

November 11, 2016

Attn:

Jessica S. Chambers  
Department of Administration, Purchasing Division  
2019 Washington Street East  
Charleston, WV 25305-0130

Subject:

EOI: City of Wheeling Landfill Closure Cap Design  
CEOI 0313 DEPI700000002

Dear Ms. Chambers:

I am pleased to submit the enclosed package for the above referenced project.

TERRADON proposes the following qualifications for engineering and design services for the City of Wheeling Landfill Closure. The included package details TERRADON's qualifications, expertise, management and staffing capabilities, prior experience related to the proposed project, and required documentation for consideration.

Sam Wilkes, MS, LRS, PWS, will serve as Project Manager and John James, PE. Both Wilkes and John James, PE will be the Lead Engineer. Wilkes and James have worked on numerous WVDEP projects of similar natures.

Upon your review of the enclosed, please do not hesitate to contact me at 304-755-8291 with any questions or concerns. I look forward to hearing from you soon.

Sincerely,



Ryan Wheeler  
TERRADON Corporation

11/14/16 15:27:52  
WV Purchasing Division



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: 254208

Doc Description: Addendum 2-EOI: City of Wheeling Landfill Closure Cap

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-11-04	2016-11-22 13:30:00	CEOI 0313 DEP1700000002	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:

**FOR INFORMATION CONTACT THE BUYER**

Jessica S Chambers  
 (304) 558-0246  
 jessica.s.chambers@wv.gov

Signature X

FEIN # 55-0687626

DATE 11/11/16

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

**ADDITIONAL INFORMATION:**

Addendum

Addendum No.02 issued to publish and distribute the attached information to the vendor community.

\*\*\*\*\*

**Expression of Interest**

The Acquisition and Contract Administration Section of the Purchasing Division is soliciting Expression(s) of Interest for The West Virginia Department of Environmental Protection, from qualified firms to provide architectural/engineering services as defined herein.

INVOICE TO	SHIP TO
ENVIRONMENTAL PROTECTION OFFICE OF ENVIRONMENTAL REMEDIATION 601 57TH ST SE CHARLESTON WV25304 US	ENVIRONMENTAL PROTECTION 601 57TH ST CHARLESTON WV 25304 US

Line	Comm Ln Desc	Qty	Unit Issue
1	City of Wheeling LF		

Comm Code	Manufacturer	Specification	Model #
81100000			

**Extended Description :**

Site Characterization Study, Leachate Management and Closure Cap Design for the City of Wheeling Landfill per the attached specifications, bid requirements, and terms and conditions, incorporated here by reference and made a part hereof.

DEP1700000002	<b>Document Phase</b> Final	<b>Document Description</b> Addendum 2-EOI: City of Wheeling Landfill Closure Cap	<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:** CRFQ 0603 ADJ1700000004

**Addendum Number:** No.01

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The purpose of this addendum is to modify the solicitation identified as ("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:**

Addendum issued to publish and distribute the attached documentation to the vendor community.

1. The purpose of this addendum is to attach the CQQ survey that was omitted in error.

No other Changes.

**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.

**SOLICITATION NUMBER:** CRFQ 0313 DEP1700000002

**Addendum Number:**

No.02

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The purpose of this addendum is to modify the solicitation identified as (“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:**

Addendum issued to publish and distribute the attached documentation to the vendor community.

1. The purpose of this addendum is to attach the CQQ survey in PDF format.
2. Amend the bid opening date from 11/15/2016 to 11/22/2016
3. Modify the specifications per the attached.

No other Changes.

**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.:** \_\_\_\_\_

**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:**

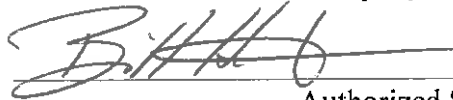
(Check the box next to each addendum received)

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6  |
| <input 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 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.

TERRADON Corporation

Company



Authorized Signature

11/11/16

Date

NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.  
Revised 6/8/2012

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

RYAN WHEELER, DIRECTOR OF BUSINESS DEVELOPMENT  
(Name, Title)

RYAN WHEELER, DIRECTOR OF BUSINESS DEVELOPMENT  
(Printed Name and Title)


409 JACOBSON DRIVE, POCA, WV 25159  
(Address)

304-755-8291 / 304-755-2634  
(Phone Number) / (Fax Number)

RYAN.WHEELER@TERRADON.COM  
(email address)

**CERTIFICATION AND SIGNATURE:** 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.

TERRADON CORPORATION  
(Company)

 President  
(Authorized Signature) (Representative Name, Title)

BILL HUNT, PRESIDENT  
(Printed Name and Title of Authorized Representative)

11-11-2016  
(Date)

304-755-8291 / 304-755-2636  
(Phone Number) (Fax Number)



STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

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

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

**DEFINITIONS:**

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

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

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

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

**WITNESS THE FOLLOWING SIGNATURE:**

Vendor's Name: TERRADON Corporation

Authorized Signature: *Beth A. Anderson* Date: 11/11/16

State of West Virginia

County of Ohio, to-wit:

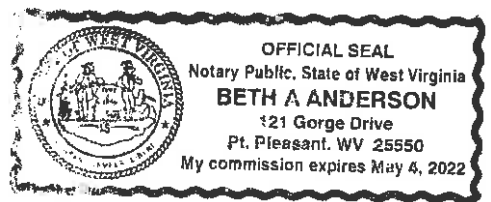
Taken, subscribed, and sworn to before me this 11 day of November, 2016.

My Commission expires May 4, 2016.

**AFFIX SEAL HERE**

**NOTARY PUBLIC** *Beth A. Anderson*

*Purchasing Affidavit (Revised 08/01/2015)*



**WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
CONSULTANT QUALIFICATION QUESTIONNAIRE**

PROJECT NAME City of Wheeling LCAP		DATE (DAY, MONTH, YEAR) 11/02/16	FEIN 55-0687626	
1. FIRM NAME TERRADON Corporation		2. HOME OFFICE BUSINESS ADDRESS 409 Jacobson Drive, Poca, WV 25159		3. FORMER FIRM NAME
4. HOME OFFICE TELEPHONE 304-755-8291	5. ESTABLISHED (YEAR) 1989	6. TYPE OWNERSHIP INDIVIDUAL, <b>X CORPORATION</b> , PARTNERSHIP, JOINT-VENTURE	6A. WV REGISTERED DBE (DISAVANTAGED BUSINESS ENTERPRISE)  YES      X      NO	
7. PRIMARY OFFICE: ADDRESS/ TELEPHONE/ PERSON IN CHARGE/ NO. (name particular type) PERSONNEL EACH OFFICE 409 Jacobson Drive, Poca, WV 25159/304-755-8291/Ashley L Lioi/46 425 North Jefferson Street, Lewisburg, WV 24901/ (304) 645-4636 / Will Thornton, PE, PS /3 persons PO Box 307, Charlton Heights, WV 25040 / (304) 541-6165 / Will Thornton, PE, PS / 2 persons				
8. NAMES OF PRINCIPAL OFFICERS OR MEMBERS OF FIRM Virginia L. King, Owner, Chief Financial Officer Bill Hunt, President		8a. NAME, TITLE, & TELEPHONE NUMBER-OTHER PRINCIPALS Ashley Lioi, PE 304-755-8291		
9. NUMBER OF PERSONNEL BY DISPLINE (Bold Lettering Indicates Minimum Design Team Members) Detailed information On Team To Be Included				
8 <b>ADMINISTRATIVE</b> _ ARCHITECTS _ BIOLOGIST	1 <b>ECOLOGISTS</b> _ ECONOMISTS _ ELECTRICAL ENGINEERS	2 <b>LANDSCAPE ARCHITECTS</b> _ MECHANICAL ENGINEERS	2 <b>STRUCTURAL ENGINEERS</b> 5 <b>SURVEYORS</b>	
3 <b>CADD OPERATORS</b> _ CHEMICAL ENGINEERS	1 <b>ENVIRONMENTALISTS</b> _ ESTIMATORS	1 <b>MINING ENGINEERS</b> _ PHOTOGRAMMETRISTS	3 <b>OTHER</b>	
10 <b>CIVIL ENGINEERS</b>	2 <b>GEOLOGIST</b> _ HISTORIANS	_ PLANNERS: _ URBAN/REGIONAL _ SANITARY ENGINEERS	53 <b>TOTAL PERSONNEL</b>	
7 <b>CONSTRUCTION INSPECTORS</b>	2 <b>HYDROLOGISTS</b>	3 <b>SOILS ENGINEERS</b> _ SPECIFICATION WRITERS		
1 <b>DESIGNERS</b> _ DRAFTSMEN				
TOTAL NUMBER OF WV REGISTERED PROFESSIONAL ENGINEERS IN PRIMARY OFFICE: <u>10</u>				
*RPEs other than Civil must provide supporting documentation that qualifies them to supervise and perform this type of work.				
10. If submittal is by joint venture, list participating firms & outline specific areas of responsibility (including administrative, technical, & financial) for each firm. Each participating firm must complete a "Consultant Confidential Qualification Questionnaire".				
10a. HAS THIS JOINT-VENTURE WORKED TOGETHER BEFORE?		YES	NO	

11. OUTSIDE KEY CONSULTANTS/ SUB-CONSULTANTS ANTICIPATED TO BE USED.		
NAME AND ADDRESS: Tuck Mapping Services 1928 Wildcat Road P.O. Box 760 Big Stone Gap, VA 24219	SPECIALTY: Aerial Photography and Topographic Mapping	WORKED WITH BEFORE  <u>YES</u> NO
NAME AND ADDRESS: Genesis Drilling P.O. Box 494 Scott Depot, WV 25560	SPECIALTY: Drilling, Soil Boring and Rock Coring	WORKED WITH BEFORE  <u>YES</u> NO
NAME AND ADDRESS: ALS Laboratories 1740 Union Carbide Drive South Charleston, WV 25303	SPECIALTY: Laboratory Analysis of Water Samples	WORKED WITH BEFORE  <u>YES</u> NO
NAME AND ADDRESS: Triad Engineering 10541 Teays Valley Road Scott Depot, WV 25560	SPECIALTY: Soils Laboratory Testing, Drilling, Soil Boring, and Rock Coring	WORKED WITH BEFORE  <u>YES</u> NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE  YES NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE  YES NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE  YES NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE  YES NO
NAME AND ADDRESS:	SPECIALTY:	WORKED WITH BEFORE  YES NO

<p>12. A. Is your firm experienced in (Solid Waste Landfill Closure Design)?  <u>YES</u> Description and Number of Projects:</p> <hr/> <p>PLEASE SEE ATTACHMENT 12. A</p>
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B. Is your firm experienced in Solid Waste landfill site characterization assessment and evaluation?

**YES Description and Number of Projects:**

PLEASE SEE ATTACHMENT 12. B

C. Is your firm experienced in landfill closure construction inspection?

**YES Description and Number of Projects:**

PLEASE SEE ATTACHMENT 12. C

D. Is your firm experienced in Aerial Photography and the Development of Contour Mapping?

**YES Description and Number of Projects:**

PLEASE SEE ATTACHMENT 12.D

E. Is your firm experienced in evaluating ground water contamination, such as may be associated with landfills?

**YES Description and Number of Projects:**

PLEASE SEE ATTACHMENT 12.E

F. Is your firm experienced in Landfill Closure cost estimating?

**YES Description and Number of Projects:**

PLEASE SEE ATTACHMENT 12.F

13. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR LANDFILL CLOSURE DESIGN (describe project) (Furnish Complete data but keep to essentials)			
NAME & TITLE (Last, first, Middle Int.)	YEARS OR EXPERIENCE		
	YEARS OF (type) EXPERIENCE:	YEARS OF (type) EXPERIENCE:	YEARS OF (name type) EXPERIENCE:
James, John, W., PE	48		

<p>Brief Explanation of Responsibilities:  <b>Mr. James' project responsibilities include: studies and designs for landfills and environmental facilities; surface and ground water studies and remediation; design of liners for landfills and various impoundments; earth and rockfill dams; roads; highways and bridges; numerous foundation investigations; foundation investigations and designs ranging in size from small projects to major industrial complexes; storm drainage facilities; airport facilities; landslide analysis and correction; and forensic engineering</b></p>			
<p>EDUCATION (DEGREE, YEAR, SPECIALIZATION)  <b>BS Civil Engineering, 1968, Geotechnical</b></p>			
<p>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:  <b>American Society of Civil Engineers  Society of American Military Engineers</b></p>		<p>REGISTRATION (Type, Year, State)  <b>Professional Engineer, WV</b></p>	
<p>13a. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR LANDFILL CLOSURE DESIGN (name type of design or work) (Furnish complete data but keep to essentials)</p>			
<p>NAME &amp; TITLE (Last, First, Middle Int.)  <b>Clutter, Mark, A.</b></p>	<p>YEARS OF EXPEIRENCE</p>		
	<p>YEARS OF EXPEIRCENE (name type):  <b>16</b></p>	<p>YEARS OF EXPEIRENCE (name type):</p>	<p>YEARS OF EXPEIRENCE (name type):</p>
<p>Brief Explanation of Responsibilities:  <b>Mark Clutter is a Project Manager/Design Engineer who is experienced in preparing construction documents and associated permitting for numerous projects throughout Kentucky, Ohio, and West Virginia including: creating erosion and sediment control plans, storm water management, design of impoundment closures, slope stability analysis, field surveying, drawings and specification preparation, design, design drafting, construction inspection, quality control testing, shop drawing review, project management, contract administration, permitting, and report preparation.</b></p> <p><b>Clutter's landfill experience adheres to the WVDEP's Landfill Closure Assistance Program (LCAP) for landfill designs and construction, including all closure-related activities such as: leachate management control, sediment and erosion, gas management, groundwater monitoring, and a final cover on non-composite lined landfills.</b></p>			
<p>EDUCATION (Degree, Year, Specialization)  <b>BS Civil Engineering Technology, 2000, Geotechnical  A.A.S. Civil Engineering Technology  A.A.S. Drafting/Design Engineering Technology</b></p>			
<p>MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS</p>		<p>REGISTRATION (Type, Year, State)</p>	

<p>13b. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES RESPONSIBLE FOR LANDFILL CLOSURE QA/QC (Furnish complete data but keep to essentials)</p>			
<p>NAME &amp; TITLE (last, first, middle int.)  <b>Reed, Philip, W., PE</b></p>	<p>YEARS OF EXPEIRENCE</p>		
	<p>YEARS OF EXPERIENCE (name type):  <b>26</b></p>	<p>YEARS OF EXPERIENCE (name type):</p>	<p>YEARS OR EXPERIENCE (name type):</p>

Brief Explanation of Responsibilities:  
**Philip Reed provides services to clients for Engineering Design, Quality Control and Materials Testing. Reed provides technical direction on a variety of civil engineering markets including landfills, commercial and industrial developments, housing, energy and infrastructure. Reed is responsible for engineering analysis and modeling, design, regulatory compliance and permitting, in addition to quality control and assurance. He has more than 20 years of experience in landfill design and construction.**

EDUCATION (Degree, Year, Specialization)  
**1988, Civil Engineering, Geotechnical**

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)  
**PE, 2006, WV**  
**PE, 2006, VA**

**13c. PERSONAL HISTORY STATEMENT OF PRINCIPALS AND ASSOCIATES REPOSIBLE FOR HEAVY EARTH WORK CONSTRUCTION PROJECTS (Furnish complete data but keep to essentials)**

NAME & TITLE (last, first, middle Int.)	YEARS OF EXPERIENCE		
	YEARS OF EXPERIENCE (name type)	YEARS OF EXPERIENCE (name type)	YEARS OF EXPERIENCE (name type)
<b>Hunt, Bill, PG, LRS</b>	31		

Brief Explanation of Responsibilities  
**Bill Hunt is a Professional Geologist, Licensed Remediation Specialist and President at TERRADON Corporation. Hunt offers relevant experience in environmental documentation, investigations, and coordination with federal, state, and local agencies. He prepares Environmental Impact Statements, Environmental Assessments, Section 4(f) Evaluations, and other environmental technical documents. He supervises and participates in work plan development, field surveys, on-site monitoring, data collection, impact analysis, subconsultant management, public meeting organization and group presentations.**

EDUCATION (Degree, Year, Specialization)  
**MA Geography, 1985, Resource Management**  
**BS, Environmental Studies, 1981, Geology**

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

REGISTRATION (Type, Year, State)  
**PG, 1999, Indiana**  
**LRS, 2005, WV**

**14. PROVIDE A LIST OF SOFTWARE AND EQUIPMENT AVAILABLE IN THE PRIMARY OFFICE WHICH WILL BE USED TO COMPLETE THIS PROJECT (name project)**

**Microsoft Office (Excel, Access, Word, PowerPoint)**

<b>Haestad Methods Hydraulic Software for Channel, Culvert, and Pond Design</b>
<b>AutoCAD 2016, Civil 3D</b>
<b>HELP (Hydrologic Evaluation of Landfill Performance) Computer Model</b>
<b>Microstation V-8</b>
<b>TR-55 Software for Precipitation and Hydrologic Modeling</b>
<b>HEC-HMS and HEC-RAS for Modeling of Watersheds and River/Stream Flows</b>
<b>Terrain Navigator (Regional Topographic Mapping Database)</b>
<b>gINT Geotechnical and Environmental boring logs and well construction logs</b>
<b>Troxler Moisture Density Testing Gauge</b>
<b>Miscellaneous Concrete and Grout Testing Equipment</b>
<b>Digital Cameras for photo-documentation of construction activities</b>
<b>Monitoring Well Sampling and Gauging Equipment</b>
<b>DumpStat statistical analysis of groundwater quality data</b>

**15. CURRENT ACTIVITIES ON WHICH YOUR FIRM IS THE DESIGNATED ENGINEER OF RECORD ASSOCIATED WITH OR RELATING TO LANDFILL CLOSURE OR CONSTRUCTION.**

PROJECT NAME,TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	NATURE OF YOUR FIRM'S RESOPNSIBILITY	ESTIMATED CONSTRUCTION COST	PERCENT COMPLETE
<b>Tucker County Landfill Cell 5 Extension</b>	Tucker County Solid Waste Authority Davis , WV	Survey, Mapping, Subsurface Investigation, Groundwater Investigation and Monitoring, Cell Design and Construction monitoring and Certification	\$600,000	100% Complete
<b>Tucker County Landfill Cell 6 New Cell Design and Construction</b>	Tucker County Solid Waste Authority Davis , WV	Survey, Mapping, Subsurface Investigation, Groundwater Investigation and Monitoring, Major Permit Modification, Cell Design and Construction monitoring and Certification	\$720,000	100% Complete
<b>Tucker County Landfill Cell 7A New Cell Design and Construction – 7 acre cell</b>	Tucker County Solid Waste Authority Davis , WV	Survey, Mapping, Subsurface Investigation, Groundwater Investigation and Monitoring, Major Permit Modification, Certificate of Need, Cell Design and Construction Monitoring and Certification	\$840,000	100% Complete
<b>HAM Sanitary Landfill Certificate of Need</b>	HAM Sanitary Landfill Inc. Peterstown, WV	Part 1 – Solid Waste Facility Permit including geologic and hydrologic evaluation of the site.	\$158,000.00	100 % Complete
<b>HAM Sanitary Landfill Part 2 – Solid Waste Facility Design Application</b>	HAM Sanitary Landfill Inc. Peterstown, WV	Part 2 – Solid Waste Facility Design including Site design, leachate modeling, composite liner design, cell	\$950,000.00	100 % Complete



		construction drawings and QA/QC plan.		
<b>Jackson County Sanitary Landfill</b> <b>WV LCAP Program</b> <b>Interim Closure Plan</b>	Jackson County Solid Waste Authority P.O. Box 800 Ripley, WV	Interim Closure Plan including storm water and leachate management planning, sediment and leachate pond design	\$3,299,683	100 % Complete
<b>Pine Creek Landfill</b> <b>WV LCAP Program</b>	Pine Creek Omar Landfill, Inc. PO Box 99 Cora, WV 25614	designed the permanent closure plan including an additional cell, storm water management, capping, leachate management and storage tank, construction QC and certification for the abandoned landfill.	\$1,306,325	100 % Complete
<b>Wyoming County Sanitary Landfill</b>	Wyoming County Commission Wyoming County Courthouse PO Drawer 309 Pineville, WV 24874	site characterization; storm water management and leachate management design including storage tank, pump station and force main to POTW; slope stability; and Subtitle D Cap for the WVDEP	\$1,427,522	100 % Complete
TOTAL NUMBER OF PROJECTS:			TOTAL ESTIMATED CONSTRUCTION COSTS:	
# 8 _____			\$ 9,301,530 _____	



17. COMPLETED WORK WITHIN LAST 5 YEARS ON WHICH YOUR FIRM WAS THE DESIGNATED ENGINEER OF RECORD (List 5 to 7)				
PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST	YEAR	CONSTRUCTED (YES OR NO)
<b>Manila Ridge Extension Engineering Poca, WV</b>	Putnam County Commission 3389 Winfield Road Winfield, WV 25213	\$1 Million	2012	Yes
<b>WV Air National Guard Design/Inspection Charleston, WV</b>	WV American Water Shared Services Center P.O. Box 5609 Cherry Hill, New Jersey 08034	\$2 Million	2013	Yes
<b>Mallory (Gibson) Portals Design Mallory, WV</b>	WVDEP/AML&R 601 57th Street SE Charleston, WV 25304	\$500,000	2013	Yes
<b>Montgomery 6th Ave. Pump Station Montgomery, WV</b>	Sanitary Board Of Montgomery 706 Third Avenue Montgomery, WV 25136	\$500,000		No
<b>Ham Sanitary Landfill - Peterstown WV</b>	HAM Sanitary Landfill P.O. Box 576 Peterstown, WV 24963	\$1 Million	2013	Yes
<b>Northern Wayne County PSD Force Main Replacement Wayne, WV</b>	Northern Wayne County PSD P.O. Box 775 Lavallette, WV 25535	\$325,000	2013	No
<b>Upper Glade Creek Dam Improvements</b>	Beckley Water Company Po Box 2400 Beckley, WV 25802-2400	\$35,000.00	2013	No
<b>Charleston</b>	Alan Ives	\$20 Million	2013	Yes

<b>Replacement Housing</b>	Construction 709 Patrick St Charleston, WV, 25312			
<b>Noise Wall in Pennsylvania</b>	ECA - Eastern Operations 500 Corporate Landing Charleston, West Virginia 25311-1264	\$300,000	2014	
<b>Edgewood Country Club Sissonville, WV</b>	ECC 1600 Edgewood Drive Charleston, WV 25302	\$150,000	2014	
<b>MOT-75-21.96 Vandalia, OH</b>	Ohio Department of Transportation 1980 W. Broad St. Mailstop: 4100, 1 <sup>st</sup> Floor Columbus, Ohio 43223	\$400,000	2014	NO
<b>Verizon Wireless Cell Tower Nitro, WV</b>	Verizon Wireless 18 Abele Road Bridgeville, PA 15017	\$200,000	2014	
<b>Verizon Wireless Cell Tower Goldtown, WV</b>	Verizon Wireless 18 Abele Road Bridgeville, PA 15017	\$200,000	2014	
<b>West Virginia GSA Office Complex Fairmont, WV</b>	State of West Virginia 1900 Kanawha Blvd E Charleston, WV 25305	\$25 Million	2014	YES
<b>Poca Elementary School Poca, WV</b>	Putnam County Board of Education 3022 Winfield Rd, Winfield, WV 25213	\$12 Million	2014	YES
<b>Winfield</b>	Putnam County	\$15 Million	2014	YES

<b>Middle School Winfield, WV</b>	Board of Education 3022 Winfield Rd, Winfield, WV 25213			
<b>Courtyard Hotel Charleston, WV</b>	VIM, Inc. P.O. Box 359 123 North Court Street Fayetteville, WV 25840	\$14 Million	2014	YES
<b>Gerrardstown Middle School Gerrardstown, WV</b>	Berkley County Board of Education 401 S Queen St, Martinsburg, WV 25401	\$13 Million	2014	YES
<b>South Preston PK-8 School Tunnelton, WV</b>	Preston County Board of Education 731 Preston Drive Kingwood, WV 26537	\$13 Million	2014	YES
<b>Leading Creek Elementary School</b>	Lewis County Board of Education 239 Court Avenue Weston, WV 26452	\$13 Million	2014	YES
<b>Advantage Valley Advanced Technology Center South Charleston, WV</b>	WV Higher Education Policy Commission 1018 Kanawha Boulevard, E., Suite 700 Charleston, WV 25301	\$15 Million	2014	YES
<b>Cabell County Bus Garage Lesage, WV</b>	Cabell County Board of Education WV Higher Education Policy Commission 1018 Kanawha Boulevard, E., Suite 700 Charleston, WV 25301	\$10 Million	2014	YES
<b>Energy Corporation of America Charleston,</b>	Energy Corporation of America 501 56th Street SE	\$12 Million	2014	YES

<b>WV</b>	Charleston, West Virginia 25304			
<b>East Hardy High School</b>	Hardy County Board of Education 510 Ashby Street Moorefield, WV 26836	\$15 Million	2014	YES
<b>WVSU Student Housing Institute, WV</b>	West Virginia State University 5000 Fairlawn Ave, Dunbar, WV 25112	\$16 Million	2014	YES
<b>Weisburg Applied Sciences Building Huntington, WV</b>	Marshall University One John Marshall Drive Huntington, WV 25755	\$30 Million	2014	YES
<b>Smith Fastener South Charleston</b>	Smith Fastener 7500 MacCorkle Ave., SE P.O. Box 4356 Charleston, West Virginia 25364	\$10 Million	2014	YES

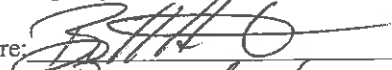
18. COMPLETED WORK WITHIN LAST 5 YEARS IN WHICH YOUR FIRM HAS BEEN A SUBCONSULTANT TO OTHER FIRMS (INDICATE PHASE OF WORK WHICH YOUR FIRM WAS RESPONSIBLE) LIST 5 TO 7.

PROJECT NAME, TYPE AND LOCATION	NAME AND ADDRESS OF OWNER	ESTIMATED CONSTRUCTION COST OF YOUR FIRM'S PORTION	YEAR	CONSTRUCTED (YES OR NO)	FIRM ASSOCIATED WITH
<b>Summit Bechtel Reserve Boy Scouts of America Glen Jean, WV</b>	Boy Scouts of America PO Box 152079, Irving, TX 75015-	\$50,000,000	2013	Yes	Trinity Works/Arrow WV, Inc.
<b>WV Northern Advanced Technology Center</b>	WV Higher Education Policy Commission 1018 Kanawha Boulevard, East, Suite 700 Charleston, WV 25301	\$15,000,000	2014	Yes	ET Boggess Architects

19. Use this space to provide any additional information or description of resources supporting your firm's qualifications to perform work for the WV Department of Environmental Protection.

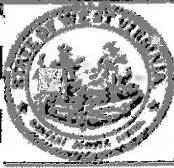
**TERRADON CORPORATION is well qualified to provide all of the services as described in the Scope of Services of the Request for Qualifications to include: site investigation of existing features, surveying and mapping, laboratory analysis of soil and water, subsurface investigations to determine location as well as limits and depths of waste, location of potential borrow areas either on-site or nearby, engineering and design of the capping system to be installed including grading plans and cross sections of the cap system, leachate collection and storage systems, sediment and erosion control plans including required ponds, preparation of construction contract drawings and specifications suitable for letting of construction bids and all applicable permitting. TERRADON's professional staff and previous experience with the WVDEP LCAP program and other municipal/industrial waste landfills will allow us to provide you with a quality project in a timely manner.**

20. The foregoing is a statement of facts

Signature:   
Title: President

Date: 11/11/16

Printed Name: Bill Hunt



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: 254208

Doc Description: Addendum 2-EOI: City of Wheeling Landfill Closure Cap

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-11-04	2016-11-22 13:30:00	CEOI 0313 DEP1700000002	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:

**FOR INFORMATION CONTACT THE BUYER**

Jessica S Chambers  
 (304) 558-0246  
 jessica.s.chambers@wv.gov

Signature X

FEIN # 55-0687626

DATE 11/11/16

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



ADDITIONAL INFORMATION

Addendum

Addendum No.02 issued to publish and distribute the attached information to the vendor community.

\*\*\*\*\*

Expression of Interest

The Acquisition and Contract Administration Section of the Purchasing Division is soliciting Expression(s) of Interest for The West Virginia Department of Environmental Protection, from qualified firms to provide architectural/engineering services as defined herein.

INVOICE TO	SHIP TO
ENVIRONMENTAL PROTECTION OFFICE OF ENVIRONMENTAL REMEDIATION 601 57TH ST SE CHARLESTON WV25304 US	ENVIRONMENTAL PROTECTION 601 57TH ST CHARLESTON WV 25304 US

Line	Comm Ln Desc	Qty	Unit Issue
1	City of Wheeling LF		

Comm Code	Manufacturer	Specification	Model #
81100000			

Extended Description :

Site Characterization Study, Leachate Management and Closure Cap Design for the City of Wheeling Landfill per the attached specifications, bid requirements, and terms and conditions, incorporated here by reference and made a part hereof.

<b>DEP170000002</b>	<b>Document Phase</b> Final	<b>Document Description</b> Addendum 2-EOI: City of Wheeling Landfill Closure Cap	<b>Page 3</b> <b>of 3</b>
---------------------	--------------------------------	---	------------------------------

**ADDITIONAL TERMS AND CONDITIONS**

See attached document(s) for additional Terms and Conditions

**SOLICITATION NUMBER:** CRFQ 0603 ADJ1700000004

**Addendum Number:**

No.01

The purpose of this addendum is to modify the solicitation identified as ("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:**

Addendum issued to publish and distribute the attached documentation to the vendor community.

1. The purpose of this addendum is to attach the CQQ survey that was omitted in error.

No other Changes.

**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.

**SOLICITATION NUMBER:** CRFQ 0313 DEP1700000002

**Addendum Number:**

**No.02**

---

The purpose of this addendum is to modify the solicitation identified as ("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:**

Addendum issued to publish and distribute the attached documentation to the vendor community.

1. The purpose of this addendum is to attach the CQQ survey in PDF format.
2. Amend the bid opening date from 11/15/2016 to 11/22/2016
3. Modify the specifications per the attached.

No other Changes.

**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.:** \_\_\_\_\_

**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 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 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.

TERRADON Corporation  
Company

  
Authorized Signature

11/11/16  
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.  
Revised 6/8/2012

**DESIGNATED CONTACT:** Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

RYAN WHEELER, DIRECTOR OF BUSINESS DEVELOPMENT  
(Name, Title)

RYAN WHEELER, DIRECTOR OF BUSINESS DEVELOPMENT  
(Printed Name and Title)

409 JACOBSON DRIVE, POCA, WI 25159  
(Address)

304-755-8291 / 304-755-2634  
(Phone Number) / (Fax Number)

RYAN.WHEELER@TERRADON.COM  
(email address)

**CERTIFICATION AND SIGNATURE:** 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.

TERRADON CORPORATION  
(Company)

 President  
(Authorized Signature) (Representative Name, Title)

BILL HUNT, PRESIDENT  
(Printed Name and Title of Authorized Representative)

11-11-2016  
(Date)

304-755-8291 / 304-755-2634  
(Phone Number) (Fax Number)

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: TERRADON Corporation

Authorized Signature: [Signature] Date: 11/11/16

State of West Virginia

County of Ohio, to-wit:

Taken, subscribed, and sworn to before me this 11 day of November, 2016.

My Commission expires May 4, 2016.

**AFFIX SEAL HERE**

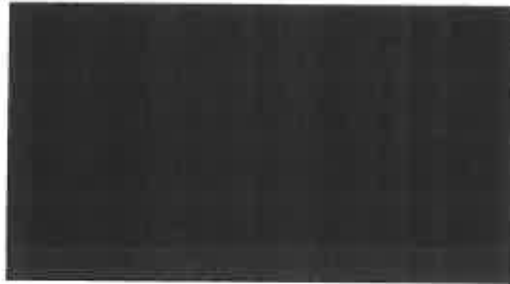
**NOTARY PUBLIC**

Beth A. Anderson

*Purchasing Affidavit (Revised 08/01/2015)*



# STATEMENT OF QUALIFICATIONS



Corporate Office  
409 Jacobson Dr.  
Poca, WV 25159  
304-755-8291

Greenbrier Valley  
425 North Jefferson St.  
Lewisburg, WV 24901  
304-645-4636

Fayette County  
P.O. Box 307  
Charlton Heights, WV 25040  
304-541-7655

[www.terraddon.com](http://www.terraddon.com)

***EOI: City of Wheeling Landfill Closure Cap Design***  
CEOI 0313 DEP1700000002

Attn:

Jessica Chambers

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

***November 15, 2016***

ENGINEERING . PLANNING . SURVEY . INSPECTION . ENVIRONMENTAL



<b>PROFESSIONAL QUALIFICATIONS</b>	<b>1</b>
• Corporate Overview	
• Department Overviews	
<b>PAST PERFORMANCES</b>	<b>7</b>
• Related Prior Experience	
<b>KEY STAFF</b>	<b>9</b>
• Resumes	
• Staff Organizational Chart	
<b>CERTIFICATES OF AUTHORIZATION</b>	<b>17</b>



Summit Bechtel Reserve, Fayette County, WV

**TERRADON Corporation offers a multi-faceted approach to design engineering and consulting services. For more than 25 years TERRADON staff has provided a wealth of engineering solutions blanketing West Virginia with successful projects. The company built its reputation using expert personnel to deliver quality, time-sensitive service. Those same founding principles hold true today.**

**The second-generation, family-owned business has built a strong reputation by providing flexible, cost effective design solutions and maintaining the highest level of customer service. The firm has been recognized through numerous awards from professional organizations and agencies including the American Society of Civil Engineers, State Highway Departments, the Department of Environmental Protection and the American Institute of Architects.**

**TERRADON's corporate culture promotes innovation and progressive thinking. Project leaders sustain customers through a wide-range of engineering offerings. TERRADON employees understand the purpose behind their services and work to cultivate lasting relationships with clients through honest, hard work.**

**SERVICE OFFERINGS**

- CIVIL ENGINEERING
- LAND PLANNING & SITE DESIGN
- ENVIRONMENTAL ENGINEERING
- GEOTECHNICAL ENGINEERING
- SURVEY & MAPPING
- WATER, WASTE WATER & STORM WATER
- TRANSPORTATION ENGINEERING
- STRUCTURAL ENGINEERING
- TESTING & INSPECTION



***TERRADON is the largest woman-owned engineering firm in West Virginia. TERRADON is a certified Women's Business Enterprise as defined by the Women's Business Enterprise National Council and the National Women Business Owners Corporation.***

## TERRADON LANDFILL EXPERIENCE

TERRADON has performed a variety of services on landfill projects throughout West Virginia for 25 years. TERRADON engineers and Geo-Environmental groups are experienced in landfill cap designs and cap system cross sections, survey and mapping landfills, design elements including leachate design, landfill analysis, NPDES certifications, etc.. TERRADON's landscape experienced professionals have worked on a number of WVDEP Landfill Closure projects through the WVDEP Landfill Closure Assistance Program. John James, PE, has led teams of TERRADON professionals on a variety of landfill projects throughout the state. James has over 48 years experience in landfill services.



Tucker County Landfill, WV

### LANDFILL SERVICES

- SURVEY & MAPPING
- LABORATORY ANALYSIS
- SUBSURFACE INVESTIGATION
- CAP SYSTEM DESIGN
- GRADING PLANS
- CAP SYSTEM CROSS SECTIONS
- LEACHATE COLLECTION DESIGN
- STORAGE SYSTEM DESIGN
- SEDIMENT & EROSION CONTROL PLANS
- QA/QC SERVICES
- ENGINEERING COST ESTIMATES
- SOLID WASTE FACILITY SITING PLAN
- CERTIFICATE OF NEED
- CERTIFICATE OF SITE APPROVAL
- QUARTERLY & ANNUAL REPORTS
- NPDES CERTIFIED

TERRADON is experienced in designed landfill closures that sufficiently manage leachate, control sediment and erosion, control and manage natural gases, monitoring groundwater, and a final cover cap on non-composite lined landfills. TERRADON services customers to standards of the WVDEP.



**TERRADON offers some of the most experienced staff in the region for local geotechnical expertise. This team of experts brings a distinctive, specialized understanding of the difficult soil and groundwater conditions found in the Ohio Valley and Appalachian Regions of the United States.**

**The Geotechnical group has provided investigations associated with earthen dams, mining, waste disposal, new building construction, landslide analysis and remedial design, cell and high mast towers, landfill permitting and cap design, flexible/rigid pavement design, and environmental remediation.**

## **GEOTECHNICAL DESIGNS**

- Complete Removal for Landslide Repair
  - Removal, Stabilization, Replacement
  - Buttressing and Regrading
  - Subsurface Drainage
  - Structural Corrections
  - Retaining Walls
  - MSE Walls and Other Gravity Walls
  - H-Piles and Lagging
  - Anchors (Rock or Soil Nailing)
- In Combination with Above, if Applicable



## **SERVICES INCLUDE**

- Test Borings
- Test Pit Excavations
- Monitoring Well and Piezometer Installation
- Soil and Rock Logging, Sampling & Testing
- Landslide Analysis and Remedial Design
- Stability Analysis
- Retaining Structure Design
- Earthen Dams
- Foundation Design
- Municipal and Industrial Landfills
- Flexible and Rigid Pavement Design
- Complete Removal for Landslide Repair
- Removal, Stabilization & Replacement
- Buttressing and Regrading
- Subsurface Drainage
- Structural Corrections
- Retaining Walls
- MSE Walls and Other Gravity Walls
- H-Piles and Lagging
- Anchors (Rock or Soil Nailing)

Constantly changing federal and state environmental requirements are difficult to track and can have a serious impact on businesses and other organizations.

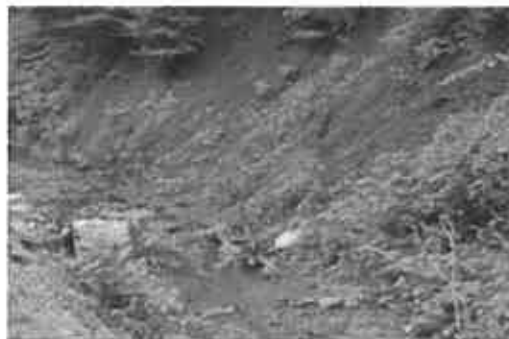
TERRADON offers a strong environmental services team to manage issues in a complex environment. Staff is well-versed on environmental permitting processes and regulations as well as site assessment and reporting.



TERRADON closely follows environmental activities on the local, state and federal levels. TERRADON has a thorough understanding of state and federal environmental permitting processes and regulations. This expertise applies to both the initial permit preparations, as well as subsequent negotiations affecting the permit. The firm's strength in addressing environmental issues is built on the diversity of its staff with credentials in chemistry, civil engineering, geotechnical engineering and geology.

### SERVICES INCLUDE

- Environmental Site Assessments
  - Phase I ESA
  - Phase II ESA
- Hazardous Waste
- Process Water
- Wastewater
- Storm Water
- Groundwater
- Air Permitting
- Risk Management Plans
- Wetland Delineation
- Tier II Reporting
- Emergency Response Plans
- Environmental Audits
- Environmental Remediation
- NEPA Compliance
- Asbestos and Lead Inspection
- Underground Storage Tanks
- Impoundment Stabilization & Closure
- SPCC Planning
- BMP Planning





**TERRADON has a long history of providing design and construction survey services for numerous transportation projects. Efficient and accurate results are ensured by prioritizing the use of modern technology, including state of the art GPS and robotic total stations, with the latest design software.**

**TERRADON maintains full-time Professional Surveyors on staff. The firm services projects through the use of in-house field survey crews who are backed by corporate staff members, including an experienced team of CAD designers. TERRADON's transportation survey group is experienced in preparing highway right-of-way plans, including courthouse research and right of way questionnaires, and writing legal descriptions for right of way take parcels, temporary construction easements and permanent drainage easements.**

#### SERVICES INCLUDE

- Mapping
- Construction Layout ALTA survey
- Topographic Survey
- GPS Network Control Surveys
- Aerial & LIDAR Mapping

**TERRADON's Professional Surveyors are licensed in:**

- West Virginia
- Pennsylvania
- Kentucky
- Tennessee

**TERRADON offers materials testing and construction monitoring services to document compliance with project design specifications and regulatory requirements. The firm provides construction monitoring for utility, highway, and commercial construction projects.**

**TERRADON also provides laboratory and field testing of construction materials. Engineers and technicians at TERRADON are West Virginia Department of Highways certified in Portland Cement Concrete, Hot-mixed Asphalt, Compaction and Aggregates.**

### **SPECIALTY TESTING & INSPECTION**

- Floor Flatness Testing
- Fireproofing
- Masonry Testing
- Structural Steel Inspection Certified Welding Inspection
- Dye Penetrant Testing
- Bolt Testing
- Project Safety Monitoring
- FAA Eastern Regional Laboratories



### **MATERIALS TESTING & INSPECTION**

- Slump of Portland Cement Concrete (AASHTO-T119)
- Air Content of Freshly Mixed Concrete (AASHTO-T196 and T152)
- Unit Weight and Yield (AASHTO-T121)
- Making and Curing of Concrete Test Cylinders(AASHTO-T23)
- Compressive Strength of Concrete Specimens (AASHTO-T22)
- Fine and Course Aggregate Gradations (AASHTO-T11 and T27)
- Specific Gravity of Aggregates (AASHTO-T84 and T85)
- Atterberg Limits (ASSHTO-T89 and T90)
- Moisture Content of Soil (ASTM-D2216)
- Nuclear Compaction Testing of Soil, Stone, and Hot Mixed Asphalt
- Preparation of Certification Forms and Construction Reports
- Welder Certification

### **CONSTRUCTION MONITORING**

- 3rd Party Construction and Environmental Monitoring
- Document compliance with project design specifications
- Ensures compliance with regulatory requirements
- OSHA 10-Hour and 30-Hour Construction Safety & Health Certified
- Compaction Testing
- Concrete Testing
- Daily Observation Reports
- As Built Drawings

## TERRADON LANDFILL PROJECT EXPERIENCE

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**HAM LANDFILL EXPANSION  
PETERSTOWN, WV**  
TERRADON Corporation provided site characterization, surveying, mapping, subsurface investigation, groundwater study, monitoring, cell design, major modification to permit, and Certificate of Need application.

**JACKSON COUNTY SANITARY  
LANDFILL  
JACKSON COUNTY, WV**  
As part of the WVDEP's Landfill Closure Assistance Program, TERRADON Corporation prepared interim closure plan including stormwater management, leachate management, sediment pond and leachate pond repairs, regrading and re-vegetation of disturbed areas.

**COPPER RIDGE LANDFILL  
CAPELS, WV**  
TERRADON provided services to Enviro Solutions for the Cooper Ridge Landfill. TERRADON services included stormwater management, leachate management, and subsurface investigations. The project had a \$5.6 Million construction cost.

**WYOMING COUNTY SANITARY LANDFILL  
WYOMING COUNTY, WV**  
TERRADON Corporation provided landfill and geotechnical services for the Wyoming County Landfill in WV. Services included site characterization, stormwater management, leachate management including storage tanks, pump station and force main to POTW; slope stability regrading; and Subtitle D cap for the WVDEP.

**PINE CREEK LANDFILL  
LOGAN, WV**  
For the WVDEP LCAP, TERRADON Corporation designed the permanent closure plan including an additional landfill cell, stormwater management, capping, leachate management and storage tank, construction QC and certification for the abandoned landfill.







**TUCKER COUNTY LANDFILL**

**DAVIS, WV**

**CELL 5 DESIGN & CERTIFICATIONS**

For the Tucker County Solid Waste Authority, TERRADON Corporation performed surveying, mapping, subsurface investigation, groundwater study, monitoring, cell design, and construction observation and certification for the extension of Cell 5.

**CELL 6 DESIGN**

For the Tucker County Solid Waste Authority, TERRADON Corporation performed surveying, mapping, subsurface investigation, groundwater study, construction monitoring and certification, cell design, major modification to permit, and Certificate of Need application for the six acre cell.

**CELL 7 DESIGN**

For the Tucker County Solid Waste Authority, TERRADON Corporation performed major modification of permit, geotechnical investigation, new 50-year cell design, and leachate pond closure plan, groundwater statistical report, leachate management, QA/QC services, stormwater ponds, subsurface investigation, and Certificate of Need (CON) application for the 20 acre cell.





WVDEP LCAP PROGRAM

SAM WILKES, MS, LRS, PWS  
PROJECT MANAGER, POINT OF CONTACT  
VP GEO-ENVIRONMENTAL, TESTING & INSPECTION

**GEO-TECHNICAL  
ENGINEERING**  
JOHN JAMES, PE  
MARK CLUTTER  
BILL HUNT, PG, LRS

**SURVEY & MAPPING**  
ROBERT THAW, PS  
DAVE BROWN, PS  
BRIAN BAKANAS, PS

**QA/QC**  
PHIL REED, PE

**TESTING &  
INSPECTION**  
GREG HARVEY  
CHRIS MORRIS  
MIKE WARD  
DAVE WALLACE

KEY STAFF ORGANIZATIONAL CHART



## SAMUEL P. WILKES, MS, LRS, PWS

VICE PRESIDENT— GEO-ENVIRONMENTAL



### EDUCATION

M.S. Environmental  
Science & Policy,  
Johns Hopkins

B.S. Earth &  
Environmental  
Science, Wilkes  
University

### WORK EXPERIENCE

TERRADON  
Corporation  
2014-Present

Tetra Tech  
2003-2014

McCormick Taylor  
2001-2003

Dynamac  
Corporation  
1997-2001

Wilkes University  
1995-1997

### CERTIFICATIONS

OSHA  
1910.120/1926.65  
HAZWOPER

Professional  
Wetland Scientist by  
the Society of  
Wetland Scientist

Samuel Wilkes joined TERRADON in April 2014. He is a Professional Wetland Scientist and Licensed Remediation Specialist with more than 20 years of consulting experience as a project manager and senior environmental scientist who provides technical support to watershed management, restoration, natural resource conservation, and hazardous materials programs. Wilkes has provided assistance to public drinking water systems throughout West Virginia to assess potential contaminant sources and preparing source water protection plans. His experience enabled him to work with the WVDHHR-BPH staff and directly with various Public Service Districts throughout WV.

He provides oversight and manages field teams and contractors collecting wetland, stream quality, environmental media data and general site condition data for site characterization.

He has assisted clients by managing research, data analysis, data mapping and as a contributory author on scientific documents and peer reviewed research papers. Wilkes routinely oversees and conducts technical reviews of other consultants' work plans, sampling analysis plans, health and safety plans, quality assurance project plans, site characterization reports, and provides oversight of field crews conducting scientific data collection, delineations of wetlands and waters of the United States.

### RELEVANT PROJECT EXPERIENCE

**Independent Oil and Gas Association** Provided technical scientific support to IOGA during the appeal process of Regulated Aboveground Storage Tanks in WV. Provided expert witness testimony during the evidentiary hearing to the Environmental Quality Board regarding the creation of Zones of Critical Concern and Zones of Peripheral Concern.

**Aboveground Storage Tank (WV Senate Bills 373 and 423) Implementation**  
The TERRADON Team supported numerous clients by conducting time critical visual inspections of approximately 2,000 ASTs throughout the state. The inspection documentation resulted in a "Fit for Service", "Not Fit for Service", or "Fit with Required Repairs" determination for each tank. In addition, completed or updated SPCC or Spill Prevention, Response Plans for submittal to the WVDEP.

### Wetland, Waters of the US Delineation, and Endangered Species

Currently providing wetland and waters of the US delineations and permitting support to numerous private development and oil/gas clients. Acting as an Authorized Agent, submitted Nation Wide Permits and Individual 404 Permits to the Army Corps of Engineers. Conducted endangered species clearance through the USFWS project review process in WV and KY.

**Environmental Audits** Conducts site visits to confidential industrial client's facilities to review environmental permitting requirements and daily business practices. Recommend appropriate environmental permitting requirements for the facility to meet federal and state requirements. Best management practices are recommended for complying with spill prevention, control, and countermeasure (SPCC) plans and other regulations. Conducted environmental audits for industrial clients in WV, VA, MD, AZ and TX.



## **JOHN JAMES, PE**

### **GEOTECHNICAL ENGINEER**

#### **EDUCATION**

B.A. Civil  
Engineering  
West Virginia  
Institute of  
Technology

#### **WORK EXPERIENCE**

**TERRADON**  
Corporation  
2004-Present

James Engineering  
1983-2004

Triad Engineering  
1978-1983

James Engineering  
1973-1978

Ackenherl &  
Associates  
1968-1973

#### **REGISTRATION**

Professional  
Engineer, WV

John James is a Senior Geotechnical Engineer for various dam, landslide, foundation investigation/design, transportation, environmental, site selection, and mining projects. He has over 48 years of experience practicing engineering in WV and surrounding states. James specializes in innovative and cost-saving concepts for his projects. Coupled with his hands on common sense approach to projects, he works with many of the accepted geotechnical and other engineering software applications for latest technical solutions. James' project experience includes: studies and designs for landfills and environmental facilities; surface and ground water studies and remediation; design of liners for landfills and various impoundments; earth and rockfill dams; roads; highways and bridges; numerous foundation investigations; foundation investigations and designs ranging in size from small projects to major industrial complexes; storm drainage facilities; airport facilities; landslide analysis and correction; and forensic engineering.

#### **RELEVANT PROJECT EXPERIENCE**

##### **TUCKER COUNTY LANDFILL (TCLF)**

James has been the lead design engineer/engineer of record for the TCLF for the past 10 years, including responsibility for siting, permitting, design and all other services for the landfill. He has devised many cost-saving solutions and designs, including the incidental mining of previous mined -out coal workings for a cost savings for \$8,000,000 of \$10,000,000 Cell 7 cost.

##### **HAM LANDFILL EXPANSION**

Provided site characterization, surveying, mapping, subsurface investigation, groundwater study, monitoring, cell design, major modification to permit, and Certificate of Need application for the Ham Sanitary Landfill Expansion Project in Peterstown, WV.

##### **PINE CREEK/OMAR LANDFILL**

This project was under the WVDEP LCAP Program. James provided design and permitting services for the landfill that used 12 Acres HDPE Liner, in Pine Creek, Logan County, WV.

##### **DAM EXPERIENCE**

James has been Engineer of Record for numerous earth and rock fill dams in West Virginia, and some recent projects include: Mallard Dam (presently in design), 8 acres; Upper Glade Creek Water Supply Dam upgrade (from 95 to 112 acres+/-; Dawson Dam, 30 acres+/-; Lake Chaweva Reconstruction, 24 acres+/-; and Chatham Dam, 65 acres+/-). Also provided consultation and construction design for the United States Army Corps of Engineers for Bluestone Dam.

##### **SITE SELECTION EXPERIENCE**

James specializes in site evaluation from geologic and topographic perspectives with an ability to visualize relevant features of both geotechnical and topographical, including literature research and site reconnaissance, for specific project needs.

##### **TRANSPORTATION EXPERIENCE**

Worked on numerous roadway (cut and fill slopes) designs, landslide evaluation and remediation, site designs for numerous projects and foundation investigations for approximately 1,000 projects in West Virginia and the surrounding states.

**TERRADON**

**MARK CLUTTER**  
LANDFILL DESIGN ENGINEER

**EDUCATION**

B.S. Civil  
Engineering  
Technology  
Fairmont State  
College

A.A.S. Civil  
Engineering  
Technology  
Fairmont State  
College

A.A.S. Drafting/  
Design  
Engineering  
Technology  
Fairmont State  
College

**WORK  
EXPERIENCE**  
TERRADON  
Corporation  
2010-Present

Triad Engineering,  
Inc.  
2000-2010

WV Army National  
Guard  
1990-2003

**TERRADON**

Mark Clutter is a Project Manager/Design Engineer who is experienced in preparing construction documents and associated permitting for numerous projects throughout Kentucky, Ohio, and West Virginia including: creating erosion and sediment control plans, storm water management, design of impoundment closures, slope stability analysis, field surveying, drawings and specification preparation, design, design drafting, construction inspection, quality control testing, shop drawing review, project management, contract administration, permitting, and report preparation.

Clutter's landfill experience adheres to the WVDEP's Landfill Closure Assistance Program (LCAP) for landfill designs and construction, including all closure-related activities such as: leachate management control, sediment and erosion, gas management, groundwater monitoring, and a final cover on non-composite lined landfills.

**RELEVANT PROJECT EXPERIENCE**

**TUCKER COUNTY LANDFILL (TCLF), CELL 7 DESIGN**

For the Tucker County Solid Waste Authority, performed major modification of the permit, geotechnical investigation, new 50-year cell design, and leachate pond closure plan, groundwater statistical report, leachate management, QA/QC services, stormwater ponds, subsurface investigation, and Certificate of Need (CON) application, HELP mode and installation of monitoring wells for a 20 acre cell at the Tucker County Landfill in Davis, WV.

**TUCKER COUNTY LANDFILL PERMITTING**

Solid Waste Facility Siting Plan, Certificate of Need, Certificate of Site Approval, Part 1-Site Evaluation Application, Part 2-Design Application, DWWM-Module A-NPDES, Major Modification, Quarterly Report, Annual Report for the Tucker County Landfill.

**TUCKER COUNTY LANDFILL CELLS 1-4 CAPPING**

The project consists of capping approximately 20 acres of previous landfill cells with a HDPE Liner. The project included the following: preparation of construction drawings, technical specifications, contract and bidding documents, advertisements for bid, design report outlining the calculations to support the design, Erosion and Sediment Control permits, modifications to the NPDES storm water permit, permits to the West Virginia Solid Waste Authority for capping and reuse of methane, air pollution control permits for use of the methane gas emissions, and field services for Quality Control.

**TUCKER COUNTY LANDFILL**

TERRADON provides quarterly surveying of the current landfill surface and calculation of the quarterly volume and compaction rate; producing semi-annual statistical analysis and reports; creating annual reports that include: construction activities, financials, MSW tonnage, leachate generation, groundwater and discharge monitoring reports, and airspace summaries.

**HAM LANDFILL EXPANSION**

Provided site characterization, surveying, mapping, subsurface investigation, groundwater study, monitoring, cell design, major modification to permit, and Certificate of Need application for the Ham Sanitary Landfill Expansion Project in Peterstown, WV.

**ADDITIONAL LCAP EXPERIENCE**

Provided design and permitting for the following under the WVDEP LCAP Program:

- Pine Creek/Omar Landfill, 12 Acres HDPE Liner, Pine Creek, Logan County, WV
- Buckhannon Landfill, 14 Acres Geosynthetic Clay Liner, Buckhannon, WV
- Don's Disposal, 24 Acres HDPE Liner, near Eden's Fork, Kanawha County, WV
- McDowell County Landfill, 12 Acres HDPE Liner, near Welch, McDowell County, WV



**BILL HUNT, PG, LRS**  
**PROFESSIONAL GEOLOGIST**

Bill Hunt is a Professional Geologist, Licensed Remediation Specialist and Vice President of the Geo-Environmental department at TERRADON Corporation. Hunt offers relevant experience in environmental documentation, investigations, and coordination with federal, state, and local agencies. He prepares Environmental Impact Statements, Environmental Assessments, Section 4(f) Evaluations, and other environmental technical documents. He supervises and participates in work plan development, field surveys, on-site monitoring, data collection, impact analysis, subconsultant management, public meeting organization and group presentations.

**EDUCATION**

B.S. Environmental Science,  
Morehead State University

M.A. Geography,  
Ohio University

**WORK EXPERIENCE**

2010—Present  
TERRADON Corporation

2008—2010  
NGE, LLC

2001—2008  
Superior Marine Ways

1991-2001  
H.C. Nutting Company

1989—1991  
PSARA Technologies

1986—1989  
Westinghouse

**RELEVANT PROJECT EXPERIENCE**

**CHARLESTON LANDFILL, CHARLESTON, WV**

Design and oversight of program to assess waste limits at two cells at the landfill. Field activities consisted of soil borings and use of ground penetrating radar to determine the horizontal and vertical extent of waste buried at two cells of this landfill.

**TUCKER COUNTY LANDFILL, DAVIS, WV**

Conduct Semi-Annual groundwater monitoring and statistical analysis of groundwater data. Data is analyzed using DumpStat software package. Reporting is provided to WVDEP semi-annually.

**GREENHOUSE GAS EMISSIONS—TUCKER COUNTY LANDFILL, DAVIS, WV**

Estimation of greenhouse gas emissions for the facility from 2010 to 2013. Emission estimates were modeled utilizing US EPA Subpart HH estimation equations for Municipal Solid Waste Landfills. Calculated emissions were reported to USEPA through their electronic reporting system (e-GGRT).

**SKINNER LANDFILL, WEST CHESTER, OH**

- Work included groundwater sampling and monitoring
- Soil boring inspection, soil logging and sampling

**CECOS INTERNATIONAL LANDFILL, WILLIAMSBURG, OH**

- Soil and groundwater sampling
- RCRA Closure sampling of roadway

**WRIGHT PATTERSON AFB FORMER LANDFILL CLOSURE, FAIRBORN, OH**

Soil and Leachate Sampling, Project Health and Safety Plan Preparation, Project Safety Oversight/Air Monitoring, Work was conducted using Levels B, C and D personnel protection

**SHELL METHANE RECOVER SYSTEM—RUMPKE LANDFILL, COLERAIN TOWNSHIP, OH**

Supervised drilling program to install methane recovery wells as designed by Shell.

**WASTE ASSESSMENT—RUMPKE LANDFILL, COLERAIN, OH**

Design and oversight of program to assess waste limits at two cells at the landfill. Field activities consisted of soil borings and use of ground penetrating radar to determine the horizontal extent of waste burial at two cells of this landfill.

**MARILLA STREET LANDFILL. BUFFALO. NY**



## ROBERT THAW, PS

VICE PRESIDENT— SURVEY DEPARTMENT



### EDUCATION

A.S. Survey  
Technology, West  
Virginia Institute of  
Technology

B.S. Surveying,  
West Virginia  
Institute of  
Technology

### WORK EXPERIENCE

TERRADON  
Corporation  
1994-Present

Bowman Land Sur-  
veying  
1992-1994

Dunn Engineers  
1990-1992

Kelley Gidley Blair &  
Wolfe  
1988-1990

Pierson & Whitman  
Architects and  
Engineers  
1984-1986

### REGISTRATIONS

Professional  
Surveyor: WV

With more than 30 years of experience in a wide range of surveying projects, Robert Thaw serves as head of TERRADON's Survey and Mapping department. Thaw has been directly responsible for the completion of survey and mapping services on a number of landfill projects while at TERRADON. He organizes and supervises survey crews, reviews project plans, and creates base mapping for the landfills. Thaw has worked on other various projects including noise barriers, interchanges, connectors, bypasses, sidewalks, bike paths, and bridges. Thaw oversees all TERRADON survey activities, including: preparation of Right-Of-Way plans; the development of GPS static networks for aerial mapping in the design of roadways; identification of existing utilities and property lines; base image development and control placement for construction projects; and drafting of legal descriptions for ROW parcels.

### RELEVANT PROJECT EXPERIENCE

#### NITRO LANDFILL TOPOGRAPHIC SURVEY

Thaw was responsible for surveying the boundary of the former Landfill for future cap and development. Thaw and the survey & mapping staff performed topographic survey of the site, and prepared project mapping plans.

#### TUCKER COUNTY LANDFILL

Thaw established survey control for the landfill. His responsibilities included creating topographic surveys on a quarterly basis to be used for volume reporting for the landfill. Tucker County Landfill is a repeat client to TERRADON.

#### CHARLESTON LANDFILL

Thaw performed topographic surveys, and located bore hole locations for the Charleston Landfill.

#### CHARLESTON LANDFILL GEOTECHNICAL STUDIES

As part of the Charleston Landfill study, Thaw conducted a feasibility study for Leachate tank siting. Thaw also performed topographic surveys of proposed leachate tank sites to be used in the feasibility study.

#### NICHOLAS COUNTY LANDFILL DESIGN

Thaw provided survey services to establish control for the landfill. Responsibilities for the project included creating topographic surveys for design studies.

#### AEP—JOHN AMOS POWER PLANT INDUSTRIAL LANDFILL SHELLY & SANDS, INC.

Thaw established survey control, performed topographic surveys used for access road design, completed construction staking for access road, and excavation, provided daily volume reports. The client for this project was Shelly and Sands Inc..



**PHILIP REED, PE**  
 SENIOR CIVIL ENGINEER, QA/QC

Philip Reed serves as TERRADON'S Lewisburg, WV Office Director and provides services to clients for Quality Control, Materials Testing and Engineering Design. Reed provides technical direction on a variety of civil engineering markets including landfills, commercial and industrial developments, housing, energy and infrastructure. Reed is responsible for engineering analysis and modeling, design, regulatory compliance and permitting, in addition to quality control and assurance. He has created numerous residential subdivision designs with roadways and drainage.

**EDUCATION**

B.S. Civil  
 Engineering,  
 Virginia Polytechnic  
 Institute and State  
 University

**WORK  
 EXPERIENCE**

TERRADON  
 Corporation  
 2005-Present

Engineering & Test-  
 ing, 2000, Inc.  
 1999-2005

Cornerstone Land  
 Surveying  
 1990-1991

Norfolk Southern  
 Railway  
 1988-1990

**REGISTRATION**

Professional  
 Engineer,  
 WV, VA

**CERTIFICATIONS**

WVDOH Certified  
 Portland Cement  
 Concrete  
 Technician  
 WVDOH Certified  
 Compaction  
 Technician

**PROJECT EXPERIENCE**

**HAM SANITARY LANDFILL**

Responsible for all aspects of solid waste landfill permitting (H.A.M. Sanitary Landfill, Inc.), including: Certificate of Site Approval through local county Solid Waste Authority; Certificate of Need through Public Service Commission; Part 1 Solid Waste Facility Permit to include geologic and hydrologic evaluation of site; Part 2 Solid Waste Facility Design Application to include site design, leachate modeling, and composite liner design; and solid waste cell construction drawings, Construction Specifications, and Construction Quality Assurance / Quality Control Plan. Also responsible for all aspects of Construction Monitoring, including: monitoring of construction of both municipal solid waste disposal cells and Construction/demolition and asbestos disposal cells; responsible for construction stakeout and monitoring of construction, and Final Certification of construction.

**TRIANA ENERGY FRESH WATER IMPOUNDMENT**

Responsible for site design, construction certification, and bi-weekly inspections for 15 acre-feet freshwater impoundment in Northern, WV. Responsible for oversight of construction monitoring inspectors, reporting and permit compliance.

**SUMMIT BECHTEL RESERVE**

Provided Engineering Support for a 12,000-acre site development in Fayette County, WV. Oversaw site layout, grading, and survey support for one of the largest infrastructure projects in West Virginia. Oversaw all QC services and provided project direction of 20 inspectors and technicians during installation of more than 100 miles of utilities and nearly 50 miles of roadway construction. Additional inspection and monitoring activities included vertical construction of three buildings and an iconic wingtip pedestrian bridge.

**GORDY OIL**

Provided survey and design for 5 natural gas pads and support for freshwater impoundments.

**ENVIRONMENTAL PERMITTING**

Managed environmental permitting of rock quarries (RBS Inc., ALTA Sand Quarry, and Muddy Creek Mountain Stone) to include air pollution control permits and water quality permits.

**SPORTING CLUB, CREEKSIDE APARTMENTS**

Responsible for surface drainage remediation and rehab for the Sporting Club, Creekside Apartments, White Sulphur Springs, WV.





**GREG HARVEY**  
SENIOR INSPECTOR

Greg Harvey is a Level III Inspector and is an experienced designer and construction manager for a wide variety of civil engineering projects. Major design and construction projects with which Harvey has been involved include water and sanitary system upgrades, buildings, roadway design, drainage design, site design, abandoned mine land reclamation, permitting, property surveys, construction administration, and oversight.

**RELEVANT PROJECT EXPERIENCE**

**S&S LANDFILL, CLARKSBURG, WV**

QA/QC and Inspection which included but was not limited to; Earthwork, Drainage, Concrete and HDPE Liner. The various projects included 3 new MSW cells and one cell that was tied into an existing cell. Total cost was approximately 9 million dollars.

**NICHOLAS COUNTY LANDFILL, CRAIGSVILLE, WV**

Environmental Study for WV LCAP Program which included but was not limited to; Field work and Final report preparation.

**FAYETTE COUNTY LANDFILL CLOSURE, CUNARD, WV**

Design, QA/QC and Inspection which included but was not limited to; Earthwork, Drainage, Concrete and HDPE Liner. The Project was a landfill closure under WVLCAP program.

**MCDOWELL COUNTY LANDFILL CLOSURE**

Project Management/ Construction Management, Design, QA/QC and Inspection which included but was not limited to; Earthwork, Drainage, Concrete and HDPE Liner. The Project was a landfill closure under WVLCAP program.

**CHRIS MORRIS**  
SENIOR INSPECTOR

Chris Morris is a Senior Inspector for TERRADON Corporation. He is responsible for quality control testing and inspection for WVDOT, commercial, and residential construction projects throughout West Virginia. He interfaces with site owners (public and private) and contractors to complete testing and inspection projects.

Morris is responsible for monitoring contractor's work for conformance to the design plans, specifications and general permit requirements; experience tracking daily quantities, completing daily inspection reports, reviewing payment requisitions and maintaining field sketchbooks and as-built drawings.

**RELEVANT PROJECT EXPERIENCE**

**Charleston Landfill**—Charleston, WV - Observation and Density Control

**AEP John Amos Plant**—Winfield, WV - QA/QC mass concrete pours for large mat foundations and contractor's QC of controlled fill and various concrete placement.

**AEP Glen Lynn Power Plant**, Glen Lynn, VA - Observation and Density Control

**Winfield Locks and Dam**—Winfield, WV - Observation and Density Control

**Mingo County Airport**—Williamson, WV - Primary QA Technician

**Western Regional Jail**—Barboursville, WV - Owners QA Technician of Auger Cast Pile Installation

**Raleigh Memorial Airport**—Beckley, WV - Observation and Density Control

**Winfield Locks and Dam**—Winfield, WV - Observation and Density Control

**Blennerhassett Bridge**—Parkersburg, WV - QA/QC for all facets of construction of new bridge

**AEP Kyger Creek Power Plant**—Cheshire, OH - Observation and Density Control

**REGISTRATIONS**

- WVDOT Compaction Inspection
- WVDOT Portland Cement/Concrete
- WVDOT Asphalt Plant Technician
- WVDOT Asphalt Field Technician Compaction
- WVDOT Aggregate Inspector
- Nuclear Radiation Safety Officer
- FAA Eastern Regional Laboratories List
- PTI—Post-Tensioning Institute Level #2
- OSHA 10-Hour Construction Safety

**WEST VIRGINIA BOARD OF PROFESSIONAL SURVEYORS**



**Certificate of Authorization**

ISSUED TO:

**Terradon Corporation**  
*Nitro, West Virginia*



**Certificate of Authorization # 16-5430**

This certificate is issued by the West Virginia Board of Professional Surveyors in accordance with West Virginia Code § 30-13A-20. The person or organization identified on this certificate is licensed to conduct professional surveying and mapping services in the State of West Virginia for the period:

**January 1, 2016 through December 31, 2016**

This certificate is not transferrable and must be displayed at the office location for which issued.

In witness whereof I have put my hand, this 15<sup>th</sup> day of December, 2015

*ROY E. SHREWSBURY, II, Chairman*

*R. MICHAEL SHEPP, Member*



*NELSON B. DOUGLAS, Secretary*

*ANTHONY J. SPARACIO, Member*

**WEST VIRGINIA BOARD OF PROFESSIONAL SURVEYORS**



**Certificate of Authorization**

ISSUED TO:

**Terradon Corporation**  
*Lewisburg, West Virginia*



**Certificate of Authorization # 16-5629**

This certificate is issued by the West Virginia Board of Professional Surveyors in accordance with West Virginia Code § 30-13A-20. The person or organization identified on this certificate is licensed to conduct professional surveying and mapping services in the State of West Virginia for the period

**January 1, 2016 through December 31, 2016**

This certificate is not transferrable and must be displayed at the office location for which issued.

In witness whereof I have put my hand, this 18<sup>th</sup> day of December, 2015

Handwritten signature of Roy E. Shrewsbury, II.

**ROY E. SHREWSBURY, II, Chairman**

**R. MICHAEL SHERR, Member**



Handwritten signature of Nelson B. Douglass.

**NELSON B. DOUGLASS, Secretary**

**ANTHONY J. SPARACINO, Member**