

May 5, 2016

*Expression of Interest*

# Architectural/Engineering Design Services for Various Projects

Solicitation Number: CEOI 0612 DPS160000001



submitted to  
**West Virginia State Police**

05/04/16 14:03:04  
WV Purchasing Division

submitted by  
**Michael Baker International, Inc.**

**Michael Baker**  
INTERNATIONAL

**Michael Baker**

**INTERNATIONAL**

400 Washington Street, Suite 301  
Charleston, West Virginia 25301  
(304) 769-0821  
FAX (304) 769-0822

## Letter of Transmittal

To: Bid Clerk	Solicitation Number: CEOI 0612 DPS1600000001
Department of Administration	Project: A/E design services for various projects
2019 Washington Street East	
Charleston, WV 25305	
Attn: Tara Lyle	Date: 5 May, 2016

We are forwarding the following:  Attached  Under Separate Cover  Other

DWG. NO.	NO. COPIES	TITLE OR DESCRIPTION	COMMENTS
	1 each	Original Proposal	
	3 each	Convenience Copies	

**THESE ARE TRANSMITTED as checked below:**

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> As requested | <input type="checkbox"/> No exception taken                   | <input type="checkbox"/> Revise and resubmit    |
| <input type="checkbox"/> For review and comment  | <input type="checkbox"/> Rejected - See remarks               | <input type="checkbox"/> Submit specified items |
| <input type="checkbox"/> For your information    | <input type="checkbox"/> Proceed subject to corrections noted | <input type="checkbox"/> Other                  |

**GENERAL COMMENTS:**  
For Your Use

**Michael Baker International**

By: Nicole Riley

Title: Associate Architect

Page 1 of 1

**Michael Baker**

**I N T E R N A T I O N A L**

*We Make a Difference*

May 5, 2016

Ms. Tara Lyle  
West Virginia Department of Administration  
Purchasing Division  
2019 Washington Street, East  
Charleston, West Virginia 25305

**Subject: CE01 0612 DPS1600000001 - WV State Police  
Expression of Interest**

Dear Ms. Lyle:

The Charleston office of Michael Baker International, Inc. (Michael Baker) is pleased to respond to the subject Expression of Interest for the WV State Police. We understand that this solicitation covers numerous projects at various locations across the State of West Virginia and that assignments may include new construction as well as renovations to existing facilities.

Michael Baker is well positioned to assemble a comprehensive design team (in-house) including: Architectural, Civil/Site, Mechanical, Plumbing and Structural expertise. Our diverse team of professionals are well versed in the preparation of construction documents, bid specifications, and the application of required construction permits. Michael Baker can also provide assistance during the Bidding process and the appropriate level of Construction Administration.

We thank you for your consideration and look forward to meeting with the selection committee in person in order to share our thoughts and ideas for this exciting opportunity!

Should you have any questions or require additional information, please feel free to contact me at (304) 769-2164 or by e-mail at [Nicole.Riley@mbakerintl.com](mailto:Nicole.Riley@mbakerintl.com).

Very truly yours,

Michael Baker International, Inc.

  
Nicole D. Riley, Associate AIA

enclosure

**MBAKERINTL.COM**

400 Washington Street, Suite 301 | Charleston, WV 25301

Office: 304.769.0821 | Fax: 304.769.0822

# Mandatory Proposal Submission Forms



**Michael Baker  
INTERNATIONAL**



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Centralized Expression of Interest  
 02 - Architect/Engr

Proc Folder: 198605

Doc Description: Architectural/Eng. design services for various projects

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-03-29	2016-04-21 13:30:00	CEOI 0612 DPS1600000001	1

**BID RECEIVING LOCATION**

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV 25305

US

**VENDOR**

Vendor Name, Address and Telephone Number:

**Michael Baker International, Inc.**  
**400 Washington Street, Suite 301**  
**Charleston, West Virginia 25301**  
**304.769.0821**

**FOR INFORMATION CONTACT THE BUYER**

Tara Lyle  
 (304) 558-2544  
 tara.l.lyle@wv.gov

Signature X

FEIN # **25-1228638**

DATE **05May2016**

... offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

The West Virginia Purchasing Division for the agency, WV State Police, is soliciting CEOI responses from qualified firms to provide a contract to provide necessary architectural and engineering services for multiple projects for the WV State Police throughout the State of West Virginia, per the attached documentation.

Vendors should submit one original proposal plus three (3) convenience copies to the Purchasing Division.

INVOICE TO		SHIP TO	
WEST VIRGINIA STATE POLICE 4124 KANAWHA TURNPIKE		WEST VIRGINIA STATE POLICE 4124 KANAWHA TURNPIKE	
SOUTH CHARLESTON	WV25309	SOUTH CHARLESTON	WV 25309
US		US	

Line	Comm Ln Desc	Qty	Unit Issue
1	Architectural/Engineering/Design services		

Comm Code	Manufacturer	Specification	Model #
81101508			

**Extended Description :**

Architectural/Engineering/Design services for various projects

**SCHEDULE OF EVENTS**

Line	Event	Event Date
1	Technical questions due by 4:00 pm	2016-04-13

DPS160000001	<b>Document Phase</b> Final	<b>Document Description</b> Architectural/Eng. design services for various projects	<b>Page 3</b> <b>of 3</b>
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**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Centralized Expression of Interest  
 02 — Architect/Engr

Proc Folder: 198605

Doc Description: Addendum No. 1 - A/E design services for various projects

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-04-20	2016-05-05 13:30:00	CEOI 0612 DPS1600000001	2

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number:

**Michael Baker International, Inc.**  
**100 Washington Street, Suite 301**  
**Charleston, West Virginia 25301**  
**304.769.0821**

**FOR INFORMATION CONTACT THE BUYER**

Tara Lyle  
 (304) 558-2544  
 tara.l.yle@wv.gov

Signature X

FEIN # **25-1228638**

DATE **05May2016**

Offers subject to all terms and conditions contained in this solicitation



**ADDITIONAL INFORMATION:**

Addendum No. 1 - To extend the bid opening from 04/21/2016 to 05/05/2016. Responses to vendor questions will be issued under separate addendum. See attached pages.

INVOICE TO		SHIP TO	
WEST VIRGINIA STATE POLICE 4124 KANAWHA TURNPIKE		WEST VIRGINIA STATE POLICE 4124 KANAWHA TURNPIKE	
SOUTH CHARLESTON	WV25309	SOUTH CHARLESTON	WV 25309
US		US	

Line	Comm Ln Desc	Qty	Unit Issue
1	Architectural/Engineering/Design services		

Comm Code	Manufacturer	Specification	Model #
81101508			

**Extended Description :**

Architectural/Engineering/Design services for various projects

**SCHEDULE OF EVENTS**

<u>Line</u>	<u>Event</u>	<u>Event Date</u>
1	Technical questions due by 4:00 pm	2016-04-13

DPS160000001	<b>Document Phase</b> Final	<b>Document Description</b> Addendum No. 1 - A/E design services for various projects	<b>Page 3</b> <b>of 3</b>
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**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions

# SOLICITATION NUMBER: CEOI – DPS1600000001

## Addendum Number: 1

The purpose of this addendum is to modify the solicitation identified as CEOI DPS1600000001 (“Solicitation”) to reflect the change(s) identified and described below.

### Applicable Addendum Category:

- Modify bid opening date and time
- Modify specifications of product or service being sought
- Attachment of vendor questions and responses
- Attachment of pre-bid sign-in sheet
- Correction of error
- Other

### Description of Modification to Solicitation:

1. The bid opening has moved from 04/21/2016 to 05/05/2016.
2. Responses to vendor questions will be issued under separate addendum.

**Additional Documentation:** Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

### Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: CEOI DPS160000001**

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

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

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input type="checkbox"/> Addendum No. 2            | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3            | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

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

**Michael Baker International, Inc.**

Company



Authorized Signature

**May 5, 2016**

Date

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



Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

State of West Virginia  
 Centralized Expression of Interest  
 02 - Architect/Engr

Proc Folder: 198605

Doc Description: Addendum No. 2 - A/E design services for various projects

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-04-26	2016-05-05 13:30:00	CEOI 0612 DPS1600000001	3

**BID RECEIVING LOCATION**

BID CLERK  
 DEPARTMENT OF ADMINISTRATION  
 PURCHASING DIVISION  
 2019 WASHINGTON ST E  
 CHARLESTON WV 25305  
 US

**VENDOR**

Vendor Name, Address and Telephone Number:

**Michael Baker International, Inc.**  
**400 Washington Street, Suite 301**  
**Charleston, West Virginia 25301**  
**304.769.0821**

**FOR INFORMATION CONTACT THE BUYER**

Tara Lyle  
 (304) 558-2544  
 tara.l.lyle@wv.gov

Signature X

FEIN # **25-1228638**

DATE **05May2016**

Offers subject to all terms and conditions contained in this solicitation

**ADDITIONAL INFORMATION:**

Addendum No. 2 - Responses to vendor questions attached. See attached pages.

The bid opening remains on 05/05/2016 at 1:30 pm.

INVOICE TO		SHIP TO	
WEST VIRGINIA STATE POLICE 4124 KANAWHA TURNPIKE		WEST VIRGINIA STATE POLICE 4124 KANAWHA TURNPIKE	
SOUTH CHARLESTON	WV25309	SOUTH CHARLESTON	WV 25309
US		US	

Line	Comm Ln Desc	Qty	Unit Issue
1	Architectural/Engineering/Design services		

Comm Code	Manufacturer	Specification	Model #
81101508			

**Extended Description :**

Architectural/Engineering/Design services for various projects

**SCHEDULE OF EVENTS**

Line	Event	Event Date
1	Technical questions due by 4:00 pm	2016-04-13

<b>DPS160000001</b>	<b>Document Phase</b> Final	<b>Document Description</b> Addendum No. 2 - A/E design services for various projects	<b>Page 3</b> <b>of 3</b>
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**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions

# SOLICITATION NUMBER: CEOI – DPS1600000001

## Addendum Number: 2

The purpose of this addendum is to modify the solicitation identified as CEOI DPS1600000001 ("Solicitation") to reflect the change(s) identified and described below.

### Applicable Addendum Category:

- Modify bid opening date and time
- Modify specifications of product or service being sought
- Attachment of vendor questions and responses
- Attachment of pre-bid sign-in sheet
- Correction of error
- Other

### Description of Modification to Solicitation:

1. Responses to vendor questions attached.
2. The bid opening remains on 05/05/2016 at 1:30 pm.

**Additional Documentation:** Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

### Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.



**CEOI DPS1600000001**  
**Addendum No. 2**

**Questions:**

- Q1: Please clarify item 6. Bid Submission. In paragraph 1 it indicates that all bids must be submitted electronically through wvOasis or delivered by the Vendor to the Purchasing Division. After logging into the wvOasis system, under Response Option, Respond Online is not available. Should we assume the preferred method of delivery is hard copy; one original and three convenience copies?
- A1: Responses must be submitted in paper form (hard copy) as the electronic submission option has been prohibited in wvOASIS. As noted on the CEOI issued on 03/29/2016, vendors should submit one (1) original proposal and three (3) convenience copies.
- Q2: Item 4.4 Project and Goal. C/A Inspection services are listed to included daily on site owner representation. Please verify that the requirement is to have a full time A/E consultant on site throughout the duration of construction. We typically provide on-site services that reflect the requirements of each project. Given the varied nature of this work, we assume that we will work with you to define that on a project by project basis.
- A2: The West Virginia State Police reserves the right to have the architect on site as the project may require.
- Q3: Section three: project specifications paragraph 4.4 indicates that construction supervision and inspections is to include "daily on-site owner representation". Is "daily" the actual intent of the agency rather than the more customary weekly or every other week on site representation?
- A3: See response A1 above.
- Q4: Will all projects be performed by a single A/E firm, or is the agency reserving the right to award projects to multiple firms?
- A4: Project will be awarded to a single firm.
- Q5: Highlighted Section 4.4 "*Perform construction supervision and inspection services to include daily on site owner representation...*" Are these items required of the architectural firm?
- A5: See response A1 above.

**Other Information:**

1. The bid opening remains on May 5, 2016 at 1:30 pm.

**ADDENDUM ACKNOWLEDGEMENT FORM**  
**SOLICITATION NO.: CEOI DPS1600000001**

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

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

**Addendum Numbers Received:**

(Check the box next to each addendum received)

- |  |  |
|--|--|
| <input type="checkbox"/> Addendum No. 1            | <input type="checkbox"/> Addendum No. 6  |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7  |
| <input type="checkbox"/> Addendum No. 3            | <input type="checkbox"/> Addendum No. 8  |
| <input type="checkbox"/> Addendum No. 4            | <input type="checkbox"/> Addendum No. 9  |
| <input type="checkbox"/> Addendum No. 5            | <input type="checkbox"/> Addendum No. 10 |

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

Michael Baker International, Inc.

Company



Authorized Signature

May 5, 2016

Date

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

STATE OF WEST VIRGINIA  
Purchasing Division

# PURCHASING AFFIDAVIT

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

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

**DEFINITIONS:**

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

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

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

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

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: **Michael Baker International, Inc.**

Authorized Signature: \_\_\_\_\_

Date: **May 5, 2016**

State of **West Virginia**

County of **Kanawha**, to-wit:

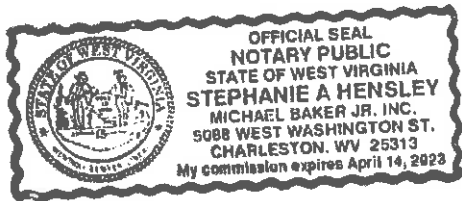
Taken, subscribed, and sworn to before me this **5<sup>th</sup>** day of **May**, 20**16**

My Commission expires **April 4**, 20**23**

AFFIX SEAL HERE

NOTARY PUBLIC

*Stephanie A. Hensley*  
Purchasing Affidavit (Revised 07/01/2012)

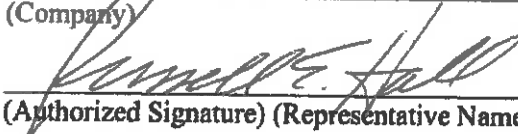


**CERTIFICATION AND SIGNATURE PAGE**

By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

**Michael Baker International, Inc.**

(Company)



(Authorized Signature) (Representative Name, Title)

**Russell E. Hall, Office Executive**

(Phone Number) (Fax Number) (Date)

**304.769.0821 (304.769.0822) 05May2016**

# Architectural/Engineering Design Services for Various Projects

Solicitation Number: CEOI 0612 DPS1600000001



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### APPENDIX 1 – Resumes

### APPENDIX 2 – Project Profiles

### APPENDIX 3 – References

# Architectural/Engineering Design Services for Various Projects

Solicitation Number: CE01 0612 DPS1600000001



## PROJECT LOCATIONS

1. State Police Troop 3 Headquarters, Kearneysville, WV
2. WV State Police Academy, Dunbar, WV
3. State Police Troop 3 Headquarters, Beverly, WV
4. State Police Procurement Division, South Charleston, WV
5. Logan State Police office, Logan, WV
6. Various other West Virginia State Police detachments and facilities

## PROJECT BACKGROUND

West Virginia Department of Administration is seeking a highly-qualified architectural/engineering firm to provide design services and bid documents for projects for the West Virginia State Police. The firm will be responsible for evaluating the existing conditions at each site, making recommendations and presenting options for upgrades or renovations as specified in the Expression of Interest (EOI).

*Michael Baker is extremely interested in continuing our relationship with the West Virginia Department of Administration and establishing a professional relationship with the West Virginia State Police"*

**Michael Baker International, Inc. (Michael Baker)** is a highly-qualified firm with extensive experience in providing the type of services required for these projects, and are extremely interested in continuing our relationship with the West Virginia Department of Administration and establishing a professional relationship with the West Virginia State Police.

## QUALIFICATIONS & EXPERIENCE

### FIRM/TEAM QUALIFICATIONS

Michael Baker's proposed team of experienced professionals has demonstrated the ability to deliver quality work products to our clients, on time and within budget. Michael Baker can provide the entire depth of services necessary to complete the project without the need for costly subconsultants. Each individual on this project team has extensive experience in their field of expertise and have demonstrated success on projects of similar size and scope.

The Principal-in-Charge will ensure that all required resources including staff and equipment are available to the project manager to execute the project successfully. Team resumes and project profiles provide a brief discussion of team member's experience base relevant to this project.

### Management and Staffing

Michael Baker International, Inc.  
 Russell Hall, Vice President | 5088 West Washington Street, Charleston WV 25313  
 304-769-0821 | [RHall@mbakerintl.com](mailto:RHall@mbakerintl.com)

### Persons Assigned to the Project (Resumes Provided In Appendix 1)

NAME	ROLE
PATRICK FOGARTY, P.E., PS, LEED®GA	Civil Engineer / Practice Manager
NICOLE RILEY, ASSOCIATE AIA	Associate Architect / Project Manager
DAVID HILLIARD, P.E., LEED®AP BD+C	Mechanical Engineer
LAURA COX, P.L.A., LEED®GA	Landscape Architect
OWEN MILLIGAN, P.E.	Electrical Engineer
WAYNE AIRGOOD, P.E.	Structural Engineer

## Architectural/Engineering Design Services for Various Projects

Solicitation Number: CEO1 0612 DPS1600000001



According to our understanding of the project scope as stated in the EOI, no additional sub consultants will be required. Michael Baker will execute the entire project with our current staff.

### FIRM CAPACITY

Michael Baker is a full service A/E firm. Our local office in Charleston WV is a "single-stop resource" capable of providing comprehensive professional services, from mechanical/electrical and civil/structural engineering to architecture and planning, final design, and construction management through operational support. Michael Baker will provide the hands-on services needed for this project, from client meetings to site surveys, design and construction administration/inspection. With over 30 in-house professionals locally, Michael Baker can react quickly and efficiently to the needs of your project.

Michael Baker's local clients for facilities development and renovation projects include, but are not limited to, colleges and universities, counties, parishes, cities, townships, local municipalities, state departments of transportation, military facilities, airport complexes, and private sector clients. Michael Baker's geographic location and extensive experience enables us to quickly respond to wide-ranging scopes of service in order to meet our client's needs.

Michael Baker is a leading global provider of engineering and consulting services which includes planning, architectural, environmental, construction, program management, and full life cycle support services, as well as information technology and communications services and solutions. Michael Baker provides its comprehensive range of services and solutions in support of U.S. federal, state, and municipal governments, foreign allied governments, and a wide range of commercial clients. With more than \$1.3 billion in annual revenue, Michael Baker has more than 6,000 employees in over 90 offices located across the U.S. and internationally. Michael Baker seamlessly integrates architecture, planning, landscape architecture, engineering and management. Internationally recognized with a portfolio spanning over half a century, the team provides excellence in solutions: superior technical ability, creative design and collaborative integration.

The success of our multidisciplinary approach to built environments results from the expertise of our design professionals. We solve challenges from multiple vantage points providing unsurpassed holistic, sustainable and innovative solutions that benefit our diverse clients, including institutions, governmental agencies, corporations, developers and builders.

Michael Baker has extensive resources and the required qualifications to provide planning, engineering and design services for the West Virginia State Police on this important project. We have local and nationally recognized experts with the technical experience necessary for this assignment.

In summary, Michael Baker's staff can provide documentation of our extensive experience in the following areas for this project:

- Nationally recognized expertise in assessing, programming and planning
- Facilities engineering (civil, structural, mechanical, fire protection, plumbing and electrical)
- Construction administration and construction monitoring
- Coordination with state and federal agencies, as required

From major new or renovated building facilities, infrastructure and aviation, to oil and gas pipeline design, bridges and roadway designs, and water resource projects, Michael Baker has evolved into one of the leading engineering and energy services firms by consistently providing targeted solutions for its clients most complex challenges.

### **STATEMENT OF FIRM'S ACCEPTANCE AND FULL UNDERSTANDING THAT ANY AND ALL WORK PRODUCED AS A RESULT OF THE CONTRACT WILL BECOME PROPERTY OF THE AGENCY AND CAN BE USED OR SHARED BY THE AGENCY AS DEEMED APPROPRIATE**

Michael Baker will provide to the West Virginia State Police or other appropriate agencies, electronic copies of all required submittals through the various design stages and will provide final AutoCAD drawings at the completion of the project if requested.

# Architectural/Engineering Design Services for Various Projects

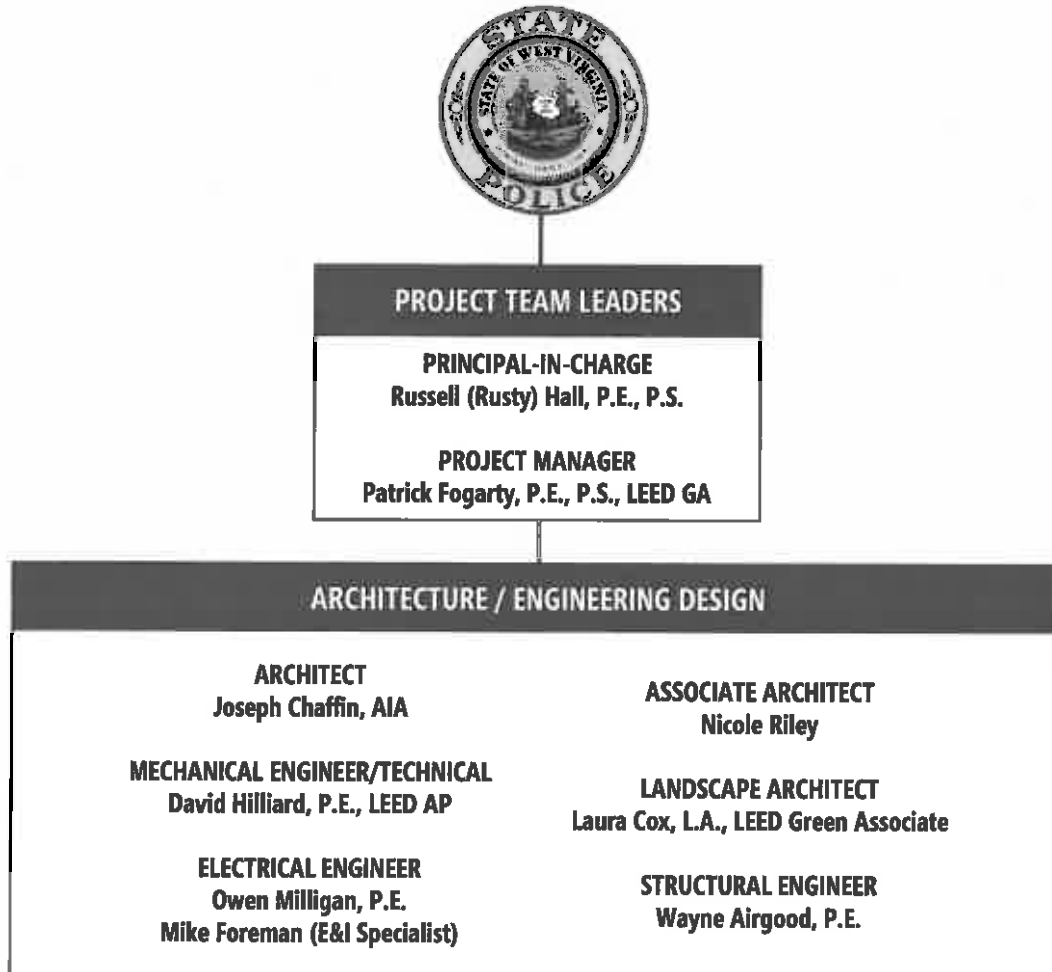
Solicitation Number: CEO10612 DPS1600000001



## DESCRIPTION OF ANY LITIGATION OR ARBITRATION PROCEEDINGS

Michael Baker is involved in such claims, arbitration proceedings and suits as is typical for the work it performs. Michael Baker's legal department may provide certain non-confidential details relating to any such individual matter after receipt of a specific written request. Michael Baker is not involved with litigation or arbitration proceedings, including vendor complaints filed with the West Virginia Purchasing Division or disputes with other Agencies and the State of West Virginia that involved legal representation by either party relating to Michael Baker's delivery of design services.

## PROJECT ORGANIZATION



## STATEMENT OR EVIDENCE OF THE FIRM OR TEAM'S ABILITY TO PROVIDE SERVICES

This team was selected based on the current Project understanding. Additional team support members will be engaged on an as-needed basis.

Please refer to the resumes for more details on team members in **Appendix 1**.



# Architectural/Engineering Design Services for Various Projects

Solicitation Number: CEOI 0612 DPS1600000001



## DEMONSTRATED EXPERIENCE IN COMPLETING PROJECTS OF A SIMILAR SIZE AND SCOPE

Project Profiles are included in **Appendix 2**. They were selected as a representative group of various kinds of related projects. These include local projects in the State of West Virginia, and other relevant projects around the country.

Five (5) References are provided in **Appendix 3**.

## PROJECT AND GOALS

### METHODOLOGY FOR MEETING GOALS AND OBJECTIVES - GENERAL

#### GOAL/OBJECTIVE 1: CONCEPT

It is Michael Baker's understanding that upgrades or renovations to existing West Virginia State Police facilities are desired at various sites. The approach of the entire project would be holistic in nature. A kick-off meeting would be held to help us understand the State Police project requirements for each task assigned. The first step of the project would be to establish priorities and develop time schedules and budgets for the various State Police project tasks. This process could include identification of existing conditions through information obtained by a review of the facilities as-built drawings. Michael Baker will then begin to plan for site visits and to begin developing the concepts required to provide the designs for the most cost effective systems to achieve the project requirements.



Based on the acquired information, Michael Baker staff would begin to develop schematic design concepts for review and approval by the West Virginia State Police. A general code review would also be undertaken to determine Federal, State and Local Codes that would affect concept selection for each task. The projects will be studied in a systematic way to analyze the existing conditions, client needs, affected system demands and then determine the appropriate solutions to meet all of those requirements. Analyzing multiple solutions provides the client the ability to choose the most cost effective approach for the project.

If needed, new facility considerations will also be investigated and options discussed with the client. Depending on the task, a minimum of two potential possibilities will be presented.

Michael Baker will provide cost estimating services. When the different options pertaining to the project are identified from a technical standpoint, the cost estimating team would be engaged to provide the financial feasibility of each option.

#### GOAL/OBJECTIVE 2: DESIGN

Michael Baker has a variety of services with extensive experience in many fields of expertise. This allows the core team members access to expertise in all areas of study.

A survey team will be responsible for identifying existing site conditions, building measurements, topography and the location of utilities and other components in the project area. This team will consist of Michael Baker employees which are Licensed Professional Surveyors and Registered Professional Engineers.

Michael Baker Architects and Engineers will be involved in all aspects of the existing condition assessment and project design. Depending on the task this may include: site/civil, architectural, structural, mechanical, electrical, plumbing, and fire protection engineering. The Architect/Engineer designer of record will be provide final sealed drawings and specifications for each portion of the project.

## **Architectural/Engineering Design Services for Various Projects**

Solicitation Number CE010612 DPS1600000001



A structural engineer will be engaged to design upgrades to existing facilities as required to support any new components. The structural engineer will be able to provide expert knowledge and experience related to both, new or existing facilities; including the structural load on the building and the challenges related to the associated options.

Michael Baker has a number of engineers that have work extensively on back-up power generators. The electrical engineer of record will be responsible for the design of the electrical system associated with the various power generators. Each electrical system will be analyzed by both need and availability of generators. The power feeds and switch gear required for each of the surplus generators will then be sized appropriately for the new systems.

### **GOAL/OBJECTIVE 3: BIDDING/CONSTRUCTION DOCUMENTS**

Michael Baker will provide all necessary design and bidding documents in accordance with West Virginia Purchasing Division for all aspects of the design. Specifications for the installation of all required products or components will be provided as part of the bid package.

Drawings and documentation will be provided based on the site survey. This documentation will include the location of affected existing on-site utilities or service lines. Design documents will also include information regarding the limitations and requirements for any needed project demolition.

If required, a project phasing plan will be provided with the construction documents, which will include the demolition and removal of the existing systems as required. Demolition drawings will be provided for the removal of existing building related components affected by the design.

The drawings will be prepared in AutoCAD format. All files will be provided to the client upon completion of the project for future use. The drawings will be 'bound', such that the files will not require external references and allows for easy future use and alteration. Paper copies and AutoCAD format drawings will be provided to the client with all copyright control for the documents.

### **GOAL/OBJECTIVE 4: BIDDING ASSISTANCE**

Michael Baker will provide assistance with the bidding process in the form of preparation of technical responses for Addenda, attendance at the Pre-Bid Conference, and consultation during the bid award process.

### **GOAL/OBJECTIVE 5: CONSTRUCTION ADMINISTRATION**

Michael Baker will preside over the required construction meetings, prepare progress reports, respond to requests for information (RFIs), evaluate change order requests and review all samples, shop drawings and progress payment applications. The shop drawings provided by the awarded contractor will be reviewed by the A/E of record to ensure that it meets all code requirements, specification criteria and is appropriate for the project. All products intended to be installed on the project shall be submitted to and approved by the A/E of record. The products will be approved based on meeting the prepared specifications, current code requirements and contract requirements.

Michael Baker will provide construction inspection on a part-time or full-time basis as dictated by the project budget and complexity. After the system installations are complete, Michael Baker will perform a final inspection and develop a corrective measure punchlist.

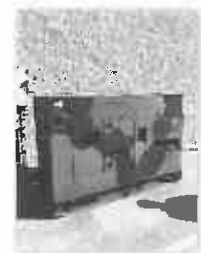
# Architectural/Engineering Design Services for Various Projects

Solicitation Number: CEO10612 DPS160000001



## INITIAL PROJECT SPECIFIC CONSIDERATIONS

1. Roof repair/design at Troop 3 Headquarters, Kearneysville, WV (Jefferson County).
  - Determine type, age and manufacturer (warranties)
  - Inspect flashing / copping condition
  - Evaluate "trouble areas"
  - Evaluate existing rooftop equipment
2. Design services for the installation of new roll-up doors at the West Virginia State Police Academy hangar facility located in Dunbar, WV (Kanawha County). This is to facilitate parking large vehicles and would require structural engineering services.
  - Determine type and manufacturer preferences
  - Inspect existing door framing/structure and surrounding conditions
  - Evaluate thermal requirements
3. Plans for a garage facility at Troop 3 Headquarters located in Beverly, WV (Randolph County).
  - Perform site topographic and utility survey
  - Evaluate building function and relationship to existing components
  - Establish "Design Vehicle" for geometric and structural criteria
  - Evaluate utility and thermal requirements
  - Consider any other special requirements
4. Plans for a storage facility at the Procurement Division located in South Charleston, WV (Kanawha County) to replace the building on the back of the parking lot.
  - Perform site topographic and utility survey
  - Evaluate building function and relationship to existing components
  - Establish loading criteria
  - Evaluate utility, thermal and climate requirements
  - Consider any other special requirements
5. Renovations to the old Logan State Police office, Logan, WV (Logan County).
  - Evaluate building function and relationship to existing components
  - Evaluate existing utility systems
  - Consider thermal requirements
  - Define limits of demolition, cutting and patching
  - Consider phasing and occupancy during renovation
  - Consider any other special requirements
6. Electrical Engineering services to install military surplus generators to provide backup power to various detachments and facilities.
  - Review equipment size and condition
  - Review location requirements
  - Define limits of demolition, cutting and patching
  - Match equipment to site



# APPENDIX 1 - Resumes



Michael Baker  
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**Michael Baker**

**I N T E R N A T I O N A L**

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## **Russell E. Hall, P.E., P.S.**

### ***Assistant Vice President and Charleston Office Manager***

#### **General Qualifications**

Mr. Hall currently serves as Assistant Vice President of Michael Baker International as well as Office Manager of our Charleston, WV office. He is an experienced transportation engineer who has been involved in numerous bridge and highway design projects in West Virginia for over 28 years. His project management responsibilities involve overseeing staff from project inception through completion, and ensuring that the clients' needs and requirements are met.

He also has over nine years of office management experience. His office management responsibilities include financial oversight and accountability for a staff of over 40 engineers, scientists, and administrative personnel for Baker's Charleston office. His major strengths include organizing and managing a project team, quality control and quality assurance, and problem resolution. He provides overall direction and maintains direct communications with all clients. Mr. Hall is very proud of the fact that he has been able to spend his entire career in West Virginia working to address West Virginia's transportation needs.

#### **Experience**

**Kanawha River Bridge, Charleston, West Virginia.** *Brayman Construction Company.* Principal-In-Charge. Responsible for oversight of Project Management. Baker's Charleston, West Virginia office redesigned seven piers for the contractor and performed a complete analysis of the superstructure and substructure to properly size the piers.

**US 35/I-64 Interchange Post Design, West Virginia.** *West Virginia Department of Transportation, Division of Highways.* Principal-In-Charge. The design phase of this project provided for the preparation of construction and right of way plans for approximately three miles of 4-lane divided highway. The construction plans were separated into three construction contracts and included the design of two interchanges, two bridges, numerous box culverts and a vehicular underpass. The post design phase of this project provided for the review and approval of shop drawings and responding to Requests for Information. Baker designed the original post-tensioned concrete box bridge. Contractor value engineered the superstructure to a steel girder bridge. Foundation for piers and abutments were as designed. Baker reviewed pile testing, mass concrete results, and MSE wall calculations provided by the contractor.

**Fort Pleasant Access Road Project, Moorefield, West Virginia.** *Fort Pleasant Farms, Inc.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker prepared contract construction plans and related documents for a 3-lane access road connecting Corridor H to private property in Moorefield, WV.

**Years with Michael Baker: 10**

**Years with Other Firms: 18**

#### **Degrees**

B.S., 1985, Civil Engineering, West Virginia University Institute of Technology

#### **Licenses/Certifications**

Professional Engineer - Civil/Structural, West Virginia, 1990

Professional Surveyor, West Virginia, 1996

**WVDOH Six-Year Bridge Inspection Program, Various Locations, West Virginia.** *West Virginia Department of Transportation, Division of Highways.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. Baker was responsible for performing the inspection services and report writing for the New River Gorge Bridge, Veteran's Memorial Bridge, Fort Hill Bridge, Fort Henry Bridge and Wheeling Tunnels.

**Fort Pleasant Farms Two Lane Road Design, Moorefield.** *Fort Pleasant Farms, Inc.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. This project involved the study, design and final construction plan development for a new two-lane access road approximately 1500' in length. This access road was designed to connect a commercial/residential development to the Moorefield Interchange on Corridor H in Moorefield, West Virginia.

**Town of Moorefield-Maple Avenue Streetscape, Moorefield.** *Town of Moorefield.* Principal-In-Charge. Responsible for oversight of Project Management. The Town of Moorefield was in need of a pedestrian-friendly way of connecting the downtown area with the highly utilized nearby community park. Maple Avenue was a secondary street connecting the two areas, but had no sidewalks and deep ditches along most of the corridor. Moorefield tasked Baker with the planning and design of improvements that would both upgrade existing facilities and create a unified community linking the downtown with the community park.

**Blennerhassett Island Bridge, Appalachian Corridor D, Washington County, Ohio and Wood County, West Virginia.** *West Virginia Department of Transportation, Division of Highways.* Principal-In-Charge. Responsible for oversight of project finances, schedules and quality control. The 878' - 6" long network tied arch was ranked as the longest of its type in the United States and one of the longest in the entire world. Baker provided project management, environmental and location studies, permitting, preliminary and final design as well as construction phase services.

**Town of West Milford Sidewalk Improvements, West Milford, West Virginia.** *Town of West Milford.* Principal-In-Charge. Responsible for oversight of Project Management. Baker performed complete planning, design and construction management services for new sidewalks along U.S. Route 270 (Main Street) for the Town of West Milford. The improvements included concrete sidewalks with integral concrete curbs, driveway curb cuts, ADA accessible curb ramps with truncated domes, "ladder-style" crosswalks and storm drainage design. Baker provided Construction Administration and resident inspection services as well as periodic site review during construction.

**City of Charleston Bridges-Engineering Consulting Services, Charleston, West Virginia.** *City of Charleston, West Virginia.* Principal-In-Charge. Responsible for oversight of Project Management. Baker's Charleston, West Virginia office provided various services for the City of Charleston. Baker reviewed existing inspection reports, performed bridge inspections and recommended and prioritized repairs for 13 bridges owned by the city. Kanawha-Putnam Bike/Pedestrian Plan, Phase I, South Charleston. Regional Intergovernmental Council. Principal-In-Charge. Responsible for oversight of Project Management. Baker performed a cursory inventory of existing bicycle and pedestrian facilities, identified areas with a high level of bicycle and pedestrian activity, collected existing resources and performed a broad base public outreach effort to identify bicycle and pedestrian issues in Kanawha and Putnam Counties for the Regional Intergovernmental Council (RIC). All data, survey results and preliminary findings were compiled for analysis and incorporation into the final plan during Phase II of the study.

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## Patrick W. Fogarty, P.E., P.S., LEED®GA

*Civil Engineer, Facilities Practice Manager*

### General Qualifications

Mr. Fogarty has over 29 years of civil engineering project design and management experience. He is responsible for the technical and management aspects of civil design and surveying projects within Baker's Charleston, West Virginia office. Mr. Fogarty has designed and managed projects in numerous disciplines including civil, structural, and transportation engineering; site development planning; and surveying. These projects have included retail/commercial site preparation, airports, streets/highways, bridges, parking lots, buildings, retaining walls/foundations, sanitary systems and structures, as well as boundary and topographic and photogrammetric surveys. Duties included field surveying, drawings and specification preparation, design, design drafting, construction inspection, quality control testing, shop drawing review, project management, contract administration and report preparation.

### Experience

**West Virginia State Capitol Restroom Renovations.** *State of WV General Services Division.* Project Manager. Responsible for the overall management of the project including the coordination of the subconsultant. Baker is leading a planning study for the renovation of 31 restrooms in the historic West Virginia Capitol Building. The planning study will assess the facilities and their conformance to current code requirements and code-required capacities, compliance with Americans with Disabilities Act (ADA) requirements, quantification of the building occupancy during normal and peak periods, and an evaluation of gender distribution of restrooms within the capitol. Baker will provide design, construction sequence, and scheduling recommendations. Upon approval of the design, Baker will prepare construction documents and provide construction administration services for the renovation of three restrooms on the basement level.

**Nitro Bank Street Streetscape Improvements, Nitro, West Virginia.** *City of Nitro.* Project Manager. Responsible for concept planning, detailed design, construction document generation, and construction administration. Baker provided design, bid-phase support, and construction services for streetscape improvements to Bank Street, located in the city's business district. Baker's services include base mapping, background data collection, design plans, construction document preparation, bid-phase support, construction management, and construction inspection.

*Years with Michael Baker: 10  
Years with Other Firms: 20*

### *Degrees*

B.S., 1985, Civil Engineering, West Virginia University Institute of Technology

Diploma, 1993, Surveying and Mapping, International Correspondence Schools

Coursework, Business Administration, Heriot-Watt University, Edinburgh College of Art

### *Licenses/Certifications*

Professional Engineer - Civil/Structural, West Virginia, 1990

Professional Surveyor, West Virginia, 1993

Construction Documents Technologist, 1996

**A/E Services for the Office of the Adjutant General, West Virginia Army National Guard, Division of Engineering and Facilities, Charleston, West Virginia. *State Army National Guard Headquarters.*** Project Manager. Responsible for the management and coordination of all activities. The Facilities Management Officer (FMO) for the State of West Virginia, Division of Engineering and Facilities (DEF), West Virginia Army National Guard (WVARNG) selected Baker for a lump sum/fixed fee contract for architectural and engineering services. Baker was selected by the Division of Engineering and Facilities to provide complete design and construction administration services for the renovation of the first floor of the entire wing of the Office of the Adjutant General (TAG). The Owner requested the need for modernization of approximately 12,000 square feet of existing outdated office space - project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, alterations to the existing floor plan, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal.

**Lost Creek Train Depot Rehabilitation, Lost Creek, West Virginia. *Town of Lost Creek.*** Project Manager. Responsible for the management and coordination of all activities as well as all engineering design. The Town of Lost Creek retained Baker for the planning and design of the rehabilitation of a historic train depot adjacent to the Harrison County Rail Trail. Baker prepared a plan to raise the structure, make repairs to the deteriorated timber, excavate and place the concrete foundation system, then lower the structure to rest on the new foundation. Baker provided construction administration and inspection services as well as periodic site review during construction.

**Little Kanawha Bus Facility, Calhoun County, West Virginia. *WV Division Of Public Transit.*** Project Manager. Responsible for the civil, site and structural engineering components of the project. Baker is providing architectural and engineering services, landscape architecture, and construction-phase support for a new, 9,900-square foot, pre-engineered, metal and brick bus maintenance and transit operations facility. The 5,100-square-foot administrative area will include offices, a conference room, a money-counting room, and a driver-training room, and the 4,800-square-foot bus maintenance area will include storage for seven buses. The facility will be ADA-compliant and is being designed to achieve LEED® certification. Services include site survey and design, geotechnical testing, environmental compliance, utility coordination, bid documents, bid-phase support, and as-built drawings.

**West Virginia Army National Guard - TAG Wing Improvement, Charleston, West Virginia. *State Army National Guard Headquarters.*** Project Manager. Engineer of Record responsible for the coordination of all activities. Baker performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General at the State Army National Guard Headquarters in Charleston, West Virginia. Project elements included new acoustical ceilings, flooring, energy-saving light fixtures, duplex outlets, communications jacks, several new wall partitions, exterior door replacements, new interior doors and hardware, new wall finishes and asbestos removal. Baker provided Construction Administration and Inspection services as well as periodic site review during construction.



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## **Nicole Riley**

*Associate Architect / Project Manager*

### **General Qualifications**

Ms. Riley brings more than 17 years of design and project coordination experience to the project. While at Baker, Ms. Riley has focused most of her time on design and coordination with the client while maintaining a close relationship with the design team, from the early assessment of project planning stages to the construction administration. Ms. Riley's project design experience includes facilities for entrepreneurs, correctional, educational, institutional, military installations, commercial, residential, and religious facilities. She is experienced with the submittal and construction process for various state agencies including the WV State Fire Marshal and West Virginia State Police.

**Years with Baker: 1**

**Years with Other Firms: 16**

### **Education**

Bachelor of Architecture, Virginia Tech

### **Licenses/Certifications**

Associate AIA

### **Experience**

**Multi-Purpose Facility for the West Virginia State Police Academy, Institute, West Virginia**  
Designer and Project Manager. Responsibilities included site investigation, cost estimate, architectural design and collaboration with geotechnical engineer as well as the West Virginia State Police staff overseeing the project. The facility employs a skylight system in the main gym, intended to provide natural light to the user as well as lowering electricity expense. Special consideration was given to the underground foundation and location of the facility at the Academy.

**Glenn Jean Armed Forces Reserve Center / Military Entrance Processing Station, Glen Jean, West Virginia.**  
*West Virginia Army National Guard / U.S. Department of Defense.* Designer and Project Manager. Responsibilities included complete design package and collaboration with staffs from both the state and federal entities for the 110,000 S.F. facility. Special consideration given to force protection, geotechnical challenges, helipad design and location, vehicle repair and petroleum storage, adequate mustering space, as well as medical office spaces.

**Economic Development Center, Charleston, West Virginia.** *West Virginia State University Gus R. Douglass Extension,* Designer and Project Manager. Responsibilities included: feasibility study, budget development and construction documents and construction administration services for total renovation of a 5,000 S.F. facility. Diverse use of facility lent to consideration for recording studios, digital green studio, office space for entrepreneurs, and public gathering space.

## R. Joseph Chaffin, R.A., A.I.A.

### *Lead Design Architect*

#### General Qualifications

In balancing creative, organizational, and technical strengths, Joseph Chaffin's professional experience demonstrates a broad practice of architecture from residential through complex institutional projects. He challenges current capabilities, cultivates leadership, and develops new strengths through his position at Baker. As Director of Architecture, Mr. Chaffin is responsible for the daily operations, design quality, and project execution of the architectural and interior design staff. He performs interdisciplinary technical reviews for all designs and oversees coordination of related engineering disciplines. Ensuring the highest quality design services within budget and schedule parameters, he also emphasizes a "world view," or comprehensive perspective, within which professional services are delivered prioritizing and maintaining client expectations.

#### Experience

**Building 12 Defense Logistics Agency Headquarters Renovation Design, Tobyhanna, Pennsylvania. *Tobyhanna Army Depot.*** Director. Responsible for design/technical quality and project execution provided by the architectural and interior design staff. Role also included interdisciplinary technical reviews for all design/construction documents. Baker prepared design documents for the partial renovation of Building 12 to serve as the new Defense Logistics Agency headquarters building. Work was performed under a three-year indefinite delivery-indefinite quantity contract. Baker's tasks included architectural design, building systems engineering, construction cost estimate development, and as-built plans development.

**Restroom Renovation Design, TISCOM, Alexandria, Virginia. *U.S. Coast Guard, CEU Cleveland.*** Director. Responsible for design/technical quality and project execution provided by the architectural and interior design staff. Role also included interdisciplinary technical reviews for all design/construction documents. Baker is developing specifications, construction drawings, a detailed cost estimate, and a projected construction schedule to renovate two male and two female restroom areas in the Telecommunication and Information Systems Command Navigation Center. The renovated restrooms will be compliant with the Americans with Disabilities Act and will include new plumbing fixtures, toilet partitions, floor coverings, wall coverings, electrical fixtures, and exhaust fans.

**U.S. Armed Forces Reserve Center, Rutland, Vermont. *U.S. Army Corps of Engineers, Louisville District.*** Director. Responsible for design/technical quality and project execution provided by the architectural and interior design staff. Responsibilities also included detailed interdisciplinary reviews of the RFP design criteria documents with an emphasis on architecture. Baker developed design-build RFP documents for a new 600-member Armed Forces Reserve Center meeting Silver LEED® standards. A 97,634-square-foot training building (AFRC), a 14,600-square-foot multi-use classroom, a 7,302-square-foot Organized Maintenance Shop (OMS), and a 3,113-square-foot unheated storage (UHS) building were included in the RFP package. The center accommodates training and mobilization, and provides for the storage, inspection, maintenance, and repair of combat and tactical vehicles and equipment.

Years with Baker: 7

Years with Other Firms: 17

#### Education

B.Arch., 1990, Architecture, University of Cincinnati

Certificate, 1988, Architecture, Ecole d'Art Americaines - Ecole des Beaux Arts

#### Licenses/Certifications

Registered Architect, West Virginia, 2011

NCARB, 1999

Registered Architect, Pennsylvania, 2001

associated with the regional deployment of Vermont Army National Guard and Army Reserve units. RFP development consisted of conducting a design charrette; providing a topographical survey and geotechnical investigation; performing a utility survey; developing conceptual site plans, floor plans, and building elevations; developing RFP specifications; preparing DD Form 1354 – Transfer of Real Property; and providing a PACES construction cost estimate.

**General Architect and Engineering Services Contract, U.S. and Its Territories. *U.S. Coast Guard, CEU Cleveland.*** Director. Responsible for design/technical quality and project execution provided by the architectural and interior design staff. Role also included interdisciplinary technical reviews for all design/construction documents. Baker is providing services under a U.S. Department of Homeland Security \$50 million, 10-year indefinite delivery-indefinite quantity general architect and engineering contract for work at U.S. Coast Guard facilities within the 50 U.S. states and territories. The scope of the contract includes modifications and renovations to existing structures as well as new construction. Facility types and applications include space planning, light commercial buildings and their mechanical and electrical systems, site utilities, waterfront facilities, dredging, structural inspections, and runways.

**Design of U.S. Army Reserve Center Renovation and Expansion, Homewood, Illinois. *U.S. Army Corps of Engineers, Louisville District.*** Director. Responsible for design/technical quality and project execution provided by the architectural and interior design staff. Role also included interdisciplinary technical reviews for all design/construction documents. As designer of record, Baker provided architectural and engineering services for the renovation and expansion of a 400-member U.S. Army Reserve Center to provide a 60,374-square-foot Training Building, including an approximately 3,500-square-foot Unheated Storage Building. The project also includes construction of a 22,300-square-foot parking area for military equipment, and 130 parking spaces for privately owned vehicles. Tasks were performed under an indefinite quantity-indefinite delivery engineering agreement. Baker designed the training facility to meet LEED® Silver certification. Baker's services included architectural design, surveys, environmental and geotechnical investigation, all site and building engineering, cost estimating, value engineering, and LEED® certification administration.

**Unit Operations Facilities, SATOC TO #4, Fort Bliss, El Paso, Texas. *U.S. Army Corps of Engineers, Tulsa District.*** Director. Responsible for design/technical quality and project execution provided by the architectural and interior design staff. Role also included interdisciplinary technical reviews for all design/construction documents. Projects constructed under this task order include Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF). TEMFs provide facilities for the purpose of maintaining and repairing vehicles, complete with equipment and parts storage, and administrative offices. Task Order No. 0004 was for the design-build delivery of a medium-sized, 32,290-square-foot TEMF, a 6,300-square-foot Organizational (Deployment) Storage facility, a 540-square-foot oil storage facility, and a 540-square-foot building for hazardous materials storage. Facility designs are required to meet or exceed a Silver LEED® certification.

**Blennerhassett Island Bridge, Appalachian Corridor D, Washington County, Ohio, and Wood County, West Virginia. *West Virginia Department of Transportation, Division of Highways.*** Architect. Responsible for the design of a conceptual tower/beacon woven into the proposed bridge span over the Ohio River at historic Blennerhassett Island. Baker provided engineering services for the Blennerhassett Island Bridge; the "missing link" final segment of Appalachian Highway Corridor D. Baker's services included project management, environmental engineering and location studies, permitting, preliminary and final design, and construction services for this network tied-arch bridge that carries U.S. 50 over the Ohio River. The bridge is 100 feet, six inches wide, and the total length of the structure is 4,008 feet, nine inches. It has an 878-foot, six-inch-long main span with a rise of 175 feet.

**Laura Cox, PLA, ASLA,  
LEED Green Associate  
Landscape Architect/Planner**

**General Qualifications**

Ms. Cox is a Registered Landscape Architect with over 30 years of experience in the fields of landscape architecture and land planning. She has knowledge of all phases of design from site analysis and conceptual planning through construction documentation, permitting and administration. Her design experience includes large scale site preparation and grading, drainage analysis, storm water conveyance and detention, and utility and infrastructure design.

Ms. Cox has an extensive background in site and land use planning for counties and municipalities including, feasibility studies, review and evaluation of preliminary and final subdivision plans, special exceptions, rezoning applications, yield studies, special use permits and client representation at public hearings and meetings with civic groups.

**Experience**

**Technical Assistance to Caroline County for Implementation of UDA Requirements.** *Virginia Department of Transportation.* Project Planner.

Assisted with conducting or reviewing all aspects of technical analysis to develop Comprehensive Plan, Zoning and Subdivision Ordinance revisions to bring the County into compliance with the Urban Development Area requirements. Baker was also responsible for completing technical memo outlining the transportation demand reductions the UDA developments will bring to the County and VDOT

**Marshall University 2012 Master Plan.** Michael Baker Jr. Incorporated is currently involved with Smith Group JJR and a team of specialized firms to provide a comprehensive Campus Master Plan for Marshall University. The Master Plan will provide a framework for long- and short-term planning that is clear and flexible – responding to changing needs and conditions as the University continues to evolve. Ms. Cox is part of the Baker Team which is working on various portions of the plan including: Transportation Planning, Existing Building Assessment, Utility infrastructure, Community Involvement and Site / Civil Support. The Master Plan is scheduled for completion in December of 2013.

**KYOVA Long Range Transportation Plan.** Laura worked with the Baker team on area wide land use topology and growth pattern documents for the plan update. She also participated in a design charrette held in Huntington where various redevelopment and streetscape improvement scenarios including such criteria as ADA compliance were explored as well as methodologies to accommodate the needs of the City of Huntington and Marshall University.

**Years with Baker: 8**

**Years with Other Firms: 27**

**Education**

B.S., 1978, Landscape Architecture, West Virginia University

Certificate, 1995, Computer Aided Drafting, Putnam County Technical Center

**Licenses/Certifications**

Landscape Architect, Virginia, 1987

NICET III Transportation-Highway Construction, West Virginia, 1983

Registered Landscape Architect, West Virginia, 2008

Licensed Landscape Architect, New Jersey, 2010

**WV AIA Livable Communities Committee.** Laura currently serves as the chairman of this community which assists West Virginia communities to realize their dreams of downtown revitalization by beginning the process of identifying their needs and assessing design possibilities. They are currently working on a plan for an overlay district in Parkersburg. Streetscape improvement recommendations will include creation of ADA compliant crosswalks and curb ramps.

**West Virginia Capitol Complex Master Plan, Charleston, West Virginia.** *WV Department of Administration.* Project Planner, Ms. Cox assisted in providing the State of West Virginia General Services Division a comprehensive campus-wide master plan for the 55+ acre state capitol campus. Ms. Cox was part of the Baker Team which worked in conjunction with the owner and a team of specialized consultants providing planning elements including master planning, public involvement, document management, facilities planning, and document preparation. Ms. Cox also performed a campus level ADA Compliance report with recommendations on necessary upgrades.

**Parsons City-Wide Comprehensive Parks and Recreation Master Plan, Parsons, West Virginia.** *Parsons Park Board, Inc.* Landscape Architect. Assisted in the plan preparation and public outreach for this project. Baker prepared a Master Plan of improvements and recommendations for existing and proposed parks and recreation amenities for the City of Parsons, WV. The City, over time, had acquired many parcels of FEMA-condemned properties due to the flood-prone topography of Parsons; in an effort to properly manage existing facilities, yet prepare for the future of the additional facilities scattered throughout the community, this master planning effort was begun. Through a series of public meetings and stakeholder meetings, a final plan was developed with recommendations for ball fields, hiking and biking trails, recreation center, miniature golf course, play structures, picnic facilities, ADA-compliant fishing access, interpretive signage, and landscaping improvements for existing and new park areas.

**Ararat River Restoration, Greenway, and Parks Project, Mount Airy, North Carolina.** *City of Mount Airy, North Carolina.* Landscape Architect. Assisted in the preparation of construction documents and provided construction administration and construction inspection for three (3) parks along the Ararat River in North Carolina. Baker prepared construction documents and construction administration and inspection services for three parks along the Ararat River in North Carolina: the first park, Riverside Park, includes basketball courts, playground structures, parking areas, a premier soccer field, picnic shelters, nature trails, canoe launch facility, restrooms, fencing, signage and landscaping. Rowe Environmental Park will showcase environmental issues in the park design and construction including an outdoor amphitheater/classroom, picnic facilities, nature trails, parking area, pedestrian bridge to nearby middle school, fishing access and canoe launch facility. The final park, Tharrington Park, includes a premier soccer field, additional soccer fields to create a soccer complex, access road and parking, fitness trail, restroom facility, concessions, and maintenance building.

**US 33 Streetscape Improvement Project - Phase II, Mason, West Virginia.** *Town of Mason.* Landscape Architect. Assisted in the preparation of construction documents. Baker performed complete detailed design, construction document preparation and construction management services for new sidewalks and storm sewer improvements the Mason Phase II Streetscape Project. The improvements included concrete sidewalks with integral concrete curbs, driveway curb cuts, ADA accessible curb ramps with truncated domes, ladder-style crosswalks, storm sewer improvements, benches and trash receptacles. Baker provided construction administration and inspection services.

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## **David J. Hilliard, P.E., LEED® AP**

### **Mechanical/Electrical/Plumbing Engineer**

#### **General Qualifications**

Mr. Hilliard has a wide range of "hands on" design, engineering, and construction experience. From his beginnings as a carpenter he has expanded his professional abilities to a senior engineer for Baker. His recent design experience has included the design of new campus water lines and other service utilities at West Virginia State University, the complex mechanical design of such projects as a large Charleston, West Virginia hospital, a Bus Maintenance Garage and office building for the West Virginia Department of Transportation, an Army National Guard Armory HVAC/Electrical renovation, Master Planning and engineering at the West Virginia Capitol Complex including plumbing renovation design on the historic State Capitol Building. His resume covers over 30 years of real world work in engineering, design, fabrication and construction in the mechanical, electrical and general trades.

Over the years, while practicing his profession, Mr. Hilliard continued his education by studying mathematics, civil and mechanical engineering, finally taking degrees in both mathematics and mechanical engineering. He has continued his professional development through his involvement with ASME, ASHRAE, ASPE, USGBC, and other pertinent organizations

#### **Experience**

**West Virginia State University - Open-End Architectural/Engineering Services, Institute, West Virginia.** 10 year IDIQ. Mechanical/Electrical and Plumbing Designer and Engineer of Record for on demand projects at West Virginia State University. Some recent tasks have included programming, planning, design development, construction documentation, systems evaluations, and feasibility studies and cost estimating. Mapping, evaluation and design services for storm and sewer line systems, a campus wide domestic water loop system design, football field upgrades and overall facility maintenance support as requested by the University. He has also been involved with the development and acquisition of WVDEP permits for both MS4 and Air Perming.

**Little Kanawha Bus, Calhoun County, West Virginia. WV Division of Public Transit.** Mechanical Engineer. Responsible for the Mechanical, Electrical and Plumbing Design, MEP Document Preparation, and Construction Administration for a new bus maintenance and office facility for Gilmer County. Duties include the design of the vehicle storage, cleaning and maintenance mechanical systems, as well as oil pumping and collection systems. The design of an energy efficient HVAC system for the entire building is also part of his responsibilities. The facility was designed as a LEED® project.

**Years with Michael Baker: 6**

**Years with Other Firms: 20**

#### **Degrees**

B.S.M.E., 2005, Mechanical Engineering, West Virginia University Institute of Technology

B.S., 2002, Mathematics and Science, West Virginia State College

#### **Licenses/Certifications**

Professional Engineer, West Virginia 2011

LEED AP, bd+c, 2010

#### **Professional Affiliations**

American Society of Plumbing Engineers

American Society of Heating, Refrigerating, and Air-Conditioning Engineers

American Society of Mechanical Engineers

**Good News Mountaineer Garage, Charleston, West Virginia.** Mechanical Engineer. Responsible for the Mechanical, Electrical and Plumbing Design, MEP Document Preparation, and Construction Administration for newly renovated Auto Repair garage and administrative office facility for this non-profit organization. The Good News Mountaineer Garage accepts donations of vehicles that are repairable for a reasonable amount of money. These donated cars are then distributed to families with low incomes for transportation to work.

**West Virginia State Capitol Restroom Renovations.** *State of WV General Services Division.* Mechanical Electrical and Plumbing Engineer. Mr. Hilliard provided the State of West Virginia General Services Division a comprehensive MEP plan for the renovation and renovation of the 33 restrooms of the West Virginia State Capitol Building. He helped provide design, construction sequence, and scheduling recommendations. And will provide Construction Administration during construction

**Army National Guard Headquarters Renovations, Charleston, West Virginia.** *State Army National Guard Headquarters.* Mechanical Engineer. Responsible for all mechanical design oversight and construction management. Baker performed complete planning, design, and construction management services for renovations to the Office of the Adjutant General at the State Army National Guard Headquarters in Charleston, West Virginia. Project elements included a complete renovation and replacement of the HVAC system with a Loop Heat Pumps, new acoustical ceilings, flooring, energy-saving light fixtures, several new wall partitions, new interior doors and hardware, new wall finishes and asbestos removal. Baker provided Construction Administration and inspection services as well as periodic site review during construction.

**Advanced Individual Training Barracks and Company Operations Facility, Fort Gordon, Richmond, Jefferson, McDuffie, and Columbia Counties, Georgia.** *U.S. Army Corps of Engineers, Fort Worth District.* Mechanical Engineer. Responsible for exhaust & outdoor air system review and development. Baker served as the designer of record for the design-build for a new, design-build, 93,000-gross-square-foot advanced individual training barracks and a three-story training barracks that is designed to house 300 single soldier trainees. The facility is designed to meet achieve Gold LEED® rating. Baker's services included architectural, engineering, landscape, and interior design services.

#### **Other pertinent experience**

**Heart and Vascular Center - CAMC Memorial Hospital, Kanawha City, West Virginia.** Mechanical Engineer. Performed design calculations, layout of Plumbing, HVAC ductwork, piping and components for three floors of the Clinical Teaching Center; Lobby, Cath Labs and patient rooms. This work was all done in affiliation with BSA Life Structures

**Fairmont State University, Student Activities Center; Fairmont West Virginia.** For this project, Mr. Hilliard worked on the HVAC Design, coordination and construction of the student recreation center for Fairmont State. The HVAC systems included large packaged rooftop units with VAV zone control, a pool area with fabric duct system, locker room exhaust, exposed spiral ductwork in exercise and gym areas and a building smoke evacuation system.

**Ashland Community and Technical College; Ashland, Kentucky.** Mr. Hilliard worked on Design Evaluation and Coordination of the Medium Pressure VAV Mechanical System. He prepared shop drawings and coordination drawings. His duties also included Construction Administration.

**Mountain State University School of Business and Applied Technologies; Beckley West Virginia.** Mr. Hilliard worked on Design Evaluation and Coordination of the Mechanical System. He prepared shop drawings and coordinated construction.

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## Owen Milligan, P.E.

### *Electrical Engineering Manager*

#### **General Qualifications**

Mr. Milligan is an electrical engineer who is experienced working with consulting engineering firms in the study and design of electric distribution and control systems, emergency power for process plants and facilities, water/wastewater treatment plants, government and commercial projects, ASHRAE energy-efficient building design, coordination with vendor and contractors, and approval of vendor drawings. He has a strong knowledge of distribution equipment and designs, motor control center layouts and design, and start-up and services during construction. He is capable of handling multiple projects from conception to final design, working as a team member toward meeting project goals. His work includes management of Baker's electrical engineering department, supervising and providing technical advice to designers and coordinating design and construction work with engineers, contractors, vendors, and clients.

#### **Experience**

**Design/Bulld SATOC for Military Facilities in the Southwest Region, Various Locations in Southwestern U.S., AR, AZ, CA, LA, NM, NV, OK, TX.** *U.S. Army Corps of Engineers, Tulsa District.* Electrical Engineer. Provided design assistance to the electrical engineering subconsultant, and performed a technical quality review of the construction documents for the TEMFs located at Fort Bliss. Electrical systems included lighting, lightning protection and grounding, power distribution, telecommunications, fire alarm, and unique voltage and frequency requirements. Designs were required to meet UFC and military design standards. Projects constructed under this contract include Brigade Combat Team (BCT) Tactical Equipment Maintenance Facilities (TEMF). TEMFs provide facilities for the purpose of maintaining and repairing vehicles, complete with equipment and parts storage, and administrative offices. Task orders awarded to date include the following: Two TEMFs at Fort Bliss in El Paso, Texas to be shared by five Battalions and one Company; and a Unit Operations Facilities consisting of a TEMF and an Organizational (Deployment) Storage facility, at Fort Bliss in El Paso, Texas. Facility designs are required to meet or exceed a Silver LEED® certification.

**On-Call Multi-Discipline Services, Pittsburgh International, and Allegheny County Airports (PIT/AGC), Pittsburgh, Pennsylvania.** *Allegheny County Airport Authority.* Technical Advisor. Provided technical direction to electrical design staff and performed a technical quality review of the construction documents. Designs were required to meet NEC standards. Since 1989, Baker has provided multidiscipline, on-call services to the Allegheny County Airport Authority (ACAA). The ACAA owns and operates Pittsburgh International Airport (PIT) and Allegheny County Airport (AGC). Baker acted as an extension to the ACAA's staff, providing the depth of resources and experience of the entire company when called upon by the ACAA. Baker provided a full range of services to ACAA on an "On-Call/As-Needed" basis, including architecture, civil, structural, mechanical, electrical and environmental engineering, general engineering administration, construction support, and other areas.

**Years with Michael Baker: 7**

**Years with Other Firms: 20**

#### **Degrees**

B.S., 1988, Electrical Engineering,  
Gannon University

Computer Aided Drafting, Putnam  
County Technical Center, 1995

#### **Licenses/Certifications**

Professional Engineer, California,  
2003

Professional Engineer,  
Pennsylvania, 1999

Professional Engineer, Montana,  
2001

Professional Engineer, Kentucky,  
2005

Professional Engineer, Oklahoma,  
2008



**Rescue Swimmer Training Facility, U.S. Coast Guard Support Center, Elizabeth City, North Carolina. *U.S. Coast Guard, Facilities Design & Construction Center Atlantic.*** QA/QC. Performed a technical quality review of the electrical design for this building renovation project, including lighting and electrical receptacles. Baker prepared Design/Build RFP Documents for a new Rescue Swimmer Training Facility (RSTF) for the Aviation Technical Training Center (ATTC), a tenant of and located on the SC Elizabeth City, NC. The \$13.3 million RSTF is a dedicated aquatic trainer for the purpose of supporting the Aviation Survival Technician (AST) School and recurrent water survival training requirements. Sized appropriately for the curriculum and student loading, the RSTF contained elevated platforms, pool temperature controls, adequate wet and dry storage, male and female locker/shower facilities, classrooms, and office space.

**Gymnasium Locker Room Rehabilitation, USCG Training Center Cape May, New Jersey. *U.S. Coast Guard.*** QA/QC. Performed a technical quality review of the electrical design for this building renovation project, including lighting and electrical receptacles. Baker prepared the design, construction documents, and cost estimate for the interior rehabilitation of an existing facility to combine two women's locker rooms into one large room.

**Relocation and Improvements to the Front Gate, USCG Training Center Cape May, New Jersey. *U.S. Coast Guard.*** QA/QC. Performed a technical quality review of the electrical design for this building renovation project, including lighting and electrical receptacles.

**Route 52, Contract - "B", Somers Point & Ocean City, New Jersey. *New Jersey Department of Transportation.*** Electrical Engineer. Responsible for the electrical systems design to meet NEC standards for a new Visitor's Center, bridge and site lighting, power distribution, and a supplemental photovoltaic solar system.

#### **Non-Baker Project Experience**

**Siemens Government Services, Inc (formerly SD Engineers), Pittsburgh, Pennsylvania.** Senior Electrical Project Engineer. Responsibilities included Senior Electrical Engineer in charge of all electrical work at the Department of Energy's Naval Reactor Facility in West Mifflin, Pennsylvania. Duties included complete electrical design including multiple new office building designs and construction, light industrial type facilities for confidential DOE projects, retrofitting and relocation of existing laboratories, power studies, arc flash calculations, and site power distribution.

**Chester Engineers / US Filter Corporation, Pittsburgh, Pennsylvania.** Electrical Project Engineer. Responsibilities included the following:

- Lead electrical engineer for multiple site water and wastewater treatment projects for a large automobile manufacturer.
- Lead electrical engineer for design of water treatment plants for several large steel manufacturers.
- Lead electrical engineer on design of numerous remote cellular telephone communication sites for a large, wireless Telecommunications Company.
- Assisted a Senior Electrical Engineer on a Short Circuit and Coordination Study using CAPTOR/DAPPER analysis program.
- Responsible for several large detailed constructions cost estimates.
- Lead Electrical Engineer to many local municipalities for wastewater and water pumping/filtration upgrades.

## Wayne Airgood, P.E.

### Structural Engineer

#### General Qualifications

Mr. Airgood is a practicing structural engineer with experience in the design of commercial, institutional, light industrial building structure, and foundation systems.

#### Experience

**Design of Central Issue Facility, Fort McCoy, Wisconsin. U.S. Army Corps of Engineers, Louisville District.** Mr. Airgood was the senior structural engineer of record responsible for design of the building structure and foundation systems from concept through construction of an approximate 62,553-square-foot large-sized Central Issue Facility (CIF) to expedite the shipping and receiving, distribution, processing, and exchange of soldier equipment. The structural system consisted of steel joist and girder framing supported by interior steel columns and exterior precast, insulated concrete load-bearing walls. Foundations were soil supported, isolated and continuous, reinforced spread footings.

**Container-Loading Facility Design, Fort McCoy, Wisconsin. U.S. Army Corps of Engineers, Louisville District.** Mr. Airgood was the senior structural engineer of record responsible for the design of a clear span steel roof framing system to achieve column-free interior warehouse space of a 30,862-square-foot Container-Loading Facility. Roof framing system is supported by interior steel columns and exterior precast, insulated concrete load-bearing walls. Foundations were soil supported, isolated and continuous, reinforced spread footings.

**Montgomery County Public Schools Foodservices Facility. Montgomery County, Department of General Services.** Mr. Airgood was the senior structural engineer of record responsible for the development and design of structural framing and foundation systems for 70,000-square-foot food production, warehouse and distribution facility. His responsibilities included coordination with owner/user and other engineering disciplines throughout design, performing and overseeing of production structural design calculations and documents and construction administration services such as review of structural product submittals and periodic site visits.

**West Haven Commuter Rail Station Engineering Design, West Haven, Connecticut. Connecticut Department of Transportation.** Mr. Airgood was the senior structural engineer responsible for the structural framing and foundation design of a two story passenger train station building. The station building featured a two story, glass curtain wall enclosed passenger waiting area with exposed to view curved roof structure. The design also included a 75 foot span, glass curtain wall enclosed pedestrian bridge spanning over the four rail line track bed to connect the station building with a new two story stair and elevator tower. His responsibilities included coordination with engineering and architectural disciplines during design, performing and overseeing of production structural design calculations and documents, and review of fabrication shop drawings and other construction administration services as related to the building structural systems.

Years with Michael Baker: 8

Years with Other Firms: 23

#### Degrees

B.S.C.E., 1984, Structural Engineering, Geneva College

#### Licenses/Certifications

Professional Engineer, Pennsylvania, 1999, [REDACTED]

Professional Engineer, Maryland, 2013, [REDACTED]

Professional Engineer, North Carolina, 2014, [REDACTED]

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**Penn Hills Operations Center Addition, Penn Hills, Pennsylvania.** *Duquesne Light Company.* Mr. Airgood was the senior structural engineer of record responsible for the development, design, and detailing of a load bearing masonry wall and steel framing addition to an existing facility.

**Design-Build Tactical Equipment Maintenance Facilities, 31st ADA Brigade, Fort Sill, Oklahoma.** *U.S. Army Corps of Engineers, Tulsa District.* Mr. Airgood was the senior structural engineer responsible for the design of the foundation systems to support an 18,000-square-foot, 35,200-square-foot, and 57,031-square-foot pre-engineered steel Tactical Equipment Maintenance Facilities (TEMF), and a 20,000-square-foot Supply Support Activity facility supply support activity warehouse (SSA). Because of existing expansive soil conditions, the ground floors of each building were designed as reinforced concrete floor systems with a void space between the expansive soil and floors. The concrete floor system and PEMB structural columns were supported by a deep foundation system of drilled concrete piers extending to rock. His responsibilities included review of structural fabrication drawings, attending design coordination meetings and periodic site visits during construction.

**Buildings 200 & 250 of Imperial Business Park, Imperial, Pennsylvania.** Mr. Airgood was the lead structural engineer responsible for the development and design of the structure and foundation systems for two, 250,000-square-foot warehouse facilities. Responsibilities also included construction administration services such as review of structural product submittals and periodic site visits. Each building consisted of steel joist and joist girder roof framing supported by interior steel columns and exterior precast concrete bearing and shear walls. Foundations were soil supported, isolated and continuous, reinforced spread footings.

**ABB Manufacturing and Office Facility, Mt. Pleasant, Pennsylvania.** Mr. Airgood was the lead structural engineer of a high-bay manufacturing, testing and warehouse facility for electric transformer equipment, including an attached two-story office area. The structural systems consisted of precast concrete wall panels enclosing a steel framed interior column and roof structure, including the support of numerous under-hung crane systems throughout the facility ranging from 5- to 20-ton capacities. The lateral framing system was a combination of steel braced and moment frames, and foundations were soil supported isolated and continuous, reinforced spread footings.

**Fuel Cell Facility, Pittsburgh, Pennsylvania.** *Siemens Westinghouse.* Mr. Airgood was the lead structural engineer of a high-bay manufacturing facility, warehouse and two-story attached office area. The structural systems consisted of precast concrete wall panels enclosing a steel framed interior column and roof structure. The lateral framing system was a combination of steel braced and moment frames, and the structural design included support of various top running bridge crane systems ranging from 10- to 40-ton capacities. The foundations were soil supported isolated and continuous, reinforced spread footings.

# APPENDIX 2 - Project Profiles



**Michael Baker**  
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## District II Metro Police Station and Training Facility

*Fairfax County, Virginia*

Michael Baker provided architectural and engineering design services for the District II substation and training facility for the Metro Transit Police Department. Michael Baker's services included architecture; interior design; landscape architecture; civil, geotechnical, structural, mechanical, electrical, and plumbing engineering; fire protection design, and sustainable design.

The facilities consist of a 22,515-square-foot, three-story, steel-framed administration and police station building with police and detective offices, training facilities, rest and locker rooms, and crime deterrent and analysis facilities, and a 31,337-square-foot, one-story training facility providing target ranges to accommodate 16 simultaneous users, weapons cleaning, training rooms, support spaces, ammunition storage rest rooms and offices.

This facility is a precast concrete structure with a partial second floor mechanical room. The facility also includes surface parking for up to 185 vehicles. The facilities were designed to achieve LEED® Silver 3.0.

The firing range, a first of its kind for the department, features two firing ranges with 12 lanes each. The range training facility is an important addition to the department because it provides a dedicated range facility for officers to receive instruction and training without having to use the resources of other law enforcement agencies.

The complex is located on 26 acres and replaces another police facility. About 140 officers and support personnel are assigned to the new facility, and cover a patrol service area that includes several Metrorail lines and bus routes, three rail yards, and three bus garages.

The project required permitting approvals from the Fairfax County department of planning and zoning and department of public works and environmental services. The facility site has been zoned as "Medium Intensity Industrial District (I-4)," per special permit uses, in accordance with the Fairfax County zoning ordinance. The project was subject to special exception review pursuant to Section 904 of Article 9 of the Fairfax County zone code, which regulates land uses. The project is subject to Commonwealth of Virginia Code Section 15.2-2232, which regulates the development of public use facilities and adoption into the county's comprehensive plan.

On December 19, 2014, the Metro Transit Police dedicated the facility to Officer Harry Davis, Jr., the department's first officer to be lost in the line of duty. Officer Davis was mortally wounded on December 20, 1993, while investigating a suspicious vehicle near the Landover Metrorail Station. The new station will serve as a permanent memorial to Officer Davis.

**Client**

Washington Metropolitan Area  
Transit Authority  
600 Fifth Street, NW  
Washington, D.C. 20001

**Completion Date**

2015

**Michael Baker's Role**

- Architecture
- Interior design
- Landscape architecture
- Civil engineering
- Geotechnical engineering
- Structural engineering
- Mechanical engineering
- Electrical engineering
- Plumbing design
- Fire protection design
- Sustainable design

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## FirstNet SLIGP Services

### *Statewide, Kentucky*

Michael Baker is providing State and Local Implementation Grant Program (SLIGP) planning services to facilitate design of the Commonwealth Public Safety Radio Access Network (RAN) adhering to nationwide interoperability specifications to assure integration into the National Public Safety Broadband Network (NPSBN).

The Middle Class Tax Relief and Job Creation Act of 2012 created the First Responder Network Authority (FirstNet) with a mission to build, operate, and maintain the first high-speed, nationwide wireless broadband network dedicated to public safety. The NPSBN will be a single interoperable platform for emergency and daily public safety communications. Under the FirstNet SLIGP, the Kentucky State Police (KSP), together with the Kentucky Wireless Interoperability Executive Committee (KWIEC) and the Public Safety Broadband Working Group (PSBWG), is working to develop and implement a plan of action to determine the most efficient and effective way to utilize and integrate the NPSBN. The plan must satisfy the commonwealth's wireless communications and data services needs and provide input for improvement of FirstNet's network offering to the Commonwealth.

The NPSBN will utilize fourth generation commercial Long Term Evolution (LTE) cellular technology and comprise multiple RANs deployed in each state and a common management and switching component (Core).

As part of the planning process, Michael Baker will work with the KSP to perform the following tasks:

- Research and develop a stakeholder entity list that identifies NPSBN stakeholders and potential users
- Review and update the public safety governance and organization structure as necessary to establish and manage the NPSBN needs of the Commonwealth
- Prepare materials and conduct educational and outreach sessions for all stakeholders and potential NPSBN participants
- Gather and compile stakeholder NPSBN requirements
- Collect potential infrastructure assets data that can be used in deployment of the NPSBN
- Develop business plans for the Commonwealth and local constituent stakeholder entities
- Prepare for and support consultation and negotiations between FirstNet and the Commonwealth

#### *Client*

Kentucky State Police - HQ  
Communications and Computer  
Technology Branch  
94 Airport Road  
Frankfort, Kentucky 40601

#### *Completion Date*

Estimated: 2016

#### *Michael Baker's Role*

- Project management
- Research and planning
- Outreach and education
- Requirements gathering
- Data collection, aggregation and analysis
- Business plan development
- FirstNet consultation preparation and support
- GIS database development
- Website development
- Map application development and analysis



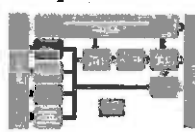
**Why FirstNet**



**LTE Technology**



**Kentucky SLIGP Work Plan**



This resource was prepared by the Kentucky State Police using funds under award #14-AT0021 from the National Communications and Emergency Coordination Center (NCECC), U.S. Department of Homeland Security. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of the NCECC, DHS, or FirstNet.

**GET INVOLVED**

**Available Events:**

- Information packages are being prepared for county emergency management, police, fire and EMS. They will be available soon to county managers in the month of July. If there is any change in your email address, please call SGP. Please go to 7170 for more information or for phone numbers.

**May 2014 Outreach and Education Workshop**

- May 2014 Outreach and Education Workshop Presentation

**Webinars:**

- Outgoing Public Safety Guide Systems and Facilities
- Exploring Business Tools for Leveraging Assets

**IN THE NEWS**

**June 25 Local Control Aided in Proposed FirstNet LTE System**





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# Good News Mountaineer Garage Administrative and Maintenance Facility

Charleston, WV

Baker provided general Architectural and Engineering services to the Good News Mountaineer Garage (GNMG). The facility is located on the west side of Charleston, West Virginia. The Good News Mountaineer Garage is a nonprofit organization that accepts donations of vehicles that are repairable for a reasonable amount of money. After repair, these donated cars are then distributed to low-income families needing dependable transportation.

The GNMG selected Baker to provide complete design and construction administration services in three phases. The first phase was to renovate the interior of the building on 4<sup>th</sup> Avenue in order to provide facilities for the automobile repair and administrative staff. Phase II included the build-out of a show room and Phase III was dedicated to the exterior of the building including vehicle storage and special event areas. Parking for some repaired vehicles and employee vehicles was provided east side of the building. The site is approximately 0.75 acres. The main facility has approximately 7,500 square feet of space of which 4,700 square feet, houses four administrative offices, a board room, a copier/supply room, restrooms and a large show room /event center which can accommodate up to approximately 75 individuals. The remaining 2,100 square feet is dedicated to the automotive repair functions. The garage includes two new vehicle lifts and overhead parts storage. The building was designed so that the vehicles can pull through the garage while the lifts are being used. Baker incorporated green building practices, including passive solar tube lighting in the showroom and maintenance garage. LED lighting was also used in order to help control utility costs for the operation of the facility.

#### Client

Good News Mountaineer Garage  
1637 4<sup>th</sup> Avenue  
Charleston, WV 25387

*Ms. Asley Orr,  
Executive Director  
304-344-8445*

#### Completion Date

March, 2016

#### Baker's Role

- Architecture
- Civil Engineering
- MEP Engineering
- Landscape architecture
- Structural Engineering
- Bid Phase Services
- Construction Management
- Estimating



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## Replacement of District 6 Maintenance Facility and Three State Police Stations

*New Jersey*

Michael Baker provided supervision of construction services for replacement of the maintenance building at Turnpike District 6 Yard and construction of Troop "D" Newark, Moorestown, and Galloway State Police Stations.

The State Police Stations were brought up to contemporary law enforcement agency standards to meet today's requirements and future needs, including the addition of fitness room and locker room facilities for female troopers. The upgrades also include expansion of parking; new underground motor fuel tanks; and new utility services, including emergency generators and a helipad at Moorestown. The new District 6 Maintenance Yard provides updated equipment, expanded capabilities, and contemporary amenities for Turnpike Maintenance personnel to replace the overcrowded and obsolete facility.

Michael Baker provided inspection staff, daily coordination, and negotiations with contractors; electronic document control; change order review and analysis; safety and incident management; meetings facilitation; and claims avoidance/resolution.

### *Client*

New Jersey Turnpike Authority  
P.O. Box 5042  
581 Main Street  
Woodbridge, New Jersey 07095-  
5042

### *Completion Date*

Estimated: 2016

### *Michael Baker's Role*

- Construction inspection
- Electronic document control
- Safety and incident management
- Meetings facilitation
- Claims avoidance/resolution

## Coonskin Park Maintenance Facility

Kanawha County, WV

Baker provided general Architectural and Engineering services to the West Virginia Army National Guard on behalf of the Kanawha County Parks and Recreation Commission at Coonskin Park in Charleston. The new maintenance and storage facility was built to relocate existing maintenance and storage services interrupted by the new bridge and entrance to Coonskin Park.

The West Virginia Army National Guard selected Baker to provide complete design and construction administration services. The project included the design of a pre-engineered metal building and the corresponding utility infrastructure. It was sited on the available property to allow for future expansion. The site is approximately 3.5 acres. The facility has approximately 6,000 square feet of which 4,500 square feet house maintenance garage functions for the park. The remaining 1,500 square feet is dedicated to future locker/shower rooms for the adjacent soccer field. The garage has four automatic garage doors, two with drive-through capabilities. A restroom is included on the maintenance side, with roughed-in plumbing for the future shower/locker rooms.

This facility is the temporary home for park equipment and maintenance staff until the new park access bridge, entrance and new park maintenance complex is completed. The building is then planned to become part of the soccer complex.

### Client

West Virginia Army National Guard  
1707 Coonskin Drive  
Charleston, WV 25311

*LTC David P. Shafer*  
*Construction and Facilities*  
*Management Office*

*Todd Reynolds, Project Manager*

### Completion Date

October 2014

### Baker's Role

- Architecture
- Civil Engineering
- Mechanical Engineering
- Electrical Engineering
- Landscape architecture
- Structural Engineering
- Bid Phase Services
- Construction Inspection



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# Little Kanawha Bus Administrative and Maintenance Facility

*Grantsville, West Virginia*

Baker provided general Architectural and Engineering services to the West Virginia Division of Public Transit for the Little Kanawha Administrative/Maintenance Facility located in Grantsville, West Virginia.

The WV Division of Public Transit selected Baker to provide complete design and construction administration services to include the construction of a pre-engineered metal and brick building, sited on the available property allowing for future expansion needs. Parking for the buses and employee vehicles will surround the building. The site is approximately 4.55 acres.

The operations facility has approximately 10,000 square feet of which 4,500 square feet houses five offices, a conference room, and money counting room, office storage space, copier and supply room, and a driver training room that accommodates approximately 25 individuals. The remaining 5,500 square feet is dedicated to the maintenance functions and includes a Wash Water Reclaim System. The building is provided with selective stand-by electrical power from a 50 KW natural gas generator with an automatic switch gear system. The garage structural roof the overall eave height will be about 18 feet. This area also includes space for indoor bus storage for approximately seven (7) vehicles. The building is designed so that the vehicles can pull through the facility. The building was designed to employ green building practices, but was not LEED (Leadership in Energy & Environmental Design) Certified.

## **Client**

State of West Virginia  
Department of Transportation  
Division of Public transit  
Building 5, Room 906  
1900 Kanawha Blvd., East  
Charleston, WV 25305-0432

## **Contract Completion Date**

2013

## **Baker's Role**

- Architecture
- Renovation design
- Feasibility studies
- Cost estimates
- Civil engineering
- Surveying
- MEP engineering
- Structural engineering
- Environmental Permitting



## APPENDIX 3 - References



Michael Baker  
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Each of the Project Profiles found in Appendix 3 lists Baker's client and contact information for your use as a reference. Additionally, we offer the following diverse list of past or current clients and contact information:

- **130<sup>th</sup> Airlift Wing West Virginia Air National Guard**  
1679 Coonskin Drive, Unit 18  
Charleston, WV 25311-5005  
*Captain Harry Netzer, P.E., Deputy Base Civil Engineer*  
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