the Kenna Ridge Business Park. Services for this project included surveying, site development and utility layout, structural design, bidding assistance, construction contract administration, and construction management.

#### Evans Dale Estates Subdivision

Owner: Hobba Enterprises, LLC 4801 Buffalo Road

Buffalo, West Virginia 25033 Attention: Mr. Dave Hobba

(304-373-0184)

FOX was responsible for the complete design of the Evans Dale Estates Subdivision. The design included the layout of over 90 residential lots as well as four



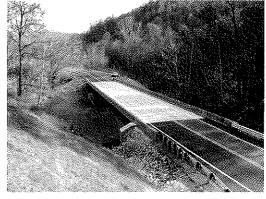
townhouse apartment complexes, encompassing over 40 units. Complete utility design was included as well as the design of a four acre retention pond for the anticipated storm water runoff. Upon completion the subdivision will have the potential of housing over 130 families.



### • Blandville Bridge Replacement

Owner: West Virginia Department of Transportation, Division of Highways Building 5 1900 Kanawha Boulevard, East Charleston, WV 25305-0430 Attention: Mr. Will Thornton (304-558-9693)

FOX was responsible for the design of a new 172 foot steel plate girder bridge to replace the existing bridge

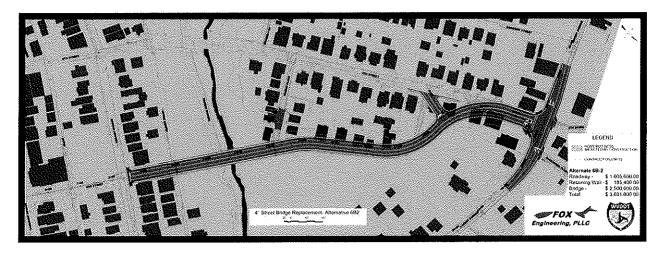


over Meathouse Fork in Doddridge County, West Virginia. Services included surveying and mapping, hydraulic analysis, permit applications, bridge design, roadway and maintenance of traffic design as well as preparation of contract plans and specifications. FOX was able to provide final construction plans only four months after receiving notice to proceed.

#### Fourth Street Bridge Replacement

Owner: West Virginia Department of Transportation, Division of Highways Building 5 1900 Kanawha Boulevard, East Charleston, WV 25305-0430 Attention: Mr. Will Thornton (304-558-9693)

FOX is responsible for the design of a new three span, 315 foot steel plate girder bridge to replace the existing Fourth Street Bridge in Marion County, West Virginia. Services include surveying, hydraulic analysis, permitting, bridge design, roadway design and maintenance of traffic. The project includes approximately 1400 feet of new roadway alignment as well as multiple retaining walls.





#### **OVERVIEW**

FOX Engineering is a multi-disciplined consulting engineering firm offering innovative solutions to our clients. FOX Engineering is a certified Disadvantaged Business Enterprise (DBE) in Engineering Design services as well as Surveying and Mapping services.

FOX Engineering was founded with the goal of providing a local choice to the large firm atmosphere offered at most engineering firms. Growing up in Ravenswood, West Virginia and now residing in Silverton, Jennifer Fox, P.E., owner of FOX Engineering, wanted to stay close to her Jackson County home. With this in mind Jennifer established FOX Engineering out of her home in 2001. With years of hard work and dedication, FOX Engineering has grown and is currently located in historic downtown Ripley, West Virginia. The rapid growth of FOX Engineering has proven that this was a niche waiting to be filled. With the acquisition of John C. Giese Engineers, Inc. in 2008, FOX now has an office located in Fairmont, West Virginia. This well established office possessing nearly 60 years of experience has greatly contributed to the development of FOX Engineering.

Jennifer has positioned the company with the ability to provide the services available at larger firms without compromising on the values that were the basis of establishing FOX Engineering. As a **full service firm**, FOX Engineering provides surveying, civil engineering, construction inspection, contractor services and structural inspections to our clients including government agencies, municipalities, consultants, contractors as well as private clients. By providing this wide range of services, FOX Engineering can work as the lead engineer performing most aspects of projects in house, from the initial planning and analysis to the design and construction while still providing larger firms the types of services they often seek in subconsultants.

When you couple the experience level available at FOX Engineering with the employees' strong work ethic and commitment to quality, it is easy to see how FOX Engineering would be a valuable addition to your next project. Add to that the benefit of the Disadvantaged Business Enterprise credit earned from working with FOX and you can see why the company has undergone such phenomenal growth. The DBE credits are only as valuable as the work that goes along with them, and FOX's recruitment of a top level staff with a range of expertise is one particular asset to working with FOX Engineering. Another benefit is the ease of working with a smaller firm. You will be working with people who have made a professional choice to work locally, support area businesses, and take personal investment in the quality of their work.

Jennifer W. Fox, P.E., Owner



### **ENGINEERING AND DESIGN**

### Services:

FOX Engineering's **structural design** experience encompasses numerous projects comprised of short, medium and long-span bridges; retaining walls; box culverts and various other structures. Our structural design services include:

- Plate girders (tangent and curved)
- Steel box girders
- Precast box beams and prestressed I-beams
- Timber bridges
- Structural inspections and load ratings
- Structure and bridge rehabilitation
- Hydraulic and scour analysis
- Concrete box culverts
- Shop drawing review

FOX Engineering's **highway design** experience encompasses all phases of the highway development process. Our highway design services include:

- Design studies
- New limited access highways
- Complex interchange design/improvements
- Highway/roadway resurfacing, rehabilitation and reconstruction
- Intersection improvements
- Safety improvements
- Maintenance and protection of traffic
- Hydraulics and hydrology
- Right-of-way plans
- Stream mitigation
- Stormwater drainage

FOX Engineering has the resources and experience to provide **site development** services for large commercial/industrial developments as well as residential developments. Our site development services include:

- Site selection and evaluation
- Preliminary engineering studies
- Site grading and drainage
- Access road design
- Subdivision layout and design
- Parking Lot design
- Permitting
- Master Plan development
- Construction administration



FOX Engineering's structural condition inspection experience encompasses a wide array of disciplines ranging from private home inspection to state and federally funded large structure condition inspections. Currently three FOX employees have received inspection certification from the National Highway Institute's Safety of In-Service Bridges Course. Our experience includes the inspection of seven bridges crossing the Ohio River, four bridges crossing the Kanawha River, as well as over 50 additional bridges and structures throughout the state. Representative structures include:

- Steel box girders
- Steel plate girders
- Steel tied arch
- Steel eyebars
- Steel pin and hanger assemblies
- Concrete arches
- Prestressed concrete box and I-beams
- Cable-stayed structures
- Timber structures
- Tunnels
- Concrete box culverts
- Structural plate pipes

We also provide inspection services to banks, mortgage institutions, and real estate agencies. Our services include:

- Foundation inspection
- HUD compliance inspection
- Foundation repair recommendations

FOX Engineering has the resources and experience to provide **contractors** with any necessary engineering design required during construction. In addition to the design services previously listed, our contractor services include:

- Temporary bridge and shoring design
- Deck overhang checks
- Causeway analysis and design
- Value engineering



# Personnel:

### Jennifer W. Fox, P.E. - Owner

A 1994 graduate of West Virginia University, Jennifer brings over a decade of experience involving structural design and inspection. She has been responsible for the complete design of both state and federally funded bridge projects which involve hydraulic studies, superstructure design, substructure design, and contract plan preparation. She is also experienced in structural inspection and rehabilitation, inspection equipment operation, and non-destructive testing. Jennifer is a Registered Professional Engineer in West Virginia, Indiana, South Carolina, Ohio, and Maryland.

# Dan Metheny, P.E. - Engineering Division Manager/Design Engineer

A 1997 graduate of West Virginia Institute of Technology, Dan brings years of highway design and related experience to FOX Engineering. While working in the consulting industry, Dan has served as Project Manager and Design Engineer on various WVDOH projects. His experience includes four-lane divided highway and interchange geometric design; analysis and study of various interchange configurations; coordination of design efforts with surveying and geotechnical sub-consultants as well as a large in-house design team; quality assurance and quality control reviews and development and production of highway construction plans. Dan is a Registered Professional Engineer in West Virginia and Kentucky.

# Nikki Fint, P.E. - Design Engineer

A graduate of West Virginia Institute of Technology (1995) and West Virginia University (1998), Nikki brings years of bridge design and related experience to FOX Engineering. While working in the consultant industry, she served as Project Manager and Design Engineer on various projects. She has design experience with steel and concrete bridges as well as mechanically stabilized earth retaining walls. She has prepared contract plans, hydraulic studies, and preliminary roadway designs and performed bridge inspections. Nikki is a Registered Professional Engineer in West Virginia.

# Grant Martin, P.E. – Design Engineer

A 1999 graduate of West Virginia Institute of Technology, Grant brings extensive bridge design experience to FOX Engineering. While working in the consultant industry, he has prepared design studies, contract plans, performed structural analyses, and developed load ratings for various WVDOH design projects. Grant has vast design experience in curved steel plate girders, ranging in length up to 2,200 feet, and concrete piers, ranging in height up to 110 feet. Grant is a Registered Professional Engineer in West Virginia, Kentucky, and Ohio.

# William "Bill" Rota, P.E., P.S. - Design Engineer

A 1959 graduate of West Virginia University, Bill brings over 50 years experience to FOX Engineering. Bill has served as Senior Design Engineer and Project Manager on numerous WVDOH and private sector projects. His experience includes design of both four-lane divided highways and two-lane divided highways and interchanges including the geometry, drainage, and estimates in connection with these projects. Bill's experience also includes the geometric design and detailing of numerous bridges. He has vast experience developing and producing



highway and bridge construction plans. Bill has also prepared right of ways plans and done the field stake out for those projects. Bill is a Registered Professional Engineer and Registered Professional Surveyor in West Virginia.

# Troy Schell, P.E. - Fairmont Office Manager/Design Engineer

A dual graduate of West Virginia University, earning both his bachelor's and master's degrees in 1997 and 2001 respectively, Troy brings broad experience in many aspects of bridge related projects to FOX Engineering. While working in the consultant industry, he has performed, prepared and reviewed studies, designs, construction plans and contract documents for steel and concrete bridges, culverts, retaining walls and other structures, and is familiar with the technical design and report preparation requirements thereof. He is also experienced with hydrologic, hydraulic and scour analysis and report preparation, roadway design, drainage analysis and design, erosion and sediment control, specification and special provision development, and permitting. He has provided construction engineering services including shop drawing reviews, temporary bridge and shoring design, and has also performed in-service bridge inspections, prepared conditional reports and developed maintenance, rehabilitation and retrofit details and plans. Troy is a Registered Professional Engineer in West Virginia.

# John C. Casey - Operations Manager/Safety Officer

John Casey has extensive experience managing large complex projects with a career in the construction industry stretching over 20 years. His education includes Safety, Health, and Environmental Management as well as Fire Science and Industrial Safety and Health; this is in addition to his multiple safety and OSHA certifications. A United States Air Force veteran John is responsible for the oversight of all aspects of a project, including: procurement, estimating, job costing and control, client relations, safety, and procedures.



# **SURVEY**

#### Services:

FOX Engineering's survey staff features a collection of experienced personnel with a multidisciplined background. This diversity affords us the opportunity to provide a variety of survey related services to our clients. Our surveying services include:

- Rural and residential boundary surveys
- ALTA/ACSM land title surveys
- Courthouse title resurveys
- Architectural and engineering site surveys
- Topographic surveys and aerial mapping
- GPS and conventional control surveys
- Gas well locations and pipeline mapping
- Utility locations and coordination
- Flood certifications / LOMA applications
- Construction layout and monitoring

FOX Engineering has positioned itself to provide the highest quality product while minimizing additional costs passed on to its clients by utilizing both conventional and robotic TOPCON total stations. Conventional crew setups include TOPCON 3005LW wireless total stations in cooperation with TDS Survey Pro, through a wireless Bluetooth connection eliminating potential downtime as a result of cable failure. Gas well location and pipeline crews are outfitted with Trimble Pro-XH sub-foot mapping grade GPS units to insure high quality positions and quick turnaround for the high speed oil and gas industry.

For survey grade GPS results, FOX utilizes Leica System 1200 GPS Smartrovers. The Smartrover is the lightest cable free RTK GPS system in the world. The versatile setup can be used as a typical base-rover setup, or as two standalone RTK-Net rovers depending on the job site. Both Smartrovers are equipped with Leica GNSS technology utilizing both GPS and the Russian Glonass Constellation to reduce downtime in areas where excessive cover blocks visible GPS satellites.

Partnering with Loyola Spatial Systems, FOX is proud to host the first RTK-Net reference station in the state of West Virginia. RTK-Net infrastructure provides increased production and accuracy for all types of surveying and mapping by providing long range capabilities for RTK GPS. Regardless of the application, production is increased by eliminating the need to setup a temporary base station and using a short range conventional radio. Productivity with GPS is more than doubled when compared to short range conventional RTK because the portable base station can be used as a productive rover.



#### Personnel:

# Jason Woods, P.S. - Professional Surveyor

A graduate of Glenville State's Land Surveying program, Jason brings over eleven years of field experience to FOX Engineering. He has been involved in construction layout, topographic surveys, horizontal and vertical control surveys, and both rural and residential boundary surveying, and more recently with FOX he has worked on several WVDOH design surveys. His experience also includes optical alignment and leveling of aluminum rolling mills and overhead crane rails as well as several years of AutoCAD experience related to the surveying field. Jason is a Registered Professional Surveyor in West Virginia.

# Steve Sayre, S.I.T. - Senior Crew Chief

A Registered S.I.T., Steve brings nearly three decades of survey experience to FOX Engineering. A lifelong resident of Jackson County, he has been employed with several small survey companies, but has spent the last several years working in the consulting industry with larger firms. Steve has been involved in WVDOH design surveys, construction layout, topographic surveys, and literally thousands of rural and residential boundary surveys. His experience also includes optical alignment and leveling of aluminum rolling mills and overhead crane rails as well as over a decade of AutoCAD experience related to the surveying field.

# Jason Elliott - Crew Chief

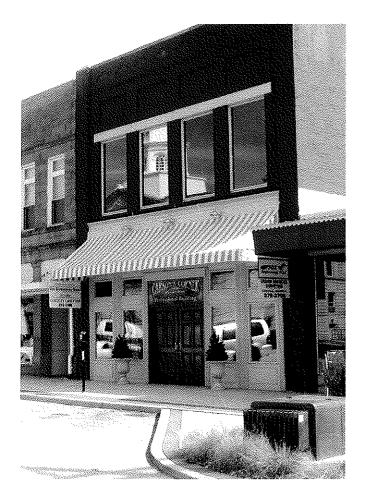
A 2003 graduate of Glenville State's Land Surveying program, Jason brings valuable experience to FOX Engineering. His experience includes ALTA/ACSM land title surveys, topographic and location surveys, and rural and residential boundary surveying. Jason also has experience using AutoCAD related to the surveying field.

# Philip Shamblin - Crew Chief

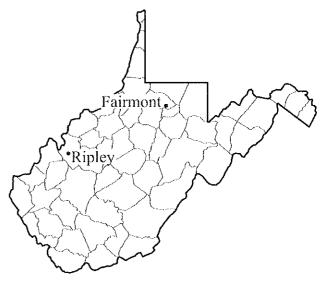
A 2004 graduate of Glenville State College, Philip has several years of surveying experience. He has worked on a variety of surveying projects including rural and residential surveys and construction layout. He has extensive experience in gas pipeline routing and mapping. Philip has been responsible for over 500 miles of pipeline projects, overseeing a team of twenty (20) field surveyors and the associated equipment to make the operation run smoothly.



# **LOCATIONS**



Ripley Office – Home Office 101 North Court Street Ripley, WV 25271 Phone 304-372-3705 Fax 304-372-4100



Fairmont Office
Marion County Business &
Industrial Park
1000 Green River Dr., Suite 101
Fairmont, WV 26554
Phone 304-534-3245
Fax 304-534-3247





Ms. Fox has over 14 years of bridge design and related experience, some of which was acquired while an employee of WVDOT. She has been responsible for the complete design of both state- and federally-funded bridge projects which involve the completion of hydraulic studies, superstructure design, substructure design, and contract plan preparation. Ms. Fox founded FOX Engineering in 2001 and continues to serve as the sole owner and decision maker of this growing firm.

#### **EDUCATION**

West Virginia University – BS, Civil Engineering 1994

#### REGISTRATIONS

Registered Professional Engineer: WV (13985), OH (64206), SC (20031), IN (10201196), MD (32912) Licensed Engineering Contractor #WV041041 Safety Inspection of In-Service Bridges – NHI Course 130055A

#### RELEVANT BACKGROUND

Bridge Design and Rehabilitation – Project engineer responsible for management, design, review, and coordination of different areas and phases of bridge projects. The types of bridges include steel plate girders, both straight and horizontally curved, prestressed concrete I-beams, and timber bridges. The bridges range in length from 150 to 2,300 feet. Substructure design includes conventional, semi-integral and integral abutments, mechanically stabilized earth retaining walls, as well as single and multicolumn piers. Representative projects include:

- Corridor H Bismark to Forman; Grant County, West Virginia
- Cotton Hill Bridge; West Virginia Route 16, Fayette County, West Virginia
- Earling Bridge; West Virginia Route 10, Logan County, West Virginia
- East River Bridge; Interstate 77, Mercer County, West Virginia
- Elkins Bypass U.S. Route 219 to Canfield; Randolph County, West Virginia
- Man Bridge; West Virginia Route 10, Logan County, West Virginia
- Mercury Boulevard Interchange; Hampton, Virginia
- Millville Quarry Access Bridge; West Virginia Route 9, Jefferson County, West Virginia
- Milton Covered Bridge Historic Restoration; Pumpkin Festival Grounds, Cabell County, West Virginia
- Moorefield Interchange Bridge; Hardy County, West Virginia
- Rita Bridge; West Virginia Route 10, Logan County, West Virginia
- Spring Valley Bridge; Wayne County, West Virginia
- Three Forks Creek Bride; Tyler County, West Virginia
- Trace Fork Pony Truss Bridge Replacement; Route 32, Lincoln County, West Virginia
- West 19<sup>th</sup> Street Overpass Bridge: Interstate 64, Cabell County, West Virginia

**Box Culvert Design** – Project engineer responsible for design, review, and coordination of different areas and phases of concrete box culvert projects. The culverts range in length from 70 to 250 feet. Representative projects include:

- Elkins Bypass U.S. Route 219 to Canfield; Randolph County, West Virginia
- Spring Valley Bridge; Spring Valley Drive, Wayne County, West Virginia



Retaining Wall Design – Project engineer responsible for design, review, and coordination of different areas and phases of retaining wall projects, including cast-in-place walls and mechanically stabilized earth (MSE) walls. Representative projects include:

- Spring Valley Bridge; Spring Valley Drive, Wayne County, West Virginia
- West Virginia Route 10 Walls, West Virginia Route 10 Man to Rita; Logan County, West Virginia

Structural Condition Inspections – Served as a Team Leader and assisted in the inspection of bridges ranging in length from 20 feet to 2,400 feet. Services included preparation of reports, load ratings, and stress analysis. Representative projects include:

- Bigley Avenue Bridges; Charleston, West Virginia
- High Street Bridge; Morgantown, West Virginia
- Lee Avenue Bridge; Weirton, West Virginia
- Milton Covered Bridge; Milton, West Virginia
- West 19th Street Overpass Bridge; Huntington, West Virginia
- Wheeling Tunnel; Wheeling, West Virginia

Bridge Rating and Analysis – Assisted in conducting stress analysis and load rating for a variety of bridges throughout West Virginia. Representative bridge projects include:

- High Street Bridge; Morgantown, West Virginia
- West 19<sup>th</sup> Street Overpass Bridge; Huntington, West Virginia

Municipal Engineering Services – Provided engineering services such as preliminary and final design, construction inspection and management, assistance with funding applications, development of construction cost estimates, and utility coordination. Representative clients include:

- Alpine Theatre Restoration Chairman, Subcommittee of Main Street Ripley; Ripley, West Virginia
- City of Ravenswood Downtown Beautification; Ravenswood, West Virginia
- Jackson County Commission; Ripley, West Virginia
- Main Street Ripley; Ripley, West Virginia

#### TRAINING

- Safety Inspection of In-Service Bridges NHI Course No. 130055; Richmond, Virginia, 1999
- Introduction to Stream Functions and Processes: Course I; Canaan Valley, West Virginia, July 2002

#### MEMBERSHIPS, AFFILIATIONS AND HONORS

American Council of Engineering Companies (ACEC)

American Council of Engineering Companies of West Virginia (ACEC/WV)

American Institute of Steel Construction (AISC)

American Society of Civil Engineers (ASCE)

Architectural Engineering Institute (AEI)

National Society of Professional Engineers (NSPE)

2004 Jackson County Businessperson of the Year

2005 Who's Who in West Virginia Business

2006 Generation Next WV - West Virginia State Journal

2007 Who's Who in WV Business - West Virginia State Journal

2009 Young Gun for WV Executive Magazine



Mr. Casey's extensive experience with managing large complex projects was acquired over the past 20 years. His career in the construction industry began very early, as he was the grandson of a Contractor and grew up on heavy equipment. This knowledge brings a constructability aspect to the designs of FOX Engineering that no other firm can boast. Additionally, Mr. Casey possesses the ability to manage people and projects with the clients needs in mind. He strives for communication and teamwork at all levels of the project. His diverse experience is chronicled below.

#### **EDUCATION**

University of Findlay - Safety, Health, and Environmental Management Pikes Peak Community College - Fire Science (Major), Industrial Safety and Health (Minor)

#### **CERTIFICATIONS**

CURRENT CERTIFICATIONS UNDER THE FEDERAL CODE OF REGULATIONS 29CFR 1910.120 Haz-Woper (8hr, 24hr, 40hr, Supervisor, & Instructor)

29CFR 1910.146 Confined Space Entry Operations

29CFR 1910.147(1) Powered Industrial Truck Operation & Instructor

#### NATIONAL FIRE ACADEMY

Haz-Mat Recognition and Identification Haz-Mat Concept Implementation

Hazardous Material Response Team Training

Initial Response to Haz-Mat Incidents

#### OKLAHOMA UNIVERSITY

Fire Fighter I and Fire Fighter II

Fire Alarm Communications

Driver/Operator Pumper

Confined Space Rescue

#### US DEPARTMENT OF TRANSPORTATION

Response to Hazardous Materials Incidents

#### AMERICAN RED CROSS

Adult CPR

Standard First Aid

First Responder

#### **USEPA**

Listed as an acceptable instructor of Haz-Woper courses

Operations including, excavation, deep trench work, compaction, specialty structures placement, installation of water lines, sewer lines, concrete formwork, asphalt site preparation, final grading, storm water controls, etc.

#### RELEVANT BACKGROUND

#### FOX Engineering, PLLC

# **Operations Manager**

Responsible for the oversight of all aspects of a project, including: procurement, estimating, job costing and control, client relations, safety, and procedures. Reporting progress and information to FOX Management and implementing company goals.



#### **PRAY Construction Company**

### Project Manager/Operations Manager

Responsible for successful marketing, estimating, client relations, job costing and control, project scheduling, selection and management of crew personnel.

**Safety Director** 

### **URS** Corporation

# Operations & Safety Manager

Site: Weymouth Neck Remediation Project - Boston, MA

Construction and Safety Manager responsible for day to day operations, with up to twelve sub-contractors and, at peak of the project, 86 crew members who were charged with the remediation of approximately 24 acres of prime land in Boston on the Weymouth Bay. Lead and arsenic and other heavy metal contaminants were to be removed. The remediation and restoration of the property included excavation, consolidation, transport and disposal of 58,000 cubic yards of material, placement of 210,000 cubic yards of aggregate and soil for the construction of 1800 linear feet of revetment, construction of new roadways, sidewalks, parking lots, storm water controls, sanitary sewer and water lines.

Site: Dow Chemical - Charleston, WV

One of several consultants responsible for estimating decontamination, isolation of utilities, demolition, transportation, & disposal of facilities within the DOW South Charleston Operations site. Assisted with the development and implemented Quality Assurance / Quality Control program.

Site: Ford Motor Company - Dearborn, MI

Project Superintendent for the construction of the Ford Motor Company Phytoremediation Site. Plotted out and planted specific native plants found to be effective in the diffusion of heavy metals and contaminants in the soil.

Site: Honeywell - Riegelwood, NC (Superfund)

Operations Supervisor, Directed crew of 28 laborers and equipment operators in the decontamination, demolition, and disposal of entire plant and support facilities. Maintained disposal logs and manifests for all shipments.

Site: Dupont - Seaford, DE

Project Superintendent / Safety, directed crew of 12 operators in the excavation of a 165,000 cubic yard fly ash containment / settlement pond. The fly ash was excavated hauled to an onsite landfill placed in one foot compacted lifts. The slopes of the containment / settlement ponds were restored to three - one slopes.

#### Four Seasons Environmental

Project Superintendent - Site: North Sanitary Drum Removal, - Dayton, OH (Superfund)

- -Direct and supervise crew of twenty-three during excavation of over 275,000 yards of overburden, 60,000 yards of imported fill and removal of over 27,000 buried drums.
- -Screening, logging, sampling, over packing, and / or bulking of excavated drums.
- -Sampling of impacted soils, wastewater, ground water, and imported clean fill.
- -Responsible for drum database, categorizing, handling, transport, and disposal of all waste.
- -Supervised crew in the construction of a landfill gas barrier trench. Trench 3,750 linear feet, 28 feet depth, and lined with 80 mil liner.

Site Foreman - Site: Fultz Landfill Remediation - Cambridge, Ohio (Superfund)

-Directed crew of twelve and a subcontracted Liner System Crew.



-Supervised the above crews with construction of cap to include drum removal, waste relocation, landfill shaping, sub grade layer, methane collection system, six-inch clay cap, triple layer geo synthetic membrane, two-foot frost protection, six inch top soil layer, lechate collection system, and ground water drainage system. Achieved a total of 252 drums removed, 5,000 yards waste relocation, and 150,000 yards material placed for cap and civil works.

Project Safety Officer - Site: Fultz Landfill Remediation - Cambridge, Ohio (Superfund)

- -Coordinated health and safety program activities with on site personnel.
- -Completed equipment inspection logs, air monitoring equipment, calibration logs, and air monitoring result logs.

#### TNT Mining

Operations Foreman & Safety Coordinator / Operator - Site: Gold Creek #10 Elko, NV

- -Directed crew of twelve on a 125-acre precious metal mining operation.
- -Assisted in all operations to include prospecting of site, mobilization, mill set up, excavation, backfill, and reclamation.
- -Served as site safety ensuring safety of on-site personnel and visitors from physical harm and hazards related to mining.
- -Maintained constant compliance with all regulations set by EPA, OSHA, and the Nevada Mining Commission.

#### **United States Air Force**

Fire Fighter
Hazardous Material/Fire Protection Safety
Technical Training Instructor
(911) Fire Protection Communications Coordinator

#### CONSTRUCTION PROCEDURES EXPERIENCE

Estimating and Take-offs
Material Specification and Selection
Selection and management of personnel
Selection and purchasing of equipment

#### COMMUNITY SERVICE, ASSOCIATIONS AND AWARDS

CAWV Safety Committee Member

**CAWV Young Contractors Committee Member** 

Gallery at 409 Board Member (Art Gallery in Point Pleasant, WV)

Generation Putnam Co-Founder (a subsidiary of Generation West Virginia)

Habitat for Humanity of Kanawha and Putnam Counties - Construction Committee

Mason County Community Foundation - Marketing Committee

National Association of Safety Professionals (NASP)

National Fire Prevention Association (NFPA)

National Safety Council Member

Putnam County Vocational Career College Advisory Board Member

WVExpo Committee Member

Arkansas Traveler Certificate Holder (signed by Governor Mike Huckabee)

Honorary Kentucky Colonel (signed by Governor Paul E. Patton)

Recipient of State Journals 2008 Generation Next Award (40 under 40)



# DAN A. METHENY, P.E. DESIGN ENGINEER/ENGINEERING MANAGER

Mr. Metheny has over ten years of highway design and related experience. His experience includes the geometric design of four-lane divided highways, two-lane arterials and interchanges on new and existing alignments; as well as, structural condition inspections of in-service bridges, structural design of bridge substructure units, structural shop drawing review, commercial site development and residential subdivisions.

#### **EDUCATION**

West Virginia Institute of Technology – BS, Civil Engineering 1997

#### REGISTRATION

Registered Professional Engineer: WV (16389), KY (24365) NHI – Safety Inspection of In-Service Bridges – NHI Course 130055A

### RELEVANT BACKGROUND

Highway Design – Served as a designer on various highway projects ranging in size from small bridge replacements to over two-mile sections of four-lane divided highway on new alignment. During this time he has designed horizontal alignments, vertical alignments, intersections and superelevation for four-lane divided highways, interchanges, two-lane arterials and secondary routes; as well as, preparing all aspects of right-of-way plans and highway construction plans. He has also performed design studies requiring design and evaluation of alternate horizontal and vertical alignments for various corridors and interchanges. He has served as Project Manager on multi-million dollar design contracts where he has coordinated the design efforts of large in-house design teams, design sub-consultants, surveying sub-consultants, geotechnical sub-consultants, managed soil boring contracts and performed quality assurance/quality control reviews of highway construction plans. Representative examples of his experience include:

- 2.5 Miles of U.S. Route 50, Appalachian Corridor D Interstate 77 to Alternate Route 14/East Street; Wood County, West Virginia
- 1.55 Miles of U.S. Route 50, Appalachian Corridor D Ohio Route 618 to Greenland Addition; Washington County, Ohio and Wood County, West Virginia
- 0.20 Miles of Huntington Commerce Park Access Road; Cabell County, West Virginia
- 0.14 Miles of County Route 36 at Radnor; Wayne County, West Virginia
- 0.13 Miles of Interstate 77 at the Medina Interchange; Jackson County, West Virginia
- 0.11 Miles of West Virginia Route 10 Bridge Replacement over Merritt Creek at Sarah; Cabell County, West Virginia
- New River Parkway Design Study Hinton, West Virginia to Interstate 64;
   Raleigh & Summers Counties, West Virginia

Highway Bridge Design – Served as a designer on various bridge replacement projects. During this time he has designed sub-structure units, reviewed shop drawings and assisted in the preparation of Span Arrangement and Type, Size & Location submissions. He has also served as Project Manager on large Corridor projects coordinating the design of as many as nine highway bridges and 950-feet of retaining wall on a single project. Representative examples of his experience include:

- Fort Washington Way, Contract No. 6 Ramp J Bridge; Hamilton County, Ohio
- Eckman Overhead Bridge Replacement; U.S. Route 52, McDowell County, West Virginia



# DAN A. METHENY, P.E. DESIGN ENGINEER/ENGINEERING MANAGER

**Structural Condition Inspections** – Assisted in the inspection on various bridges throughout West Virginia. Responsibilities included hands-on inspection, visual inspection, and the preparation of inspection reports. Representative examples of his experience include:

- Bigley Avenue Bridges; Charleston, West Virginia
- Richard J. "Dick" Henderson Memorial Bridge over the Kanawha River; St. Albans, West Virginia
- Corporal Thomas Bennett Memorial Bridge "Uffington Truss" over the Monongahela River; Morgantown, West Virginia

Commercial/Residential Site Development – Served as a Project Manager and designer on various commercial and residential site development projects. During this time he prepared site grading plans, lot layouts, site utility plans and storm water pollution prevention plans (SWPPP). He has also prepared necessary documents to obtain permits from local, state and federal agencies including the WV Department of Environmental Protection (WVDEP), WV Division of Natural Resources (WVDNR), WV Department of Transportation (WVDOT), WV Department of Health & Human Resources (WVDHHR) and the US Army Corps of Engineers (USACOE). Representative examples of his experience include:

- Neal Run Crossing 40 acre Commercial Development; Wood County, West Virginia
- Sterling Ridge 70 Acre Commercial/Residential Development; Harrison County, West Virginia
- Stoney Creek 43 acre residential subdivision; Jackson County, West Virginia
- Washington Woods Estates 115 acre residential subdivision; Jackson County, West Virginia

Wastewater – Served as a design engineer assisting in the design and preparation of construction plans for a gravity sanitary sewer collection system. During this time he prepared plan and profile layouts of the proposed collection system and prepared easement exhibits. Representative examples of his experience include:

• Wastewater Collection System - Lubeck Public Service District, Wood County, West Virginia

Geographic Information Systems (GIS) – Technician responsible for preparation of Land Base mapping from aerial photography utilizing GIS mapping software as part of development of a fully integrated digital mapping system of gas utilities. Utility and customer locations were established through the use of Global Positioning System (GPS) equipment. Line information such as installation date, type, pressure, leaks, and customers were attached to elements within the digital map using an Oracle database system.

#### **TRAINING**

- Moving to MicroStation Training Course; AEC Cadcon, Cincinatti, Ohio, July 1998
- GEOPAK Road I Training Course AEC Cadcon; Columbus, Ohio November 1998
- GEOPAK Road II Training Course GEOPAK Corporation; North Miami Beach, Florida, June 1999
- GEOPAK Survey Training Course AEC Cadcon; Columbus, Ohio, March 2005
- Safety Inspections of In-Service Bridges NHI Course No. 130055; West Virginia Department of Highways, August 2005

#### MEMBERSHIPS, AFFILIATIONS AND HONORS

American Society of Civil Engineers (ASCE)



Mr. Rota has over fifty years of highway design and related experience. His experience includes the geometric design of four-lane divided highways, two-lane highways, and interchanges on new and existing alignments. His experience also includes right of way plan preparation and field stake out.

#### **EDUCATION**

West Virginia University - BS, Civil Engineering 1959

#### REGISTRATION

Registered Professional Engineer: WV (4290) Registered Professional Surveyor: WV (1690)

#### RELEVANT BACKGROUND

Highway Design – Served as a designer on various highway projects ranging in size from small bridge replacements to four-lane divided highway on new alignment. During this time he has designed horizontal alignments, vertical alignments, intersections and superelevation for four-lane divided highways, interchanges, two-lane arterials and secondary routes; as well as, preparing all aspects of right-of-way plans and highway construction plans. He has served as Project Manager and performed quality assurance/quality control reviews of highway construction plans. Representative examples of his experience include:

- Amherstdale to Pardee; Monongalia County, West Virginia
- Appalachian Corridor Q U.S. Route 460 to Interstate 77; Mercer County, West Virginia
- Benton's Ferry Bridge (Southbound Interstate 79); Marion County, West Virginia
- Big Wana Bridge; West Virginia Route 7, Monongalia County, West Virginia
- Blue Sulphur Bridge; Cabell County, West Virginia
- Bridgeport City Park Bridge; Harrison County, West Virginia
- Bull Fork Bride; Gilmer County, West Virginia
- Cameron Ridge Bridge; Marshall County, West Virginia
- Capon Lake Bridge; Hampshire County, West Virginia
- Chestnut Ridge Road; Monongalia County, West Virginia
- Clark Street Bridge; North 3<sup>rd</sup> Street, Clarksburg, Harrison County, West Virginia
- Davisson Run Road U.S. Route 19 Intersection: Harrison County, West Virginia
- East Grafton Bridges, Taylor County, West Virginia
- East Keystone Bridge; McDowell County, West Virginia
- Fieldcrest Bridge (wood structure); Monongalia County, West Virginia
- Flowing Springs Bridge; Jefferson County, West Virginia
- Frametown Bridge; Braxton County, West Virginia
- General Motors Access Road; Berkeley County, West Virginia
- Holcomb Bridge; County Route 20, Nicholas County, West Virginia
- Interstate 68 Bruceton Mills to Maryland state line; Preston County, West Virginia
- Interstate 79 Clem to Coon Knob; Braxton County, West Virginia
- Interstate 79 Fairmont to White Day Creek; Marion County, West Virginia
- Interstate 81 Inwood to Maryland state line; Berkeley County, West Virginia
- Middle Bridge; Logan County, West Virginia
- Moorefield Interchange Bridge; Hardy County, West Virginia
- North Upper Track Roadway; Pendleton County, West Virginia



# WILLIAM "BILL" J. ROTA, P.E., P.S.

- Orchard Road; Monongalia County, West Virginia
- Petersburg-Moorefield Center Turn Lane; Hardy County, West Virginia
- Ronceverte Bridges; Greenbrier County, West Virginia
- Rush Run Bridge; Calhoun County, West Virginia
- Sabraton Center Turn Lane; Monongalia County, West Virginia
- Trace Fork Pony Truss Bridge; Lincoln County, West Virginia
- Wickwire Arch Bridge; Taylor County, West Virginia
- Wierton Steel Bridge; Hancock County, West Virginia
- West Virginia Route 85 Bridge; Boone County, West Virginia

**Design Reports** – Project Engineer responsible for performing design studies requiring design and evaluation of alternate horizontal and vertical alignments for various corridors and interchanges. Representative projects include:

- County Route 73/Interstate 79 Interchange; Marion County, West Virginia
- New Cumberland Bypass; Hancock County, West Virginia
- U.S. Route 522 Virginia state line to Maryland state line; Morgan County, West Virginia
- 48 Miles of West Virginia Route 10; Cabell, Lincoln, Boone, and Logan Counties, West Virginia

**Bridge Repair** – Project Engineer responsible for inspection and detailing. Representative projects include:

- City of Clarksburg Bridges; Harrison County, West Virginia
- Dupont Interchange Bridge; Berkeley County, West Virginia
- Hulbert Heights Bridge; Putnam County, West Virginia
- Fairplain Interchange Bridge; Jackson County, West Virginia
- Greenbrier Street Bridge; Kanawha County, West Virginia
- Oyler Avenue Underpass; Fayette County, West Virginia

**Miscellaneous Design** – Project Engineer responsible for survey, detailing, and geometric design. Representative projects include:

- Breeden Tunnel Repair; Mingo County, West Virginia
- Fort Hill Slope Repair; Kanawha County, West Virginia
- Interstate 81 North Rest Area; Berkeley County, West Virginia
- Interstate 81 South Rest Area; Berkeley County, West Virginia
- Interstate 79 Servia Rest Area; Braxton County, West Virginia

### MEMBERSHIPS, AFFILIATIONS AND HONORS

American Society of Highway Engineers (ASHE) 2001 ASHE Man of the Year



Mr. Woods has over a decade of experience in construction layout, topographic surveys, horizontal and vertical control surveys, and residential boundary surveying. He has worked on several WVDOH design surveys including experience in optical alignment and leveling of aluminum rolling mills and overhead crane rails. Mr. Woods also has eight years of AutoCAD experience related to the surveying field.

#### **EDUCATION**

Glenville State College – AS, Land Surveying Technology, 2000

#### REGISTRATION

Registered Professional Surveyor: WV (2174)

#### RELEVANT BACKGROUND

**WVDOH Design Surveys** – Served as survey party crew chief on a variety of roadway and bridge design projects for the West Virginia Division of Highways. Representative projects include:

- Merritt Creek Bridge, Cabell County, WV
- Durhing Arch Bridge, Mercer County, WV
- Scotts Slab Bridge, Harrison County, WV
- Dunkard Beach Bridge, Monongalia County, WV
- Birch River Bridge, Webster County, WV
- Troy Bridge, Gilmer County, WV

**Site Design Surveys** - Served as survey party crew chief on a variety of site development and design projects for a variety of clients. Representative projects include:

- King's Daughters Medical Center, Ashland, KY
- Neal Run Crossing, Parkersburg, WV
- Sterling Ridge Dialysis Center, Harrison Co., Anmoore, WV
- Stoney Creek Subdivision, Kenna, WV
- Washington Woods Development, Ravenswood, WV
- Evansdale Estates, Evans, WV

#### MEMBERSHIPS, AFFILIATIONS AND HONORS

West Virginia Society of Professional Surveyors (WVSPS)

