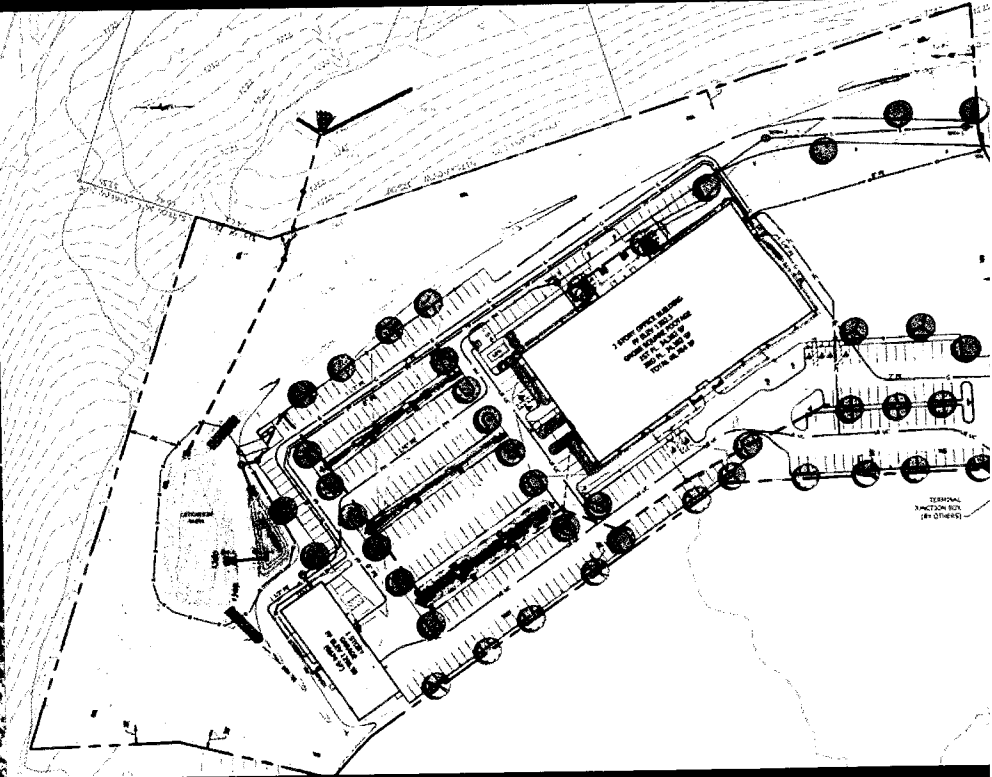




Request for Proposals

Engineering and Surveying Services for Hughesville Water Authority Tower Site and Hesker Hill Tower Site



August 21, 2020 at 5:00 PM

Copy

PROPOSAL FORM

Important note to Bidders: It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to: Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 21, 2020. **This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: Century Engineering, Inc.

Company Address: 55 Pierce Lane, Suite 301

Montoursville, PA 17754

Main Telephone: 814.364.2262

Main Fax: 814.364.2266

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Eric Lundy, PE, Associate Vice President

Contact Telephone: 814.531.4809 (ext. 3217) Fax: 814.364.2266

Contact Email: elundy@centuryeng.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Eric Lundy, PE Associate Vice President

Office Address: 55 Pierce Lane, Suite 301

Montoursville, PA 17754

Telephone: 814.531.4809 (ext. 3217) Fax: 814.364.2266

Email: elundy@centuryeng.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	<u>1</u>	Date	<u>8/3/2020</u>
Addendum No	<u> </u>	Date	<u> </u>
Addendum No	<u> </u>	Date	<u> </u>
Addendum No	<u> </u>	Date	<u> </u>

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

Company Type (check one):

- Sole Proprietorship Partnership Corporation Joint Venture

Bidder attests that:

1. He/she has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements:

2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor and material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

<u>Century Engineering</u>		<u>52-2002914</u>		
Company Name		Federal ID#		
<u>10710 Gilroy Road</u>	<u></u>	<u>Hunt Valley</u>	<u>Maryland</u>	<u>21031</u>
Street Address	PO Box	City	State	Zip
<u>443.589.2400</u>	<u></u>	<u>443.589.2401</u>	<u></u>	<u></u>
Telephone #		Fax #		

WITNESS:

Kenneth M. Stratemeyer
Signature (see below)

KENNETH M. STRATEMEYER
Name (print)

EXECUTIVE VICE - PRESIDENT
Title (print)

COMPANY:

J Schungeck
Signature (see below)

Jacquelyn Schungeck
Name (print)

Executive Vice President
Title (print)

BID PRICE SCHEDULE

Hughesville Tower Site and Hesker Hill Tower Site

Hughesville Water Authority Site E&S		
Site Grading/Site Layout		\$4,168
Stormwater Drainage Design		\$6,022
Erosion/Sediment control		\$2,969
Civil Permitting		\$6,500
Geotechnical		\$14,750
Geotechnical Boring Stakeout		\$460
Construction Stakeout		\$2,009
Soil Resistivity		\$4,500
Preliminary and Final Construction Drawings		\$2,072
Utility Coordination		\$3,754
Zoning Information	Not Anticipated	
FAA/FCC		\$5,916
Field Surveying/Courthouse Research		\$5,388
Survey Plans	Included in site layout and permitting	
Environmental Investigation	Included in other environmental services	
Infiltration Testing		\$2,164
Wetlands/Stream Delineation		\$1,460
Phase I Investigation and Report		\$3,850
Hearing Attendance (If Needed)	Not anticipated based on site meeting quotes to be obtained based on Phase I results	
NEPA/SHPO Services		\$385
Deliveries, Copies, Etc.		\$200
Subtotal		\$66,567
Hesker Hill Site E&S		
Site Grading/Site Layout		\$4,168
Stormwater Drainage Design		\$6,022
Erosion/Sediment control		\$2,969
Civil Permitting		\$6,500
Geotechnical		\$9,750
Geotechnical Boring Stakeout		\$460
Construction Stakeout		\$1,320
Soil Resistivity		\$4,500
Preliminary and Final Construction Drawings		\$2,072
Utility Coordination		\$3,754
Zoning Information		\$1,250
FAA/FCC		\$5,916
Field Surveying/Courthouse Research		\$3,999
Survey Plans	Included in site layout and permitting	
Environmental Investigation	Included in other environmental services	

BID PRICE SCHEDULE
Hughesville Tower Site and Hesker Hill Tower Site

Infiltration Testing		\$1,650
Wetlands/Stream Delineation		\$1,120
Phase I Investigation and Report		\$3,850
Hearing Attendance (If Needed)	Anticipated the site will require a special exception	\$250
Phase II Investigation and Report (If Needed)	Not anticipated based on site meeting quotes to be obtained based on Phase 1 results	
NEPA/SHPO Services		\$308
Deliveries, Copies, Etc.		\$200
Subtotal		\$60,058
Grand Total for Both Sites		\$126,625

The undersigned, as Bidder, hereby declares that the total project costs as indicated above, includes all necessary work to complete this project in full according to the general specifications contained in the RFP. Products and services not specifically mentioned, but are necessary to provide the functional capabilities shall be listed and included as part of the cost elements.

The undersigned further understands and agrees that if the County accepts the bid, no additional funds will be allowed beyond the stated total project costs.

Company Name: Century Engineering, Inc.

Address: 55 Pierce Lane, Suite 301, Montoursville, PA 17754

Point of Contact: Eric Lundy

Phone Number: 814.571.1994

Fax Number: 814.364.2266

Email address: elundy@centuryeng.com

Name of person submitting proposal: Eric Lundy

Signature: Eric S. Lundy

Date: August 20, 2020

When submitting a bid, place the bid form sheet as the top page of the bid package and the bid price schedule as the second page of the bid package.

Legal Ad
Sun Gazette
To Be Run: July 30th and August 3rd

NOTICE TO BIDDERS

ADDENDUM NO. 1 RFP FOR ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE

The additions and/or deletions contained in this Addendum shall be made a part of the plans and specifications and contract documents for the above-referenced solicitation, and shall be subject to all applicable requirements thereunder, as if originally shown and/or specified. In case of any conflict between the specifications, and this Addendum, this Addendum shall govern.

This Addendum must be returned with your bid as acknowledgment of its receipt. Bidders may obtain the Addendum on the County website at www.lyco.org and Request for Bids.

The following modification is made to the text for the referenced solicitation:

The scope of the project has changed from one (1) tower site to two (2) tower sites, resulting in a number of changes to the RFP issued. Please see the following changes for the Lycoming County RFP for E&S services.

1. Change from "Hughesville Water Authority Tower Site" to "Hughesville Water Authority Tower Site and Hesker Hill Tower Site: (1) on the cover page, (2) on Notice to Bidders page 1-1, second paragraph, and (3) on Section 2, page 2-2, paragraph 2.9, third line.

2. Change to Scope of Work & Technical Specifications, Introduction, page 5-1 is as follows:

Lycoming County is currently upgrading our existing radio system to better serve the residents, businesses, tourists and public safety agencies of the county. In order to achieve the overall plan, Lycoming County will be contracting for the construction of two (2) raw lands to finish tower sites to improve RF coverage for our first responders. Additionally, on the one site, a second plot of land is to be cleared for the water authority to use (no further development of the second plot is required).

3. Changes to Scope of Work & Technical Specifications, General Requirements, item 1, page 5-1 are as follows:

1. The names and locations of the two (2) new proposed tower sites are:

- a. Hughesville Water Authority tower site
 - i. Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
 - ii. Street address: 279 Reservoir Road, Hughesville, PA
 - iii. Township: Wolf
 - iv. County: Lycoming
 - v. Size of site plot: 100'x100'
 - vi. Height of tower: 250'

Hughesville Water Authority land which is to be cleared (not developed) for water authority use is:

- i. Street address: 279 Reservoir Road, Hughesville, PA
- ii. Township: Wolf
- iii. County: Lycoming
- iv. Approximate size of plot to be cleared for the water authority: 100'x100'

- b. Hesker Hill tower site
 - i. Latitude: 41-14-19.1 N, longitude: 77-14-35.1W
 - ii. Street address: 1324 Hesker Hill Road, Jersey Shore, PA
 - iii. Township: Piatt
 - iv. County: Lycoming
 - v. Size of site plot: 75'x75'
 - vi. Height of tower: 250'

The County will be responsible for procurement of site and leasing of property.

4. Change to Mandatory Site Walk on Notice to Bidders, page 1-1, paragraph 4 is as follows:

A mandatory site walk will be held on Wednesday, August 5, 2020, at 10:00 AM for the two (2) tower sites, starting at the Hughesville Water Authority site located at 279 Reservoir Road, Hughesville, PA.

5. Change to Price Proposal, section 6.1 Cost Elements is as follows:

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final	

Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	
Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HUGHESVILLE	

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	

Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HESKER HILL	

GRAND TOTAL FOR BOTH SITES	
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ACKNOWLEDGEMENT

I hereby acknowledge receipt of this Addendum for the above noted project.

Signature *Joseph C. Schunger*

Date 8/20/2020

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SURVEYING / ENGINEERING SERVICES

Site Design and Approvals (Hughesville Tower Site)

- a. Research the Wolf Township Subdivision and Land Development Ordinance (SALDO) and Stormwater Management Ordinance (SWMO) and existing site conditions to ascertain stormwater management measures that may be required for the site and uses, setbacks, lot coverage, buffer yards, parking requirements and similar parameters that would affect the Proposed Site Development.
- b. Research tax mapping, recorded deeds, right of way documents
- c. Request/confirm existing right-of-way (ROW) width for surrounding roads
- d. Complete a Pennsylvania One Call design request (PA Act 287 as amended) and request copies of utility plans and information if available from utility service providers
- e. Research FEMA floodplain mapping for the subject property
- f. Investigate the type of sewage facilities planning required (i.e. "exemption" or Planning Module) and obtain appropriate planning approval for the lease area: planning exemption is anticipated, since there is no actual sewage service required.
- g. Submission to Pennsylvania Historic and Museum Commission for historical site clearance.
- h. Topographic field survey to verify existing conditions. Our services include survey of visible utility facilities (manholes, valve boxes, etc.) and correlating that data with existing utility records as available.
- i. Preparation of an Existing Conditions Site Plan of 1' contours for the development area with this the field survey information and 2' contours will be created for the rest of the property using available GIS data. Recorded easements and utility rights-of-way referenced on the current deed of record will be shown and identified within the survey limits. Pavement and ROW widths for roads adjoining the project site will be shown and identified. Building setback lines as determined from the Wolf Township Zoning Ordinance for the applicable district will be shown for the subject property.
- j. **Sketch Plan Development** – Preparation of a sketch site design and grading plan for review and approval by the Owner. Sketch plan will be with proposed tower pad layout and sizing per Owner direction along with new access, and parking area. Once approved by Owner, the Sketch plan will be submitted to the Township for initial review and comment. We will set up meetings with the Township Planning Commission and the County Conservation District for their initial review and comment.
- k. **Municipal Approvals** – Based on Municipal requirements, the project constitutes submission of a Land Development Plan to the Township for the proposed lease area. Therefore, one plan submissions will be made following the sketch plan submission.
 - i. **General Requirements** – This task shall include the preparation of Title/Signature Sheet, General Notes sheet, Existing Conditions/land clearing plan, highway entrance plans, details. The plan set will include geometry plans that will detail the metes and

- viii. Additional survey(s), due to improper construction by the Contractor, will be on a time and materials basis and billed as additional services
- ix. Perform engineering review of as-built data to ensure it meets the design requirements
- x. Prepare and record a restrictive covenant for the stormwater management facilities
- xi. Prepare a Notice of Termination application and coordinate all required signatures
- xii. Prepare E&S plan for submission
- xiii. Preparation, submission and administration of stormwater management access and maintenance easements, as required by the Municipality/County
- xiv. After construction is complete, coordinate final inspection, pursue signatures on the plan and record the Land Development Plan
- xv. Soil Infiltration Testing
 1. Century will perform a maximum of two (2) sets of double ring infiltrometer tests, in accordance with the PA DEP Stormwater BMP Manual, Appendix C. Infiltration testing will occur in key areas that may be suitable for volume control BMPs.
 2. Century will inventory existing conditions at the site, i.e. soils, geology, streams, topography, drainage patterns, land uses, and other natural or man-made features.
 3. Century will perform soil profiles at each infiltration test location to ensure adequate depth (24 inches or greater) exists between the potential infiltration BMP and the limiting layer.
 4. Backhoe and operator for pit excavation is included in this scope.

Utility Coordination (Hughesville and Hesker Hill Road Tower Sites)

- a. Complete a Pennsylvania One Call design request (PA Act 287 as amended) and request copies of utility plans and information if available from utility service providers
- b. Conduct site meeting with utility owners to determine the best location and if easements and utility rights-of-way are required to obtain service
- c. Aid in the preparation of service applications for the various utilities

FAA/FCC Approvals (Hughesville and Hesker Hill Road Tower Site)

- a. Prepare FAA Form 7460 for the tower location and height at each site
- b. Prepare FCC Application and Registration forms for each tower site
- c. Prepare the Environmental NEPA reviews and Categorical Exclusion required for the tower application at each tower site

Geotechnical (Hughesville and Hesker Hill Road Tower Site)

- a. Locate, stakeout and prepare each site for three (3) test borings at a depth of 35 feet.
- b. Conduct field electrical resistivity testing and prepare electrical resistivity report for each site.

- c. Prepare a Geotechnical Report, which will be generated as a result of the subsurface investigation and laboratory testing, will include the following:
 - i. Test boring logs, laboratory testing data, geology map, mining research, USGS Map, research references and test boring location plan
 - ii. Site preparation, drainage, groundwater control, and structural fill placement recommendations
 - iii. Foundations design recommendations: maximum net allowable bearing capacity and maximum anticipated total and differential settlement
 - iv. Lateral earth pressure recommendations: active, passive and at-rest lateral earth pressure, unit weight, angle-of-internal friction, and cohesion parameters
 - v. Site seismic classification

Wetlands and Environmental (Hughesville and Hesker Hill Road Tower Site)

- a. Research the historical information and existing wetland mapping of each site to have a knowledge of possible existing wetlands
- b. At each site: conduct a field investigation to locate and flag any wetland area found in the vicinity of the tower plots
- c. At each site: prepare a wetlands report to document if wetlands were present
- d. At each site: research the historical information of each site to have a knowledge of possible hazardous materials used
- e. At each site: conduct a Phase I Environmental Field Investigation to locate and flag any potential hazardous material found in the vicinity of the tower plots
- f. Prepare a Phase I Environmental Report to document any hazardous materials present at each site.
- g. If the Phase I Environmental Report shows that environmental hazards are present at either site, conduct a Phase II Environmental Investigation for the site(s) with the known environmental hazards

OWNER RESPONSIBILITIES/DESIGN SUPPORT INFORMATION

The following Owner responsibilities and design support information is required to complete the identified scope of services provided by Century.

- 1. Owner is responsible for all reimbursable expenses, including permit/submission fees.
- 2. Equitable owner is responsible for execution of necessary documentation required for permitting.
- 3. Provide unrestricted access to the property.
- 4. Provide Architectural Layout of proposed building, access doors, floor plan, suitable for placing on the Land Development Site Plan.

5. Utility distribution strategy shall be conceptually designed in consultation with the utility service provider and building engineer/architect to include plan layout, easement needs, agreement requirements, and other requirements
6. Sign all applications, permits and plans in a timely manner

POTENTIAL ADDITIONAL SERVICES/ASSUMPTIONS/EXCLUSIONS

The following services are identified as potential additional services, based on the required scope of the project. **These services are not included in the contact scope of services and proposed fees.**

If in the event these services are requested by the Owner, prior to the execution of a contract regarding any additional service, the services will be provided and invoiced based on a separate contact to be submitted for approval.

ASSUMPTIONS/EXCLUSIONS

- + Century will address comments provided by authorities having jurisdiction provided such comments pertain to compliance with code, ordinances or regulation and are consistent with this Scope of Work. Revisions to prepared documents as a result of design and/or engineering differences of opinion with the reviewing authority and not as a result of code, ordinance, or regulation requirements shall be considered an additional service.
- + Each submission shall be signed and sealed by a professional registered in the Commonwealth of Pennsylvania. All professional service tasks proposed under this agreement will be performed by Century in-house staff.
- + Owner to cover cost of permit/submission fees
- + No structural design has been included within this proposal
- + This scope does not include preparation of cost estimates or master planning of the site (other than for performance security purposes), participation in a separate Value Engineering exercise nor any redesign resulting from those activities
- + Preparation of standalone demolition or mass grading packages/plans has not been included.
- + Contractor engineering related to construction means and methods (such as but not limited to: design of shoring, bracing, formwork, scaffolding, underpinning procedures.) is not included.
- + Easement preparation and administration due to unforeseen or discovered problems identified is excluded.
- + Construction management services, other than identified above, is excluded.
- + Construction inspection other than identified above is excluded.
- + Utility Design/Relocation service, other than identified above is excluded.
- + Mitigation of any issues as a result of a PA Historical Museum Commission "Hit" is excluded.
- + Proposal excludes utility HOPs: none are anticipated.
- + Assist site contractor with issues encountered during construction is excluded.

- + Preparation of As-Built drawings for the site plan from a new As-Built survey is excluded.
- + Preparation of As-Built drawings of the utilities from a new As-Built survey is excluded.
- + PA D.E.P. sewage module planning is excluded. Planning exemption is anticipated.
- + Meetings with Owner's attorney are excluded.
- + Project assumes that all improvements will be built prior to final inspection/occupancy. Therefore, a surety agreement/cost estimate for improvements not completed is not anticipated to be needed.
- + Any changes to the approved plan that might take place during construction that would result in required plan revisions is excluded.
- + FCC Form 854, is excluded per Q&A No. 4 - Question 14.
- + Property survey for each parent tract is not being provided per answers provided in Q&A No. 4.
- + Grading design for a pad for water storage tank at the Hughesville site is not included in our scope per Q&A No. 4 - Question 45.
- + Any services not specifically listed in this contract is excluded.

Franklin Township Sanitary Sewer Project



LOCATION
Franklin Township,
Lycoming County
(Approximate Population:
114,000)

SERVICES
Civil, Electrical,
Controls, Environmental,
Geotechnical Engineering,
and Surveying Services

OWNER
Franklin Township
Supervisors
PO Box 85
Lairdsville, PA 17742

REFERENCE
Victor Marquardt
570.584.3240

COMPLETION DATE
Ongoing
(Design completed 2019)

Pictured: a similar pump station as the one to be installed for the Franklin Township Sanitary Sewer project

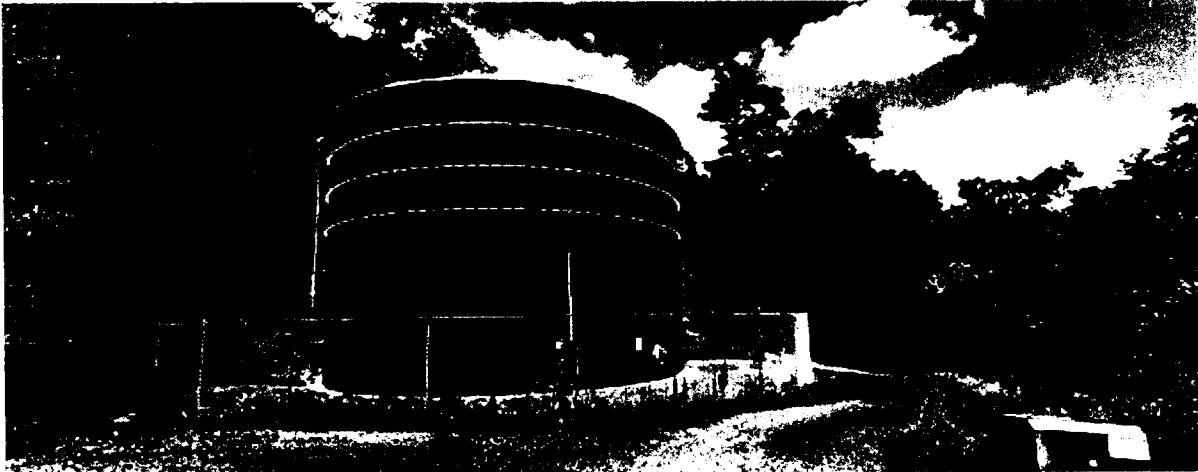
Century Engineering, Inc. (Century) provided Civil engineering services for the Franklin Township Sanitary Sewer project in the Village of Lairdsville, Franklin Township, Lycoming County. The project will include construction and installation of a gravity sewer collection system, pump station, force main, wastewater treatment plant, and discharge line.

Century performed a topographic survey of the existing project area, including stream cross-sections, wetland boundaries, first floor elevations of houses, and all site features that may be affected by the proposed project. The information collected from the field survey was used as basis for design of the collection and conveyance system and site layout for the pump station and treatment plant. We were responsible for the design of the duplex pump station, SBR treatment plant, treatment building to house required blowers, plant controls, and UV disinfection system, and all required backup power supplies and site lighting.

Century obtained all required permits and clearances, including general NPDES for stormwater and erosion sediment control, several general permits relating to stream encroachments and crossings, NPDES for effluent discharge, Water Quality Management, PHMC clearance, and PNDI search. The project also required a PennDOT HOP permit and coordination with the Department's milling and overlay project of SR 0118. Century also coordinated design with Lycoming County Water and Sewer Authority (LCWSA) since they will operate the plant on a daily basis.

The project is currently awaiting funding from the RUS section of the USDA. Century is working closely with LCWSA to obtain funding and will continue to work with all parties involved to successfully bid and construct the project.

Centre Hall Borough Water Tank



LOCATION

Centre Hall Borough,
Centre County
(Approximate Population:
114,000)

Century Engineering, Inc. (Century) provided civil engineering services for the Centre Hall Borough 491,000 gallon finished water storage tank project located in Potter Township, Centre County. The project consisted of all site and water tank design, bid, and contract administration.

SERVICES

Civil, Environmental,
Electrical, Controls and
Geotechnical
Engineering and Surveying
Services

Century performed a topographic survey of the existing project area, design of site access and grading, geotechnical investigation for tank footer design, utility services and connections and acquisition of all required local, state, and federal permits, including, but not limited to NPDES for stormwater and erosion and sedimentation control and DEP Public Water Supply and Environmental permits. Century also created construction plans, specifications, and publicly bid the project.

OWNER

Centre Hall Borough
Water Department
134 N. Hoffer Avenue
Centre Hall, PA

The tank site is on the southern slope of Mount Nittany and consideration had to be taken for the type of tank and associated siting requirements. Taking the steep slope of the overall site into consideration, Century conducted a review of a concrete tank that would decrease the site grading required and a glass-fused bolted steel tank which would require a larger amount of site grading to facilitate the tank pad. Ultimately, the client elected to construct a glass-fused bolted steel tank.

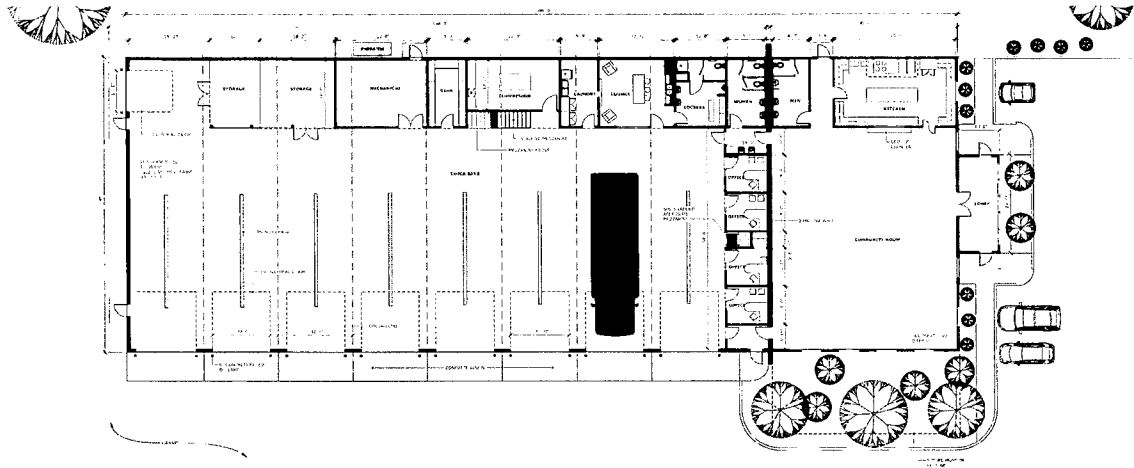
REFERENCE

Ken Strouse
814.364.1772

COMPLETION DATE

2004

Centre Hall Volunteer Fire Company Fire Station



LOCATION

Centre County, PA
(Approximate Population:
162,000)

SERVICES

Survey and Civil
Engineering

OWNER

Centre Hall Volunteer Fire
Company
207 N. Pennsylvania
Avenue
Centre Hall, PA

REFERENCE

Davis Araujo, CHFC
President
814.933.6066

COMPLETION

2021 (Estimated)

The Centre Hall Volunteer Fire Company project was initiated in the Fall of 2016 due to the need for a larger seven (7) bay fire station that was better suited to serve the growing community and to relocate the fire station to a more suitable location with larger community gathering space and additional parking. The project was put on hold due to funding considerations and was recently re-activated.

Following a standard course through zoning, land development (preliminary/ final land development), environmental permitting (NPDES), execution of various public improvement agreements (Centre Hall Borough Water), and other municipal and state approvals, the project was bid out with bids being due June 2020. Construction is slated to begin mid-July 2020 with completion slated for July 2021.

The site was designed to have multiple access points to reduce everyday traffic patterns crossing with engine paths as well as accommodating turning movements of larger vehicles, and additional parking stalls to better suit community events.

Projects

Penns Valley Area School District Renovations and Addition



LOCATION
Centre County, PA
*(Approximate Population:
162,000)*

SERVICES
Civil Engineering and
Surveying

OWNER
Penns Valley Area
School District
4528 Penns Valley Road
16875

REFERENCE
Robert Miller, Director of
Physical Plant
814.422.2000

COMPLETION
2019

Century Engineering, Inc. (Century) provided civil engineering and surveying services for various land development projects including topographic surveys, pavement designs, stormwater management, erosion and sedimentation control, recreational fields/areas, and permitting, NPDES permitting, construction administration, bid document preparation and construction stakeout for various projects.

Most recently, Century provided all the civil engineering services for PVASD's high school renovation and new gymnasium project, including stormwater design and permitting, ADA sidewalk and parking design, utility line relocation design, bid administration, construction stake-out, and contract close-out/punch list services.

The project was completed in the fall of 2019.

Cumberland County Hospitality LLC Land Development

LOCATION
Cumberland County, PA
(Approximate Population:
253,000)

SERVICES
Civil Engineering, Site/Land
Development, Surveying,
Permitting

OWNER
Cumberland County
Hospitality LLC Land
Development

REFERENCE
Mark Nesselroad
304.599.3369

COMPLETION
2020

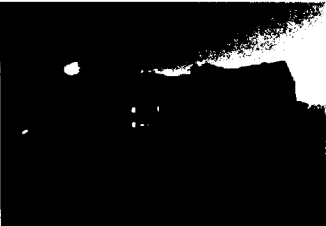
Century Engineering, Inc. (Century) provided numerous civil engineering services for the Cumberland County Hospitality LLC Land Development in South Middleton Township, Cumberland County, near Carlisle, PA. The project is located off the I-81 Exit 44 interchange along Allen Road. Century prepared several design options for the site, including the development of a restaurant and regional commercial center. Century reviewed all development options with the property owner, architect, and municipal staff. Following these discussions, it was agreed that the site should be developed into an extended-stay MainStay Suites hotel, with the potential to further develop the remainder of the site in the future.

Century performed a topographic survey and provided land development services for the site. In the existing condition, the site was very narrow, rocky, and significantly elevated above Allen Road. To resolve these design challenges, Century's geotechnical team designed several retaining walls and provided other measures to stabilize the site. Increased stormwater flows were mitigated by routing runoff through a series of rain gardens and underground infiltration chambers onsite. Century staff were also responsible for site layout, grading, water and sewer utility design, as well as site landscaping and lighting.

The development of the MainStay Suites hotel required several permits and approvals from state and local agencies such as a General NPDES Permit for stormwater and erosion and sediment control from the County Conservation District as well as a Sewage Facilities Planning exemption from DEP and multiple Highway Occupancy Permits from PennDOT. Century also worked with township staff to obtain a conditional use approval and several waivers and variances.

Century prepared Final Land Development Plans for the site, and municipal approval was granted in February 2020.

Penn State University – Nittany Village



LOCATION
 Dauphin County, PA
(Approximate Population: 278,000)

SERVICES
 Civil, Transportation, and Geotechnical Engineering, Surveying, and Landscape Architecture

OWNER
 Lift Development
 625 North Spring St.
 Middletown, PA 17057

REFERENCE
 John Tierney
 717.319.9028

COMPLETION
 2013

Century Engineering, Inc. (Century) provided civil, transportation, environmental, survey, landscape architecture, and geotechnical engineering services.

The Nittany Village Student Housing project was initiated in the fall of 2010 due to an increase in student applications and a demand for student housing. Following a standard course through zoning (granting of special exception), land development (lot consolidation and preliminary/final land development), environmental permitting (NPDES), highway occupancy permitting (PennDOT), execution of various public improvement agreements (Lower Swatara Township and Middletown Water Authority), demolition and construction, occupancy wasn't predicted by August 2012.

It is a measure of the project team's effectiveness that the two buildings were constructed and were 90% occupied for the start of the 2012 fall semester. The third building was subsequently constructed and occupied for the 2013 fall semester.

Nittany Village was designed to look and behave as an extension to the campus though creating its distinct sense of place through its architecture.

The extension of pedestrian linkage and improved emergency vehicle access to the entire neighborhood were worthy public improvements that benefited the Lower Swatara community. Penn State was involved in every step of the project particularly the stormwater and campus linkage planning.

The site's stormwater runoff was carefully designed to pass through water quality features before entering one (1) of three (3) underground detention facilities that relied on infiltration to recharge the aquifer and reduce the post construction peak rate of runoff by over 60%. Water quality filters were introduced before each of the underground detention facilities to capture oil, grease, and sediment from each of the parking areas. Rather than the roof runoff from each building entering into a piped collection system, it is disconnected from any piped collection system and used to fill rain barrels at each wall inset that are in turn used for watering the landscaped beds adjacent to the first floor walls.

This project adopted a strategy to over-manage the post development 100 year flows to as close to zero cfs as space and budget permit. The design team was successful in achieving that target through the use of 12 underground stormwater cells that successfully manage the peak rate runoff from the 100-year design storm. The underground cells were decentralized to serve local buildings, roadways and walks with over half of the paving designated as porous asphalt.

Projects

Elizabethtown Public Works Garage



LOCATION

Lancaster County, PA
(Approximate Population: 546,000)

The Elizabethtown Public Works Garage is a facility that services a multitude of needs of the Public Works Department in Elizabethtown, PA. The building itself is a two (2) story structure that provides vehicle parking bays as well as office space for employees. There is also a large storage building on site that houses materials used by Borough personnel.

SERVICES

Civil, Mechanical, Plumbing, Electrical, and Structural Engineering

Century Engineering, Inc. (Century) performed the site civil services including survey, stormwater design, permitting, construction management, and inspection services for this project. We also designed a 10 FT tall retaining wall and site landscaping. Additionally, Century provided the mechanical, electrical, plumbing, geotechnical, and structural engineering for this project.

OWNER

Borough of Elizabethtown
 600 South Hanover Street
 Elizabethtown, PA 17022

REFERENCE

Ann Roda,
 Assistant Borough Manager
 717.367.1700

This project was designed and constructed with an eye towards environmental impacts. Contaminated soils and other hazardous materials were discovered on-site during construction. These hazardous items were removed and disposed of in a safe manner that complied with all DEP and OSHA requirements. Hazardous and contaminated material onsite was replaced by clean fill. Native vegetation was planted onsite around the structures and in the bioretention pond, creating valuable habitat for aquatic species.

COMPLETION

2019

The construction of the Elizabethtown Public Works garage represents value added to the community. This project beautified the community by developing a vacant contaminated lot into a visually appealing property that is beneficial to the environment and meets the needs of the Public Works staff and community as a whole. Construction was completed in the fall of 2019.

Projects

Relevant Geotechnical Projects (CMT Laboratories, Inc.)

<p>LOCATION Various Municipalities, PA</p> <p>SERVICES Geotechnical Engineering</p> <p>OWNER Various</p> <p>COMPLETION 2021 (Estimated)</p>	<p>California Cell Tower <i>California Borough, Washington County, PA (Approximate Population: 207,000)</i></p> <p>CMT Laboratories, Inc. (CMT) performed a subsurface exploration and prepared a geotechnical report to include design recommendations relevant to the construction of a new cell tower.</p> <p>First Energy Trade City Substation <i>West Mahoning Township, Indiana County, PA (Approximate Population: 84,500)</i></p>
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CMT performed subsurface exploration and prepared a geotechnical report to include design recommendations relevant to construction. Additionally, CMT performed resistivity testing utilizing the Four-Pin Method with a Nilsson Model 400 Soil Resistance Meter.

U-4.0 x 160' Communications Tower
*North Woodbury Township, Blair County, PA
(Approximate Population: 122,500)*

CMT performed subsurface exploration and prepared a geotechnical report to include design recommendations relevant to construction of a new communications tower.

FirstEnergy Shade Gap Substation Upgrades
*Cromwell Township, Huntingdon County, PA
(Approximate Population: 45,000)*

CMT performed subsurface exploration and prepared a geotechnical report to include design recommendations relevant to construction. CMT also performed field resistivity testing at three (3) traverse locations and employed the Wenner Four-Electrode Method.

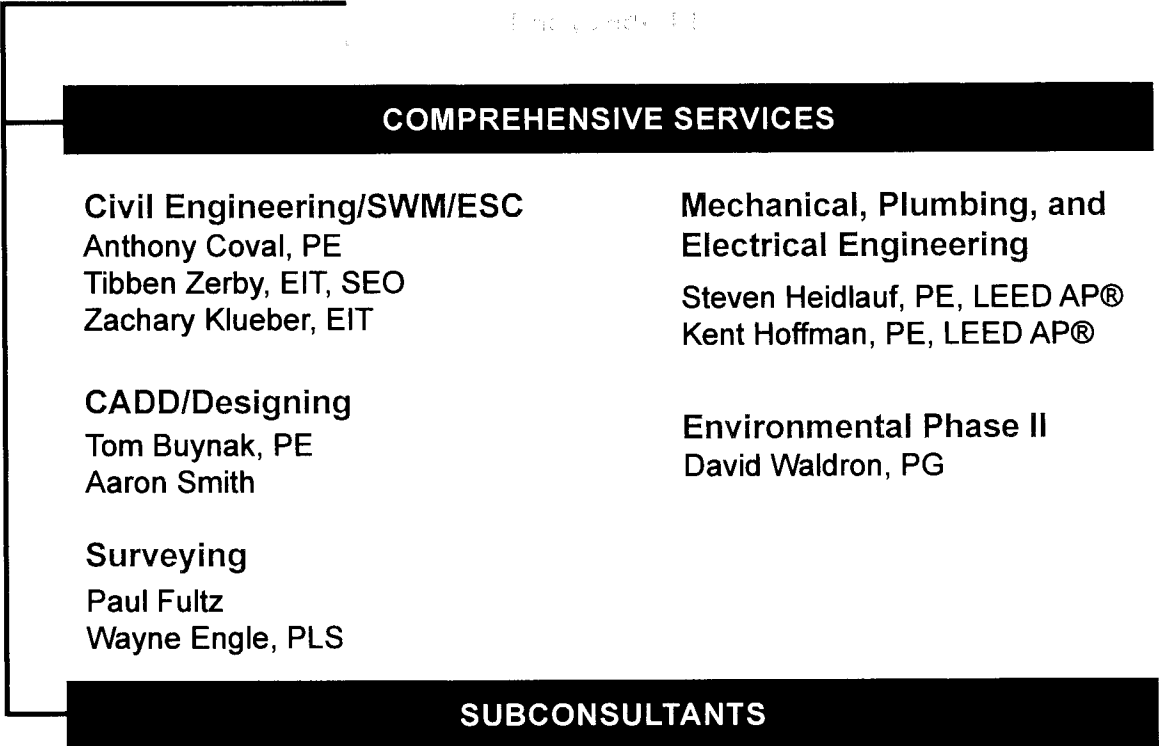


Lycoming County Hughesville
Water Authority Tower Site and Hesker Hill Tower Site



Principal-in-Charge/QA/QC
Robert Decker, PE

Project of Consultant/Engineer in Charge
Enclosure #1



COMPREHENSIVE SERVICES

Civil Engineering/SWM/ESC
Anthony Coval, PE
Tibben Zerby, EIT, SEO
Zachary Klueber, EIT

**Mechanical, Plumbing, and
Electrical Engineering**
Steven Heidlauf, PE, LEED AP®
Kent Hoffman, PE, LEED AP®

CADD/Designing
Tom Buynak, PE
Aaron Smith

Environmental Phase II
David Waldron, PG

Surveying
Paul Fultz
Wayne Engle, PLS

SUBCONSULTANTS

Geotechnical Engineering
Shad Hoover, PE
(CMT Consultants, Inc.)

Environmental Engineering
Becky Gaston, CPESCE
(Green Valley Environmental,
LLC)

**Electrical/Communications
Engineering**
Nicholas Platt, PE
(Nittany Controls, LLC)



Key Personnel

Robert Decker, PE

YEARS OF EXPERIENCE
30

ACTIVE REGISTRATION

1996 PE, PA, #PE050514E

2000 Water Treatment Plant
Operator, Class A, Type 0 (unlimited)
PA

2000 Sewage Treatment Plant
Operator, Class A, Type 0 (unlimited)
PA

EDUCATION

BS 1991
Science/Environmental/Engineering
Technology, Penn State University

CENTURY ENGINEERING, INC.
PRINCIPAL-IN-CHARGE, QA/QC

Mr. Robert Decker is project manager on several water, wastewater and land development projects. Responsibilities include review and development of technical specifications, contract documents, construction cost estimates, contract administration, funding agency administration, public water supply permit applications, sewage planning modules, various DEP permits, and highway occupancy permits subdivision, land development, erosion control, storm water management, highway occupancy design, client communications, funding agency communications, municipal meeting presentations, project estimating, proposals and billings.

Eric Lundy, PE

YEARS OF EXPERIENCE
30

ACTIVE REGISTRATION

1995 PE, PA, #PE048121E

EDUCATION

BS 1989
Civil Engineering, Penn State
University

TRAINING/CERTIFICATIONS

2017 SRBC – Water Resource
Management Considerations for
Public Water Supply Managers

2016, Chapter 102 - NPDES

2012, Groundwater Rule - 4-Log
Demonstration Training

2010, Bureau of Oil and Gas
Management

2010, Geosynthetics BMPs for
Stormwater Management

CENTURY ENGINEERING, INC.
PROJECT MANAGER, CIVIL ENGINEER

Mr. Eric Lundy has hands-on experience in several areas of civil engineering. Mr. Lundy has experience in subdivision and land development working with private entities in developing sites for residential and commercial uses as well as with municipal entities in developing sites for public/infrastructure uses including public drinking water and public wastewater collection, distribution, and small treatment systems. He is familiar with the project design, permitting, funding, construction and community coordination requirements for these types of projects. His experience includes, site, access, street, parking and utility systems design and layout, stormwater and erosion control design and associated NPDES permitting.

Key Personnel

Anthony Coval, PE

YEARS OF EXPERIENCE

30

CENTURY ENGINEERING, INC.

CIVIL ENGINEER

ACTIVE REGISTRATION

1996 PE, PA, #PE048870E
 1997, Certified Bridge Inspector

Mr. Anthony Coval is responsible for the design and management of various civil projects including NBIS inspections and reports, utility placements and relocations, drainage designs, construction management, and permits.

EDUCATION

BS 1990
 Civil Engineering
 Penn State University

Mr. Coval has experience working with water and wastewater collection, distribution, and small treatment systems. He is familiar with the project and permitting requirements for these types of projects. His experience includes, Act 537 Planning studies, gravity and pressure sewer design, pump station design, on-lot sewer design, package treatment plant design, water distribution system design, booster pump design, 4-log disinfection design, and water well filtration design. He is also familiar with the permitting of these projects. Mr. Coval has experience as a team leader for local NBIS inspections in several counties and extensive experience performing land development sub-division planning, small culvert design, stormwater management plans, local road repair projects, and airport apron, taxiway, and runway design.

Tibben Zerby, EIT, SEO

YEARS OF EXPERIENCE

5

CENTURY ENGINEERING, INC.

CIVIL ENGINEER

ACTIVE REGISTRATION

2014 EIT, PA
 2016 Certified Sewage Enforcement
 Officer, #03946

Mr. Tibben Zerby has first hand experience in residential and commercial land development projects especially related to stormwater and erosion and sedimentation control design as well as sewage planning and on-lot septic systems. Mr. Zerby is also familiar with water and sewer line design and required permitting, including PennDOT highway occupancy permits. His experiences include stormwater and erosion and sedimentation best management practice designs, stormwater modeling, waterline design, sewer line design and layout, highway occupancy permitting, ADA curb ramp design and sidewalk layout. Software experience include VTPSUHM, HY-8, and AutoCAD.

EDUCATION

BS 2015
 Biological Engineering,
 Penn State University

TRAINING/CERTIFICATIONS

2017, Onsite Wastewater Mega-
 Conference – Large Onsite Systems
 2016, PennDOT – Highway Occupancy
 Permits – Utility Facilities
 Chapter 102/NPDES Workshop
 2016, 24th Annual Pennsylvania Land
 Development Conference



VENDOR REFERENCES

Key Personnel

35

Zachary Kleuber, EIT

YEARS OF EXPERIENCE

3

ACTIVE REGISTRATION

2017 EIT, PA

EDUCATION

BS 2017

Biological Engineering,
Penn State University

CENTURY ENGINEERING, INC.

CIVIL ENGINEER

Mr. Zachary Klueber has hands-on experience with the land development process and stormwater design projects. His experience includes land development and subdivision site design, site grading, ADA curb ramp design, the design of stormwater Best Management Practices (BMP), erosion and sedimentation control facilities, NPDES permitting, and storm and sanitary sewer design. Relevant software experience includes AutoCAD Civil 3D, ArcGIS, Hydroflow Hydrographs, and VTPSUHM.

Tom Buynak, PE

YEARS OF EXPERIENCE

30

ACTIVE REGISTRATION

1999 PE, PA, #PE054455E

EDUCATION

BS 1991

Civil Engineering,
Penn State University

CENTURY ENGINEERING, INC.

SENIOR DESIGNER

Mr. Tom Buynak has extensive experience in the design, bidding, awarding, constructing, and closeout of numerous construction projects including wastewater treatment plants and CSO's; water treatment plants, tanks and pumping stations; force mains, vacuum sewers, gravity sewers, dam and spillway rehabilitation, and hydroelectric plant construction.

Key Personnel

Wayne Engle, PLS

YEARS OF EXPERIENCE
41

CENTURY ENGINEERING, INC.
SENIOR SURVEYOR

ACTIVE REGISTRATION
1994 PLS, PA, #SU048518R

Mr. Wayne Engle has diverse experience within the surveying field in Pennsylvania. His responsibilities include: residential, commercial, subdivision and land development plans, condominium declaration plans/certificates of completion; ALTA, title, land and mortgage surveys; research of all sources; field reconnaissance and surveying; boundary analysis; field crew supervision; soil logs/percolation testing; computing, plotting and analysis of all land-related statistics; team management and design of layout, grading, stormwater management, public sanitary sewer, public water, PA DEP sewage facilities planning, erosion and sedimentation control, NPDES permits, PennDOT Highway Occupancy Permits; FEMA Elevation Certificates; CAD; VTPSUHM; construction layout; municipal review; municipal meetings, agency applications/approvals, and expert testimony in legal proceedings.

EDUCATION

AAS 1977
Civil Engineering Technology,
Williamsport Area
Community College

Steven Heidlauf, PE, LEED AP®

YEARS OF EXPERIENCE
26

CENTURY ENGINEERING, INC.
ELECTRICAL ENGINEER

ACTIVE REGISTRATION
2003 PE, PA, #PE057571
2004 LEED AP®

Mr. Steven Heidlauf serves as Chief Electrical Engineer and manager for projects which include power distribution, lighting, emergency power, fire alarm systems, and sustainable electrical design. He is a LEED® accredited professional responsible for both design and construction of many types of indoor and outdoor lighting. This includes the layout and design of the electrical components, project management, development and review of contract documents, client interface, review of shop drawings, and construction services. Mr. Heidlauf's diverse experience has been applied to schools, office buildings, fire and rescue stations, community centers, parks, detention centers, and judicial facilities.

EDUCATION

BAE 1993
Architectural Engineering,
Penn State University

TRAINING/CERTIFICATIONS

2010-2017, Pennsylvania Rural
Water Association - Annual
Conference, Wastewater Treatment
Training Courses

2016/2017, Centre County
Conservation District
NPDES/ES Trainings

Key Personnel

Shad Hoover, PE

YEARS OF EXPERIENCE
26

ACTIVE REGISTRATION
2000 PE, PA, #PE055827E

EDUCATION
PhD 2008
Civil Engineering,
Penn State University

MS 2002
Civil Engineering,
Penn State University

BS 1995
Civil Engineering,
Penn State University

TRAINING/CERTIFICATIONS
Certificate in Training for Nuclear
Density Gauges
RSO Certified

CMT LABORATORIES, INC.
GEOTECHNICAL ENGINEER, TECHNICAL REVIEWER

- + Employed by the Pennsylvania Department of Transportation:
Harrisburg, PA – May 1994 to August 1994
- + Employed by Professional Service Industries, Inc.:
Pittsburgh, PA – June 1995 to February 1997
Cleveland, OH – February 1997 to April 1998
- + Employed by CMT Laboratories, Inc.:
State College, PA – April 1998 – Present

Becky Gaston, CPESC

YEARS OF EXPERIENCE
23

ACTIVE REGISTRATION
2019, Certified Professional in
Erosion and Sediment Control

EDUCATION
BS, Environmental Science,
Susquehanna University

TRAINING/CERTIFICATIONS
Risk Management Certification, GAI
Consultants, Inc.
Project Management Program, GAI
University, GAI Consultants, Inc.
2019, Conservation Technician

GREEN VALLEY ENVIRONMENTAL, LLC
ENVIRONMENTAL SCIENTIST, OWNER

Ms. Becky Gaston’s experience ranges from work in the private sector securing permits for various development projects to working with Federal, State, and County agencies to comply with the National Environmental Policy Act of 1969. Permitting experience with the company includes work with regional airports, government agencies, the oil and gas field and the private sector.

Familiar with civil engineering and site development, Ms. Gaston is proficient at wetland delineations and mitigation design. Her responsibilities include conducting Phase I Environmental Site Assessments and preparing written reports to communication findings.

Key Personnel

Nicholas Platt, PE

YEARS OF EXPERIENCE
15

ACTIVE REGISTRATION
2014 PE, PA, #PE081864E

EDUCATION
M. Eng 2012
Acoustics,
Penn State University

BS 2003
Electrical Engineering,
Penn State University

NITTANY CONTROLS, LLC
ELECTRICAL/COMMUNICATIONS ENGINEER

Mr. Nicholas Platt has considerable experience with designing electrical systems for municipal clients. Current work includes designing and fabricating UL 508A industrial control panels, performing start up and factory acceptance testing of control systems, developing automated test programs, creating custom control algorithms for facility control and performing reliability analyses of existing control systems. He designs water/wastewater treatment facility control systems, works with engineers to define and develop function descriptions, process instrumentation diagrams, and specs/plan sets for bidding. He has experience with integrating motor controls, process instrumentation, and process equipment into SCADA systems.

Implementation Schedule

Contract Award	October 25, 2020
PA One Call	October 26, 2020
Field Survey Start	November 9, 2020
Field Survey End (both sites)	November 20, 2020
Sketch Plans (both sites)	December 4, 2020
Municipal Sketch Plan Approval	December 10, 2020
FAA/FCC Start (both sites)	December 7, 2020
Wetlands/Phase I Start (both sites)	December 7, 2020
Geotechnical Stakeout (both sites)	December 8, 2020
Geotechnical Borings/Resistivity Testing	December 14, 2020
FAA/FCC Submittal	December 22, 2020
Geotechnical Report Complete	December 31, 2020
Wetlands/Phase I Report Complete	December 31, 2020
Zoning Start	December 7, 2020
SALDO Start	December 14, 2020
Zoning Submission	December 14, 2020
NPDES Start	December 14, 2020
SALDO Submission	December 30, 2021
NPDES Submission	January 15, 2021
FAA/FCC Approvals	February 22, 2021
Zoning Approval	April 1, 2021
SALDO Approval	April 13, 2021
NPDES Approval	May 15, 2021
Construction Drawing Complete	10 days following all approvals/permits
NPDES Closeout	30 days after construction completion

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal RFP for Engineering and Surveying for Hughesville Water Authority Tower Site
and Hesker Hill Tower Site

State of Pennsylvania

County of Lycoming

I state that I am Executive Vice President (Title) of Century Engineering, Inc. (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. Century Engineering, Inc. (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

N/A

I state that Century Engineering, Inc. (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

A statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

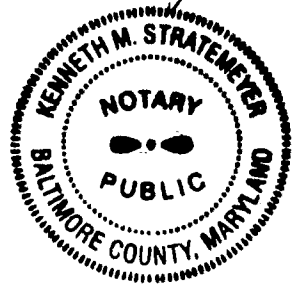
Name: Jacquelyn Schingeck
Signature: *J Schingeck*
Title Executive Vice President

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 20 DAY
OF August, 20 20

KENNETH M. STRATEMEYER
Notary Public-Maryland
Baltimore County
My Commission Expires
October 26, 2021

Kenneth M. Stratemeyer
Notary Public

My Commission Expires: _____



EXCEPTION FORM

Section Number	Explanation
4.4	<p>Term of Contract. The contract, which results from the award of this RFP, shall commence upon award and shall terminate on February 28, 2021.</p> <p>Due to permitting review times and land development meeting dates, it does not appear possible to complete both sites by the termination date of February 28, 2021. Please refer to the implementation schedule for the proposed dates.</p>
5.0 General Requirements item 2	<p>All plan review fees shall be paid by the County and included in the cost proposal.</p> <p>Due to the unknown hours for the review fees for the Township and the County, it is not possible to provide a cost. As an alternative, we propose that the review fees will be limited to the initial review and one follow-up review of comments received from the initial review.</p>
5.0 Additional Services Item B	<p>Environmental Site Assessment (ESA) of proposed site if required. A Phase I ESA is required. Based on the findings of the Phase I ESA, a Phase II ESA could be required.</p> <p>Based on the RFP, it is not anticipated that a Phase II ESA to be required; therefore there is no cost provided in the proposal. Since, a Phase II ESA cost is contingent upon the findings of the Phase I, a cost will be prepared, if the Phase I finds that a Phase II ESA is necessary.</p>
5.0 Misc. Expenses A	<p>As part of the proposal, in addition to the lump sum, list reimbursable expenses and rates.</p> <p>The expenses are included in the total lump sum costs, for each item.</p>

PROPOSAL FORM

Important note to Bidders: It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to: Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 21, 2020. **This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: Audubon Field Solutions, Inc.

Company Address: 4600 J. Barry Court, Suite 100

Canonsburg, PA.15317

Main Telephone: 724-749-3400 Main Fax: _____

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Philip Horne, PLS/Survey Operations Manager-Northeast

Contact Telephone: 724.749.3452 Fax: _____

Contact Email: phorne@auduboncompanies.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Philip Horne, PLS/Survey Operations Manager-Northeast

Office Address: 4600 J. Barry Court, Suite 100

Canonsburg, PA 15317

Telephone: 724.749.3452 Fax: _____

Email: phorne@auduboncompanies.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	<u>1</u>	Date	<u>August 3, 2020</u>
Addendum No	<u> </u>	Date	<u> </u>
Addendum No	<u> </u>	Date	<u> </u>
Addendum No	<u> </u>	Date	<u> </u>

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

Company Type (check one):

- Sole Proprietorship Partnership Corporation Joint Venture


Bidder attests that:

1. He/she has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements;
2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor and material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

<u>Audubon Field Solutions, Inc.</u>		<u>20-8087756</u>		
Company Name		Federal ID#		
<u>10205 Westheimer Road, Suite 100</u>		<u>Houston</u>	<u>TX</u>	<u>77042</u>
Street Address	PO Box	City	State	Zip
<u>281.669.0590</u>		<u>713.452.3226</u>		
Telephone #		Fax #		

WITNESS:



Signature (see below)

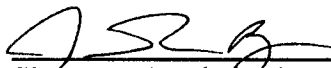
David Robison

Name (print)

Chief Financial Officer

Title (print)

COMPANY:



Signature (see below)

Jonathan Byrne

Name (print)

Vice President, Survey, ROW & Environmental

Title (print)

**PRICE PROPOSAL
HUGHESVILLE WATER AUTHORITY TOWER SITE**

Descriptoin	COST (\$)
Site Grading/Site Layout	\$ 9,810.00
Stormwater Drainage Design	\$ 8,600.00
Erosion/Sediment Control	\$ 16,866.00
Civil Permitting	\$ 30,000.00
Geotechnical	\$ 10,976.00
Geotechnical Boring Stakeout	\$ 1,975.00
Construction Stakeout	\$ 7,090.00
Soil Resistivity	\$ 1,800.00
Preliminary and Final Construction Drawings	\$ 3,824.00
Utility Coordination	\$ 2,636.00
Zoning Information	\$ 2,636.00
FAA/FCC	\$ 16,000.00
Field Surveying/Courthouse Research	\$ 24,460.00
Survey Plans	\$ 3,560.00
Environmentla Investigation	\$ 840.00
Infiltration Testing	\$ 460.00
Wetland/Stream Delineation	\$ 2,542.50
Phase I Investigation and Report	\$ 3,638.65
Hearing Attendance (if Needed)	\$ 5,886.00
Phase 2 Investigation and Report (If Needed)	\$ 11,260.00
NEPA/SHPO Services	\$ 2,155.00
Deliveries, Copies, Etc.	\$ 775.00
SUBTOTAL FOR HUGHESVILLE	\$ 167,790.15

**PRICE PROPOSAL
HESKER HILL TOWER SITE**

Description	COST (\$)
Site Grading/Site Layout	\$ 8,710.00
Stormwater Drainage Design	\$ 3,836.00
Erosion/Sediment Control	\$ 18,066.00
Civil Permitting	\$ 5,024.00
Geotechnical	\$ 10,976.00
Geotechnical Boring Stakeout	\$ 2,935.00
Construction Stakeout	\$ 3,230.00
Soil Resistivity	\$ 1,800.00
Preliminary and Final Construction Drawings	\$ 5,024.00
Utility Coordination	\$ 2,636.00
Zoning Information	\$ 2,636.00
FAA/FCC	\$ 16,000.00
Field Surveying/Courthouse Research	\$ 16,760.00
Survey Plans	\$ 3,010.00
Environmental Investigation	\$ 840.00
Infiltration Testing	\$ 1,041.00
Wetland/Stream Delineation	\$ 2,542.50
Phase I Investigation and Report	\$ 3,638.65
Hearing Attendance (if Needed)	\$ 5,886.00
Phase 2 Investigation and Report (If Needed)	\$ 11,260.00
NEPA/SHPO Services	\$ 2,155.00
Deliveries, Copies, Etc.	\$ 775.00
SUBTOTAL FOR HESKER HILL	\$ 128,781.15

The undersigned, as Bidder, hereby declares that the total project costs as indicated above, includes all necessary work to complete this project in full according to the general specifications contained in the RFP. Products and services not specifically mentioned, but are necessary to provide the functional capabilities shall be listed and included as part of the cost elements.

The undersigned further understands and agrees that if the County accepts the bid, no additional funds will be allowed beyond the stated total project costs.

Company Name: Audubon Field Solutions, Inc.

Address: 4600 J. Barry Court, Suite 100, Canonsburg, PA 15317

Point of Contact: Philip Horne, PLS Phone Number: 724.749.3452

Fax Number: _____ Email address: phorne@auduboncompanies.com

Name of person submitting proposal: Philip Horne, PLS/Survey Operations Manager-Northeast

Signature:  Date: August 21, 2020

When submitting a bid, place the bid form sheet as the top page of the bid package and the bid price schedule as the second page of the bid package.

Lycoming County, Pennsylvania

RFP for Engineering and Survey Services for Hughesville Water Authority Tower Site
and Hesker Hill Tower Site

Audubon Proposal No. 021923P

August 21, 2020

Audubon Proposal





Audubon Field Solutions, LLC
10205 Westheimer Rd, Suite 100
Houston, TX 77042

August 21, 2020

Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701
ATTN: Mya Toon - Lycoming County Controller's Office
mtoon@lyco.org

Subject: RFP for Engineering and Survey Services for Hughesville Water Authority Tower Site and Hesker Hill Tower Site

Audubon Proposal No. 021923P

Dear Ms. Toon,

Audubon Field Solutions (Audubon) is pleased to submit this technical scope and proposal for services in support of the RFP for Engineering and Survey Services for Hughesville Water Authority Tower Site and Hesker Hill Tower Site Project. This proposal is based Lycoming County, Pennsylvania's request for proposal dated July 20th; field view on August 5th; Addendum No. 1 on August 3, 2020 and Answers 1 – 4 on July 24th, July 31st, August 7th, and August 18, 2020. This vital Project to Lycoming County will not only increase the capability of municipal first responders, but the additional potential benefit to the local general public for previously unavailable cellular voice and data connections to the highly rural county.

Audubon is a leader in Engineering, Procurement, and Construction Management (EPCM), technical, field, and environmental services. With our team of over 1,000 professionals including engineers, surveyors, archeologists, scientists, and Right-of-Way (ROW) specialists, our diverse background and experience allow us to take on large scale industrial and commercial projects while also being able to effectively and efficiently deliver solutions for smaller development projects.

We greatly appreciate the opportunity to provide these professional services for the betterment and benefit for those living and working in Lycoming County.

With Regards,

JONATHAN BYRNE
Vice President, Survey, ROW & Environmental
D: 713.580.4346
C: 832.654.7883
jbyrne@auduboncompanies.com

PHILIP R. HORNE, PLS
Survey Operations Manager—Northeast Region
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People. Flexibility. Relationships. Experience.
auduboncompanies.com
info@auduboncompanies.com

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Statement of Qualifications

Audubon is a leader in Engineering, Procurement, and Construction Management (EPCM), technical, field, and environmental services. With our team of over 1,000 professionals including engineers, surveyors, archeologists, scientists, and Right-of-Way (ROW) specialists, we provide turn-key interdisciplinary services to the energy, power, and industrial markets, as well as government clients at the local, state, and federal level. Our diverse expertise, along with our commitment to technical excellence and safety enables us to provide unparalleled services and cost-saving solutions to our clients.

Relevant Project Experience

Audubon has provided biological and cultural resources survey services, from planning to permitting, for thousands of miles of pipelines and facilities projects throughout Pennsylvania, New Jersey, Texas, Oklahoma, New Mexico, Louisiana, and California. A representative selection of projects is described below:

Site Development Permitting – Harris County, Texas

Acquired Harris County Engineering Civil Site Development permits to facilitate the development of a dredge material disposal site and installation of a control building within an existing facility.

Municipal Permitting – Houston, Texas

Acquired City of Houston, Office of the City Engineer permit to facilitate the installation of a 4-inch RNG pipeline within an existing site.

Municipal Permitting – Mont Belvieu, Texas

Acquired permit from City of Mont Belvieu for site development of an existing facility, to include the installation of two (2) natural gasoline storage tanks within a diked and graded section of property.

Project Management and Execution Team

Our diverse team of environmental professionals are experienced in preparing effective permitting strategies that consider both efficient approval process and meeting client goals. With specialties in environmental and ROW permitting and compliance, we deliver cost-conscious and practical solutions to ensure regulatory compliance and reduce or eliminate risk for clients. Our multifaceted approach of environmental sciences and engineering are built on decades of environmental experience. From pre-project planning to operations, our interdisciplinary professionals provide comprehensive environmental guidance for all phases of your project life cycle.

Natural resources are protected by a broad range of federal, state, and local regulations. Our team of professional scientists and biologists have completed projects subject to evaluation under the National Environmental Policy Act (NEPA) for a number of lead federal agencies including the Federal Energy Regulatory Commission, the U.S. Army Corps of Engineers, and the Federal Communications Commission. Our expertise in satisfying the evaluation requirements of NEPA includes:

- *Wetlands & Waters Delineations*
- *U.S. Army Corps of Engineers 404/10 Permitting*
- *Threatened & Endangered Species Assessments*
- *Drainage Studies*
- *Zoning and Planning Permitting*
- *Civil Site Development Permitting at County and Municipal levels*
- *Utility Installation Permitting*
- *National Pollutant Discharge Elimination System (NPDES) Permitting*
- *Stormwater Pollution Prevention (SWPPP) Permitting and Plan Development*
- *Cultural Resource Inventories and Archaeological Surveys*
- *Evaluations and Determinations of Site Eligibility*
- *Research Design and Testing/Data Recovery Plan Preparation*



- *Testing and Excavation of Archaeological Sites*
- *Damage Assessments*
- *Construction Phase Monitoring*
- *Mitigation Planning and Monitoring*
- *Alternatives Analysis and Project Impacts Justification*
- *Hydrologic and Hydraulic Modeling*
- *Floodplain and Floodway Impact Permitting*

Complete, professional report preparation compliments all aspects of any given project. Audubon currently employs one (1) full-time permitted principal investigator, two (2) full-time biologists, and one (1) full-time permitting manager. Together they meet the organizational requirements of Audubon as presented above. All archaeological personnel are qualified to meet the level of skill required to conduct wetland delineation, clearance surveys and archaeological monitor projects, prepare reports, and make eligibility and management recommendations.

Audubon proposes to utilize the expertise, skills and experience of the following key project personnel to lead the required tasks during the execution of the project (See Appendix 1 – Project Execution Team Resumes):

- Phil Horne – Project Manager & Survey Lead
- Brent Simmons – Environmental & Permitting Lead
- Nick Polk, PE – Civil Engineering Lead
- Shawn Shaner – Electrical Engineering Lead

Audubon will also supplement their staff with the following local Engineering teams:

- Hickman Geological Consulting, LLC—Geotechnical Analysis, Infiltration, and Soil Resistivity
- Verdanterra, LLC—Survey, Environmental, Civil Engineering
- Core Environmental Services—Phase I and II Environmental Assessment (s)

Scope of Work

Audubon understands the scope of work consists of the following tank sites and tank pad location:

Hughesville Water Authority Site

- 100' x 100' Tower Pad (modified down to 75 x 100 if needed)
 - Underground Electrical Power Supply
 - Access Road initiated from existing road to existing water tank
 - Stormwater management feature
- 100' x 100' Water Tank Pad
 - Graded to Suit for future development

Hesker Hill Site

- 100' x 100' Tower Pad (modified down to 60 x 40 if possible)
 - Underground Electrical Power Supply
- Access Road initiated from existing road to existing water tank
 - Stormwater management feature



Engineering and Survey Services

Site Grading/Site Layout

Audubon will prepare a preliminary site grading plan based on publically available LiDAR and site photo imagery to review the feasibility of access road and pad placement for the two (2) tower sites and the water tank pad. This preliminary design will be utilized to locate and size stormwater management facilities that will be needed to reduce site stormwater runoff and provide site infiltration. This will also allow for the stakeout of infiltration testing that will be completed along with the geotechnical borings.

Once site civil survey topography and boundary is completed, the site grading will be revised to reflect the updated topography. General comments from Lycoming County will be addressed at that time. Final grading and site design will include roadway profile and typical sections, sections of the tower sites and the tank pad. The finalized grading plan will also include stormwater drainage and retention structures on plan and detail drawings.

Preliminary and final design will include a 12' wide access road and 20' x 30' parking pad. Audubon will work with the County and Tower manufacturer to establish the base design criteria for the sites and modify the site, where allowable, to minimize footprint and address site physical restrictions such as grade, property boundaries, and subgrade soil composition.

Stormwater Drainage Design

During preliminary site grading design, the sites will be individually analyzed for the potential increase in stormwater runoff created by development of greenfield sites. Audubon will prepare a preliminary sizing of stormwater facilities to be implemented. If infiltration areas are proposed, they will be identified and located prior to the infiltration testing performed under the geotechnical scope.

Erosion/Sediment Control

Audubon will prepare separate erosion and sediment control plans for the two (2) sites to meet the requirements of PA Chapter 102 regulations, as well as county, township and city requirements. These plans will be provided in the permitting applications identified below. Drawings will also include the design of permanent fencing for the site and design of a grounding grid, including associated plan and detail drawings.

In addition, the location of the nearest power drop and routing of the underground power line to the site from the nearest pole will be identified on the site drawings.

Civil Permitting

Audubon has provided costs for the preparation and obtaining of the following permit applications (See Appendix 2 – Price Proposal):

Hughesville Water Authority Site

- NPDES PAG-02 Permit (Disturbances Greater than 1-Acre)
- Grading Permit
- Accessory structure Zoning Permit

Hesker Hill Site

- Site Specific Erosion and Sediment Control Plan (Disturbances less than 1-Acre)
- Grading Permit
- Accessory Structure Zoning Permit
- Township Stormwater Permitting and Coordination

Draft permit applications will be provided to the County for review prior to submission, and for necessary owner signatures. Audubon will address one (1) round of agency comments.



Geotechnical

After the boring and/or cell tower locations have been staked in the field, Audubon's geotechnical subcontractor Hickman Geological, and drilling subcontractor, will contact PA One Call to identify public underground utilities. However, the public utility notification system will not locate and mark private utilities; therefore, the Owner is responsible for locating and marking any privately-owned utilities within the area of proposed explorations. No explorations will be performed in developed areas or near known utilities, due to the potential for buried private utilities.

Audubon will arrange for a tracked or ATV drill rig to be mobilized to the site. Unless otherwise advised, it is assumed that Hickman Geological and the subcontractor have permission to traverse the site in the most efficient direct path to the site and between borings. We assume that each site can be accessed with a tracked drill rig and that there are no trees from logging activities or deadfall that impedes the movement of the rig. Clearing of deadfall and logging trees will be performed on an hourly basis.

At each site, Audubon perform three (3) Standard Penetration Test (SPT) borings to a depth of 35'. Borings will include standard penetration test (SPT) sampling in soils and coring through the rock. For each site, a total of 105' of test borings is included in this proposal. The borings will be backfilled with drill spoils. No other surface restoration will be performed and all extra spoils will be spread around the borehole.

A full-time geotechnical professional to coordinate and log the explorations. The professional will visually classify the soil samples, obtain samples for testing, perform water level measurements, and prepare field logs. A limited laboratory index testing will be performed to evaluate the general engineering characteristics of the material. This testing may include grain size analysis, plasticity testing (Atterberg limits), natural moisture content, and unconfined compressive strength of rock. Specific testing will include:

- Standard Proctor Density Test (ASTM D 698)
- Water Content (ASTM D 2216-19)
- Sieve Analysis (ASTM D 6913/D 6913M-17)
- Liquid and Plastic Limits (ASTM D 4318-17e1)
- Specific Gravity (ASTM D 854-14)

A separate geotechnical report will be prepared for each site that includes the results of our field explorations and laboratory analyses, and our assessment of the implications of the subsurface conditions on the proposed cell towers. The report will include exploration location plans, typed boring logs, and field and laboratory testing results. The report will include the following:

- Discussion of subsurface conditions encountered by the explorations, including soil types, water levels, rock types, and anomalous subsurface conditions. Summary of field resistivity (Wenner array) testing results.
- Earthwork recommendations for site preparation, grading, fill compaction, trench backfill, and drainage measures.
- Recommendations for bearing capacity, frost depth, and slab on grade support for buildings and equipment pads.
- Seismic site classification.
- Stormwater infiltration test data and recommendations.

Geotechnical Boring Stakeout

Audubon, along with Audubon's geotechnical sub-consultant, Hickman Geological, will stake out the proposed boring location prior to the commencement of subsurface investigation activities. Audubon will coordinate this stakeout with Lycoming County, so that the locations may be reviewed and approved by Lycoming County prior to performance of the subsurface investigation.



Construction Stakeout

Construction stakeout will include a one-time stakeout of the tower site, access road limit of disturbance and proposed stormwater features if requested. All stakeout shall be performed during one mobilization. Stakeout will also include the one-time stakeout of the lease area and easement corners, marked with iron pins 1" diameter by 18" long.

Soil Resistivity

Audubon's subcontractor, Hickman Geological will perform 1-D field electrical resistivity testing at the cell towers using the Wenner 4 probe array in general accordance with ASTM G57. At each tower two (2) perpendicular lines will be performed. Each line will have total lengths of 30, 60, 90, 120, 150, 180, 210, 240, 270 and 300 feet. The test areas will be limited to areas that do not require clearing. Note that test results will be compromised by interference from standing water, frozen soil, buried metals or utilities, and shallow bedrock. The results of the field resistivity testing will be included in the geotechnical report. Work at the Hesper Hill property anticipates that the owner will clear all crops and vegetation within the 300' length of each line.

Preliminary and Final Construction Drawings

Audubon will prepare a preliminary construction package based on drawings provided in the NPDES NOI submission, and include site grading, E&S, stormwater management, fencing and grounding plan drawings and associated construction detail drawings. This package will be provided to the County for bid purposes only. Once permitting is finalized, a Final construction drawing package will be prepared for the use by the County selected contractor. Two (2) separate drawings packages, one for each tower, is anticipated.

Utility Coordination

Audubon will work will coordinate with the local electrical utility to provide power to the pump location. Audubon's electrical engineer will review the current capacity of utilities in the vicinity of the project to determine if adequate capacity can be provided. Audubon will coordinate two (2) separate site visit with the local electrical utility provider in order to determine the ideal power option for each site.

Zoning Information

Audubon will prepare all drawings necessary for submission of the tower design package for review by Lycoming County, City of Hughesville and Township of Piatt. Audubon plans on the Project Manager to meet with Lycoming County separately for each tower and with the City and Township for individual meetings, totaling four (4). All information submitted will be in compliance with local zoning requirements.

FAA/FCC

Audubon will coordinate with Lycoming County or its assigned operator to support an application to register a new antenna structure for each of the proposed towers using the FCC Antenna Structure Registration (ASR) system consistent with all FCC requirements and procedures. The registration will include Form 854 and all appropriate public notifications. It is anticipated that an environmental assessment (EA) will not be required, however, a cost to prepare and file an EA consistent with FCC requirements is included as a contingency.

Field Surveying/Courthouse Research

Audubon will complete all necessary field and office work to establish accurate survey control throughout the project area. This control will be established through Static and RTK GPS observations and tied to client specified coordinate system and vertical datum.

Boundary Survey of the Parent Tracts for each site will be performed including deed research and field surveys. Parent tract Perimeter will be delivered as an AutoCAD file with resolved property lines including topographic survey areas.



Topographic survey of the lease area with a 100' buffer will be performed including all visible and marked features. Survey will include all roadway features, waterways, overhead utilities, visible or marked foreign pipelines, fence lines, tree lines, known property monumentation, and visible features within the survey areas.

Survey Plans

Survey plans will be provided for each of the tower sites indicating Audubon's name, and the seal and signature of the supervising Professional Land Surveyor. The Plans will be 24" x 36" size drawings, to a scale of 1" = 20' or 1" = 30', and have a key map with a USGS background of 1" = 20000' scale.

Environmental Investigation

Audubon anticipates limited to no environmental investigations for rare, threatened or endangered species for the project based on our review of each project site and performing preliminary searches on the Pennsylvania Natural Diversity Inventory, on the Pennsylvania Natural Heritage Program website. If additional studies are required, they will be provided for under separate scope.

Infiltration Testing

At each site, a SPT boring to a depth of up to 6' will be performed for a downhole infiltration testing. PVC pipe will be embedded in the boring to perform the infiltration testing. This testing is to evaluate the in-situ infiltration rates at each site for potential infiltration practices in stormwater analysis. The testing will be performed with using the downhole cased method in general accordance with the guidelines presented in the Pennsylvania Department of Environmental Protection's Stormwater Best Management Practices Manual. The infiltration testing results and recommendations for stormwater infiltration will be provided in the geotechnical report for each site.

Wetland/Stream Delineation

The study area associated with the Hughesville Water Authority Tower Site will encompass the entire approximately 67-acre property boundary. The area of investigation for the Hesker Hill Road Site will include the proposed tower site and the proposed access road, at approximately 4-acres.

Individual wetlands located within the project area will be delineated using the USACE Wetlands Delineation Manual (Environmental Laboratory, 1987), and in accordance with the applicable USACE Regional Supplement for wetland delineations. The potential boundaries of the wetland(s) will be identified using flagging marked WETLAND BOUNDARY. Applicable USACE data forms will be completed for all identified wetland resources and upland sample points that will summarize the vegetative, hydrologic, and soil characteristics of the wetlands and uplands (i.e., non-wetlands).

All delineated wetlands will be classified in accordance with the USFWS Classification of Wetlands and Deepwater Habitats of the U.S. (Cowardin, et al., 1979). Wetland classifications and acreages will be identified on applicable project mapping and associated report tables, for permitting requirements.

In addition to wetlands, Audubon will identify all stream resources within the proposed alignment. Channel characteristics such as bank width, bank depth, channel width and water width/depth, will be documented. Streams/waterways will be classified as perennial, intermittent, or ephemeral based on applicable regulatory definitions.

All regulated aquatic resources will be located to a distance of 1-3' accuracy with the use of Global Positioning System (GPS) technology. This level of accuracy is sufficient for reporting purposes and for PADEP/USACE review.

Audubon will prepare a report summarizing the results of the delineation. The report will include a brief summary of findings, project mapping (with stream and wetland resources clearly identified), wetland/upland data forms, photographs and any pertinent information deemed noteworthy for inclusion in the report. A separate report will be prepared for each of the two (2) Project sites.



Phase I Investigation and Report

All efforts conducted under this scope of work for each Project site will be done in general accordance with American Society of Testing and Materials (ASTM), International Standard E- 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, December 2013. Per ASTM E-1527-13: In defining a standard of good commercial and customary practice for conducting an environmental site assessment of a parcel of property, the goal of the processes established by this practice is to identify recognized environmental conditions. The term recognized environmental conditions means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

As outlined below, a typical Phase I ESA is comprised of four (4) components: Records Review, Site Reconnaissance, Interviews, and Report. The Conclusion of the Phase I ESA report will include one of the following statements:

- This assessment has revealed no evidence of recognized environmental conditions in connection with the property, or;
- This assessment has revealed no evidence of recognized environmental conditions in connection with the property except for the following:

- *Records Review*

Audubon will conduct a records review of secondary sources to obtain ownership and use activities in and around the site. State, Local (if available) and Federal databases will be reviewed, which could contain information regarding spills, storage tanks (above or underground), environmental remediation, past or on-going clean-up efforts, etc. Also, Audubon will review historic aerial photographs and mapping to further document the past activities on the site.

In certain situations, the Pennsylvania Department of Environmental Protection (PADEP) may have information on file that is not available in any other database or online source. However, at this time, this scope-of-work does not include an agency file review at a PADEP office.

- *Site Reconnaissance*

Audubon will conduct one (1) site reconnaissance per Project site to observe the project study area and determine potential locations for on-site contamination. Only visual site observations will be done to document the site setting, characteristics, usage and location of existing or former structures.

NO DIGGING OR SAMPLING WILL BE CONDUCTED. Observations of potential hazardous substances, storage tanks, odors, disposal areas, mounds, drums and containers, stained soils and stressed vegetation will be documented and included with the Phase I ESA report.

- *Interviews*

Audubon will conduct interviews with the current owner(s) or individual with good knowledge and physical uses of the property (i.e., "Key Site Manager"). Other interviews may include past owner(s), police or fire departments, community officials or adjacent property owners. All interviews will be properly documented and incorporated into the Phase I ESA report.

- *Report*

Audubon will prepare a report summarizing the results of the Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM International Standard E-1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, December 2013. All information obtained from the individual sections above will be included as an attachment in the final report. An electronic copy of the report will be provided to Lycoming County. Hardcopies will be provided upon request.



Hearing Attendance (If Needed)

Audubon has included cost for the Project Manager to attend one (1) County and one (1) City/Township hearing for each site. This will include and presentation material and/or copies needed for the meeting to present to any boards or preparation materials to be submitted prior to meetings.

Phase II Investigation and Report (If Needed)

If a Recognized Environmental Condition (REC) is identified at, in or on the property and a Phase II Environmental Site Assessment is recommended, a Phase II ESA will be conducted, which will likely include field sampling and analysis and a final report Audubon will assume that at least five (5) and no more than ten (10) environmental samples from available media (surface soil or surface water, etc.) will be collected from the site and sent to a certified laboratory for analysis. The specific analysis (heavy metals, for example) will be determined from the findings of the Phase I ESA and historical use(s) of the property. All laboratory results will be compared to applicable State standards and summarized in the Phase II Investigation Report.

NEPA/SHPO Services

Audubon will conduct a preliminary desktop review of the Project sites for compliance with Section 106 of the National Historic Preservation Act of 1966, as amended and the Pennsylvania History Code.

Audubon will prepare an initial consultation letter to the Pennsylvania State Historic Preservation Office (PA SHPO) requesting their opinion on the need for cultural resources surveys. Audubon will complete cultural resources review utilizing the PA SHPO's Cultural Resources Geographic Information System (CRGIS), historic aerial photography, and other archival research to determine whether previously recorded archaeological sites or historic structures are present within or near the Project, and to assess cultural resources work previously completed in the general area. Based on the location of proposed work and the field walk, Audubon does not anticipate the need for further field studies and reconnaissance. Any additional work required by PA SHPO will be addressed under separate scope.

Deliveries, Copies, Etc.

Audubon will prepare and deliver necessary copies of plans, permits, construction documents, etc. for the project.

Commercial

This proposal is based on our understanding of the scope of work as defined by Lycoming County, Pennsylvania and will be executed on a Lump Sum basis under terms and conditions to be mutually agreed upon between Lycoming County and Audubon. Work on the project will begin upon the issuance of a purchase order and the execution of Master Service Agreement with Audubon. Modifications to the Schedule of Fees and Charges and/or Scope of Work may require revision to the fee for this Project. Individual prices for items per site and Schedule of Rates for Audubon and its subcontractors are provided in Appendix 2 – Price Proposal.

Validity

This proposal is valid for sixty (60) days from the date submitted to client. Due to potential market volatility, Audubon reserves the right to adjust the commercial offer to account for any materials and/or services cost escalation after the stated bid validity date.

Schedule

Audubon will provide a more detailed schedule for this scope of work once the Project is awarded. The project schedule included in Appendix 3 – Project Schedule. is a general schedule for the permitting and design to meet the project schedule outlined in the RFP.



Exceptions, Clarifications and Stipulations

Audubon's proposal is based on the following exceptions, clarifications and stipulations:

1. Any changes or additions to the scope of work will be handled on a Time and Materials basis and addressed with formal change orders. No additional work will be initiated without the written approval of Lycoming County, Pennsylvania's Project Manager. Audubon reserves the right to change rates if the project extends past 2020.
2. Audubon will have full and ready access to the project area.
3. Costs do not include landowner coordination or contact to obtain access, all such activities to be handled by Lycoming County's land agent.
4. Lycoming County will be responsible for payment of all applicable permit application fees or will reimburse Audubon for all permit application fees remitted by Audubon on behalf of Lycoming County.
5. Delineation verification may be required by PADEP if delineation was completed outside of the growing season. This is not included within this scope of work or cost estimate.
6. Threatened and endangered species (or habitat) evaluations or details surveys are not included in this proposal. However, they can be provided if required.
7. Lycoming County will provide contiguous property access and notify landowners for the Project.
8. No significant delays due to any client-related activities, inclement weather, site conditions, or other factors beyond Audubon's control.
9. Should the Project facilities change then Audubon can provide additional field survey efforts as a supplement to this Proposal.
10. Audubon will have adequate schedule to perform utility clearances prior to performance of geotechnical borings, including site survey location.
11. Lycoming County will provide structural information, including the structural loads and settlement tolerances prior to boring stakeout.
12. FCC Registration Number is provided or Lycoming County will log in and file using its FCC Registration Number
13. Complete plans and details for the proposed towers, including lighting, are provided in advance of registration
14. The construction stakeout cost estimate assumes the entire project will be staked out continuously.
15. Lycoming County will secure survey permission with all landowners prior to mobilization of any survey crews. Remobilization due to acquired survey permissions are not included, and will be provided at additional cost.
16. If archaeological sites are identified, Audubon will develop a separate scope for analysis and reporting.
17. Plans and drawings will be prepared in AutoCAD and ArcGIS formats.
18. Free and clear access to assess the proposed project areas.
19. Deliverables to Lycoming County will be submitted electronically and require one review cycle to incorporate comments and revisions.



APPENDIX





Appendix 1 – Project Execution Team Resumes

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(SEE PAGE THAT FOLLOWS)

Summary of Qualifications

Mr. Horne has over fifteen (15) years of surveying and project management experience in the oil and gas industry.

Professional Experience

Audubon Companies

June 2019 – Present

Regional Manager

- Recruited to build and lead a Northeast, oil and gas surveying presence for the firm.
- Client and business development nationwide for oil and gas work.

Independent Surveyor

August 2016 – Present

David H. Martin Excavating, Inc.

June 2017 – May 2019

Estimator

- Estimation/Project Management on site and utility projects from takeoff through final billing.

Cardno

May 2016 – August 2016

Regional Manager

- Recruited to build and lead a Northeast and oil and gas surveying presence for the firm.
- Development of standards and schedules in relation to “traveling” survey crew operations.
- Client and business development nationwide for oil and gas work.
- Landed clients and projects in new geographic locations for the firm.

Dewberry

2013 – 2016

Sr. Associate / Survey Manager

- Hired to help build and lead an oil and gas surveying presence for the firm.
- Development of standards and schedules in relation to “traveling” survey crew operations.
- Client and business development nationwide for oil and gas work.
- Built department from 2 field crews and \$0 revenue in 2013, to 10+ field crews and \$7.5 million in revenue for 2015.

Percheron Surveying, LLC

2011 – 2013

General Office Manager

- Hired to select a suitable geographic location for the Northeast office, and to establish its presence in the market.
- Marketing and business development to introduce firm to the clients in the local market area.
- Creation of routing protocol for major midstream company.
- Management / oversight on 45 miles of preliminary surveys, that lead to additional work such as construction stakeout and as built surveys.

Fayetteville Contractors, Inc.

2008 – 2011

Estimator / Project Manager

- Hired to help increase project win percentage, and production.
- Estimation / Project Management on site and utility projects from takeoff through final billing.
- High percentage of return on projects that were won and managed directly.
- Landed new clients and projects for the firm.

Pennsylvania State University

2009 – 2010

Adjunct Instructor

- Recruited to help increase enrollment in the surveying program, by extending the program to another campus.
- Assisted in teaching of college level surveying courses.
- Prepared and taught surveying field laboratory exercises.

CEDG, Inc.

2007 – 2008

Survey Department Manager

- Client interaction from first meeting through project completion.
- Project scheduling, proposal preparation, stakeout calculations.
- Subdivision and Land Development Plan preparation.

Brehm-Lebo

2006 – 2007

Chief of Surveys

- Client interaction from first meeting through project completion.
- Project scheduling, proposal preparation, stakeout calculations.
- Subdivision and Land Development Plan preparation.

Triad Engineering, Inc.

2005 – 2006

Party Chief

- Led field crew in completion of boundary, subdivision and topographic surveys.
- Completion of court house research, drafting of deed mosaics.
- Instructed new hires and interns on proper use of equipment.

Carl Bert & Associates, Inc.

2003 – 2005

Chief of Surveys

- Client interaction from first meeting through project completion.
- Project scheduling, proposal preparation, stakeout calculations.
- Subdivision and Land Development Plan preparation.

Erdman Anthony, Inc.

2001 – 2003

Instrument Operator

- Data collection on linear projects in support of engineering design and construction.
- Traveling survey crew across the state of Pennsylvania for various projects.
- Scheduled and ran projects in Party Chiefs absence.

Education

Pennsylvania State University, 2001

- *B.S. Surveying*

Professional Development & Training

- Professional Land Surveyor, Pennsylvania (2006)
- Professional Surveyor, West Virginia (2008)
- Professional Surveyor, Ohio (2014)
- Member of Pennsylvania Society of Land Surveyors
- Member of West Virginia Society of Land Surveyors

Summary of Qualifications

Mr. Simmons has over fifteen (15) years of experience as an environmental project manager on mid-size and large projects ranging in total budgets from \$10-500 million.

Experience Includes:

- Regulatory Compliance and Permitting - including wetland delineations and endangered species habitat evaluations
- NEPA document preparation (EIS, EA, CE, and FERC
- Resource Reports) Capital Cost Estimates
- Routing and Feasibility
- Cost Estimates
- Construction Training and Compliance

Specific knowledge of state and federal environmental regulations and policy for oil and gas infrastructure and operations includes:

- Federal Energy Regulatory Commission (FERC)
- United States Fish and Wildlife Service (FWS)
- United States Army Corps of Engineers (USACE)
- Additional Federal and State Environmental Agencies

Professional Experience

Audubon Companies

FERC Program Manager

March 2019 – Present

Merjent, Inc.

Project Manager

2017 - 2019

- Lead business development and collaborate with company leadership to increase Merjent's presence in the Houston market.
- Coordinate proposal writing for large capital pipeline projects in Texas and the southeast.
- Identify and develop relationships with potential subcontractors and project partners integral to increased opportunities for Merjent to develop new client relationships in the oil and gas transportation industry.
- Manage environmental surveys and permit acquisition on behalf of oil and gas clients.
- Increased Merjent's geographic footprint and client exposure within Houston-based pipeline clients and for projects in Texas and the southeast.

Williams Companies, Inc.

Senior Environmental Scientist

2006 - 2017

- Environmental Project Manager for numerous maintenance and capital expansion projects up to \$500 million.
- Provide environmental support for project development including routing, feasibility, cost estimating, kickoff, execution, construction, and monitoring/restoration.
- Experience with all components of NEPA with FERC as the lead agency, USFWS consultation, USACE/404 permitting, NPDES, and all other applicable federal, state, and local environmental permits and clearances that can be required for pipeline projects.
- Provide leadership on projects in agency meetings and support the public introduction of projects at open house and landowner meetings.
- In addition to project work provide support to management with developing and implementing tools and practices within group to improve efficiency with project execution and cost management.

Atkins Global (Formerly PBS&J)

Environmental Scientist

2004 – 2006

- Responsible for field evaluations and wetland delineations and jurisdictional determinations, USACE permit applications and NEPA report preparation for over 20 linear projects.
- Supported projects for state, county government entities and private real estate and oil/gas development.

Quadrant Consultants

2004

Environmental Scientist

- Provided lead environmental support for two TxDOT major corridor feasibility studies as a subcontractor to the prime Engineering Contractor.
- Performed wetland delineation and jurisdictional determinations. Prepared environmental documents under NEPA for numerous transportation projects.

Terracon

2002 – 2004

Environmental Scientist

- Managed all wetland related projects including delineation, preliminary jurisdictional determination, and section 404 permitting within an office primarily focused on environmental due diligence.
- Prepared proposals, managed budgets for over 50 projects between \$10,000 and \$25,000.
- Supported soil and groundwater investigations with sampling and well development, developed working knowledge of state and federal hazardous materials and waste handling requirements, and prepared over 100 Phase I Environmental Site Assessments.

Lennar Homes of Texas

2000 - 2001

Builder

- Residential home builder responsible for managing new home construction.
- Scheduled and inspected all aspects of new home construction, negotiated extras with contract trades and labor, coordinated inspections with municipal building inspectors, and worked closely with sales office on final make-ready.

ATC Associates

2000

Environmental Professional

- Environmental professional responsible for environmental due diligence, including phase I ESA's for real estate transactions and CE's under NEPA for telecommunications projects

The Nature Conservancy of Texas

1999 - 2000

Fire Management Technician

- Served one season and assisted with an additional season as fire management technician with responsibilities to all components of the conservancy's fire management program.
- Maintained equipment, prepared burn units, participated in prescribed burns including role as line boss, post-burn mop up, and conducted evaluations for effectiveness of burns.

Corwin Engineering

1999 - 2000

Survey Crew Member

- Civil survey crew member in support of residential and municipal development. Gained experience with survey instruments, topographical survey, lot stake, and utility layout.

Selected Project Experience**Confidential Client, West Texas Expansion Projects**

On behalf of a large Natural Gas Liquids (NGL) pipeline client managed permitting and construction compliance for approximately 200 miles of 20-inch diameter NGL pipeline lateral and looping projects in west Texas. Managed a team of environmental consultants and subs in order to obtain necessary Section 404 permits under Nationwide Permit 12, endangered species consultations, and various state and local permits necessary for the construction and operation of the described project that consisted of seven spreads. Throughout the construction phase managed a team of environmental inspectors, coordinated with construction management, and resolved multiple unanticipated discoveries of hydrocarbon-contaminated soils. Developed new procedures for unanticipated discovery of hazardous materials, tracking and reporting foreign line strikes during construction, and revised the client's construction mitigation and restoration plan.

Dalton Expansion Project, FERC Docket No. PF 15-117

Environmental project manager responsible for the FERC application, field surveys, and permitting for 115-mile Greenfield expansion project in Georgia. The project entered the FERC pre-filing process in April 2014, formally filed in March 2015, certificated in August 2016. Lead the environmental team at agency meetings, project open houses, and coordination with the FERC. Worked with project management to improve the company's implementation of project controls to improve performance with respect to schedule and cost. Represented the company as an expert witness in a successful hearing in Georgia State Court for writ of entry, allowing surveys to be completed in a timely manner. Developed a model for alternative mitigation for threatened/endangered species being used by other companies and projects. Successfully negotiated a wet open crossing of a major waterbody, limited seasonal restrictions on tree removal and timing of waterbody crossings. Presently managing the compliance staff through the construction phase.

Leidy Southeast Expansion Project, FERC Docket No. CP 13-551

Environmental project manager for project which included 28 miles of pipeline loop in 4 segments in Pennsylvania and New Jersey, compression addition at three existing stations, and various existing facility modifications. Successfully received FERC EA in August 2014. Was actively involved with core team that developed successful strategies for the project in key politically sensitive areas with significant local opposition. During construction was responsible for managing a team of contractors and subcontractors tasked with compliance with complex environmental permit conditions.

Gulfstream Phase III and IV – Completed projects

Managed environmental compliance, inspections, and reporting for 30-miles of Greenfield pipeline construction in South Florida (Phase III) and 14 miles of new pipeline across Tampa Bay (Phase IV). Both projects included endangered species, sensitive habitats, and strict monitoring and reporting requirements. Upon completion of these projects remained in the Palmetto, Florida division office to manage environmental compliance, maintenance, and post-construction environmental requirements for all of the Gulfstream system.

Education

Texas Tech University, 1997

- *B.S. Wildlife Management*

Professional Development & Training

- Project Management Professional, Project Management Institute, since 2010
- Environmental Committee, Southern Gas Association 2011-2014

Summary of Qualifications

Mr. Polk has over seven (7) years of project engineering and management experience in the pipeline and pipeline facility industry.

Experience includes:

- Project Management
- Feasibility Studies
- Capital Cost Estimates
- Project Proposals
- Project Estimates
- Detailed Engineering
- Construction Drawing Package Production
- Survey

Professional Experience

Audubon Companies

Project Manager, Pipeline Engineer

October 2018 – Present

TRC Solutions

Project Manager, Pipeline Engineer

January 2018 – October 2018

Wink Engineering

Pipeline Engineer

August 2014 – September 2018

Hatch Mott MacDonald

Pipeline Engineer

May 2013 – August 2014

Selected Project Experience

Southern Star Central Gas Pipeline – Pittsburg, KS

Responsible for coordinating the completion of the pipeline mapping and mechanical construction packages for a 10-mile pipeline. Project included managing survey, environmental, engineering, design, land, and coordinating with client managers. Mechanical scope included main line valve settings, regulator site modification, receiver installation, and tie-in piping.

Southern Star Central Gas Pipeline – Oklahoma City, OK

Responsible for coordinating the completion of the pipeline construction packages for seven (7) pipe segments totaling up to 15-miles. Project included managing several disciplines of the project including survey, environmental, engineering, design, land, and coordinating with client managers. This project required permits such as blanket FERC 7(c), CWA 404, tribal notification letters, archeological, USACE, storm water quality, OCC, USFW, OKC administration, etc.

Boardwalk SLN 10-1TT US 31W Replacement – Bowling Green, KY

Responsible for managing survey, engineering, drafting, and geotechnical sub-contract to support the relocation of a 10 inch natural gas pipeline crossing US Highway 41W. Double stopple and temporary by-passes on each end were designed to maintain pipeline operation during construction.

Boardwalk GUL 20-1 Sterlington Pipeline Replacement – Sterlington, LA

Responsible for managing survey, engineering, and drafting to support the replacement of approximately 1-mile of 20 inch natural gas pipeline.

Boardwalk Index 8-18 I-20 Crossing – Lindale, TX

Responsible for managing survey, engineering, and drafting to support the 6 inch natural gas pipeline crossing of US Interstate 20.

Williams, Meadows Heaters Phase 2 – Bergen, CO and NJ

Project Engineer responsible for coordinating the completion of the civil package. Package included over forty (40) drawings for site plans, foundation locations, concrete and steel details, site development, and grading. Over 250 piles installed to support each piece of equipment, foundation, and building.

Enterprise Products, CPC to BEA Pipeline – Beaumont, TX

Project Engineer on 3-mile, 36" pipeline project, responsible for supporting the development of P&IDs, mechanical drawing package for launcher/receiver sites, and preliminary design of an HDD crossing.

Enterprise Products, NuBlu Meter Station – Port Allen, LA

Project Engineer responsible for project management and coordination to plan and engineer a meter station to measure the flow rate of gas to LNG facility and the amount of by-product or recycled gas received from the facility. Scope also included spread footings for pipe supports, meter skid foundation, survey coordination, and site visits.

Vopak, Terminal Expansion – Deer Park, TX

Project Engineer responsible for determining secondary containment sizing per NFPA 30 and EI 19. Designed concrete retaining wall structures with reinforced steel. Designed pipe rack structures and foundations using STAAD including footings and drilled shafts, site drainage considering a 100-year/24-hour storm event, SWPPP drawings. Supported design of pipe racks, valve manifold, and sump pit platforms.

Enterprise Products, Air Liquide Meter Stations – Geismar, LA

Project Engineer responsible for project management and coordination to layout and engineer three (3) meter stations with pipeline laterals. Project included the design of a canopy for outdoor RTU panel, skid foundations, pipe supports, hot-tap tie-ins, HDD design, survey, piping isometrics, construction, as-built drawing packages, and site visits.

Big Lake Fuels, G2X Pipeline – Lake Charles, LA

Project Engineer. FEED study for 3-mile, 30" natural gas pipeline. Provided the design basis document and conducted hydraulic analysis for additional 9-mile pipeline with multiple interconnects. Following FEED, engineered and reviewed IFC deliverables including alignment sheets, HDD plan and profile, piping plans, sections, and details for the launcher/receiver sites.

Colonial Pipeline Company, Line 7 Replacement – Reggio, LA

Project Engineer responsible for 9-miles of 20" pipeline replacement from Lake Lery to Lake Borgne including an automated valve site. Performed calculations for buoyancy, pile load capabilities, and HDD stress. Engineering and coordination for alignment sheets, mechanical and civil MLV site plans, P&IDs, HDD details, electrical drawing package review, and construction typicals. Project management and scheduling. Project adherence of transportation of hazardous liquids with 49 CFR Part 195. Worked with permitting specialist to produce deliverables to Army Corps of Engineers, LDEQ, LADOTD, DNR, LDWF, and Others.

Marathon Refinery – Garyville, LA

Project Engineer responsible for 1500' of 6" pipe and 1000' of 10" pipe. Designed several pipeline crossings, bores, and an HDD in heavy vegetation landscape.

Buckeye Partners, Project Helio – LA

Project Engineer on conceptual study for the reversal of 24.4-miles of 8" pipeline, installation of two (2) new pipeline segments, and the expansion of a terminal facility. Engineering tasks included hydraulic analysis, and capital cost estimate.

Sunoco Pipeline – Delaware Basin, TX

Project Engineer responsible for 120-miles of 12", and 16" pipeline to deliver crude from Mc Loving to Sunvit, TX. Engineering review of eleven (11) HDD stress analysis designs, hydrostatic testing, thirty-two (32) road-crossing permit drawings, 135 alignment sheets, and survey processing for input to PODS database.

Enterprise Products, Nine Mile Point – LA

Project Engineer for project consisting of a gas metering station for delivery to Entergy Power Plant expansion consisting of design for 12" piping, vertical separator, meter skid, pressure regulating skid, and tie-in to existing gas delivery system. Responsibilities included project engineering for pipeline and equipment foundations, a pile foundation for a separator, and coordination to design piping and civil drawing packages. Participated in the preliminary on-site survey to locate piping, tie-in piping, and below grade appurtenances.

Anadarko, Central Oil Stabilization Facility – CO

Project Engineer for project consisting of structural engineering to design steel skids, pipe supports, concrete foundations, platforms, pipe racks, etc. Analyzed steel structures and concrete foundations using Risa3D and STAAD.

Boardwalk Pipeline Partners, Thermal Recuperative Oxidizer – Bistineau, LA

Project Engineer for thermal oxidizer installation. Project included process, electrical, and structural design to eliminate effluent from glycol reboilers.

Boardwalk Pipeline Partners, Tooke Lateral – Bistineau, LA

Project Engineer responsible for 6-miles of 2" pipeline from Tooke Well through a meter skid, launcher/receiver, and tie-in to a 42" main pipeline.

Boardwalk Pipeline Partners, Hall Summit Side Branch Absorbers – Bistineau, LA

Project Engineer responsible for site visit to gather existing site conditions and pipe measurements. Created plans and sections for SBA installation on compressor inlet and outlet to mitigate vibrations.

Boardwalk Pipeline Partners, Spring Creek Replacement – Spring, TX

Project Engineer responsible for designing the HDD by calculating pull forces, stress analysis, plan and profile design, and tie-in details. Evaluated required pipe wall thickness for future class location requirements.

Energy Transfer, RockTenn Lateral – Hodge, LA

Project Engineer responsible for a 2-mile pipeline delivered to a meter station for custody transfer. Reviewed technical deliverables for constructability and adherence to project specifications. Managed subcontract for geotechnical investigation along HDD path and site boundary. Calculated pipe wall thickness, regulating valve sizing, meter sizing, evaluated Joule-Thomson effect to determine indirect gas-fired heater requirements, wheel load analysis, pipe buoyancy in wetland areas, structural support PRV thrust force, depth of cover requirements, concrete foundation design for all station equipment, and soil-bearing capacities. Corresponded with LADOTD to permit a gas pipeline crossing under LA State Highway 147. Evaluated hydrostatic test plans for HDD, line pipe, and station piping in adherence to DOT 192.

Boardwalk Pipeline Partners, Index 430 – Marshall, TX

Project Engineer responsible for HDD design, stopple and bypass tie-in, and a hot-tap tie-in for a 2-mile, 6" pipeline route. Reviewed the class location study, resulting in an extension line upgrade.

CenterPoint Energy Pipeline Services, BT-39 Project – Houston, TX

Drafter responsible for drafting support, revising and updating alignment sheets, plats, and detail drawings for the 28-mile, 12" BT-39 project.

Axiall, Brine Pipeline – Sulfur, LA

Designer responsible for drafting support, revising and updating alignment sheets, plats, and HDD detail drawings for an 8-mile, 24" HDPE brine pipeline.

Spectra Energy, OPEN Project – Houston, TX

Designer responsible for calculation of cut/fill volumes and produce object rendering of proposed piping over/under a 3D surface. Provided drafting support, revised and updated alignment sheets, plats, and detail drawings. Created grading plans and cut/fill calculations.

ETC Texas Pipeline, Peach Creek Extension – San Antonio, TX

Designer responsible for creating alignment sheets, plats, and HDD detail drawings.

TransCanada, Carty Lateral – Morrow County, OR

Drafter responsible for drafting support, revising and updating mechanical detail drawings for 24.3-miles of 20" pipeline and related facilities.

Enable Gas Transmission, Bradley Interconnect – Shreveport, LA

Designer responsible for creating grading plans and cut/fill calculations, updating mechanical site drawings to accommodate for ground elevation changes for a proposed 16-mile gas pipeline.

TransCanada, North Montney Mainline Project – British Columbia

Project Engineer responsible for mitigation and stress analysis on mainline pipeline using Bentley AutoPIPE to account for thermal expansion, overburden pressure, and buoyancy forces. Project consisted of a total of 306 kilometers of a 42" diameter pipeline.

Magellan Midstream Partners, Little Rock Pipeline Project - AR

Drafter responsible for review and plot property deeds for a 53-mile, 12" refined petroleum products pipeline.

Education

Louisiana Tech University, 2013

- *B.S. Civil Engineering*

Professional Development & Training

- Registered Professional Engineer; LA - No. 42055
- Registered Professional Engineer; MS - No. 29075
- Registered Professional Engineer; KY - No. 33567
- Registered Professional Engineer; TN - No. 121916
- Registered Professional Engineer; WY - No. 16978
- Registered Professional Engineer; GA - No. 44505
- Registered Professional Engineer; NM - No. 25551
- Registered Professional Engineer; CO - No. 56377
- Registered Professional Engineer; OK - No. 31948

Summary of Qualifications

Mr. Shaner has over twenty-four (24) years of instrumentation/electrical experience in the oil and gas industry.

Professional Experience

<u>Audubon Engineering Company, LP</u> <i>I&E Engineering Supervisor</i>	March 2019 – Present
<u>Accenture</u> <i>Engineering Services Manager</i>	2012 – 2019
<u>CSD Engineers</u> <i>Senior Control Specialist</i>	2012 – 2012
<u>Indspec Chemical Corporation</u> <i>Electrical Engineer</i>	2008 – 2012
<u>Americom Government Services</u> <i>Production Manager/Systems Engineer</i>	2005 – 2008
<u>Axcelis Technologies, Inc.</u> <i>Systems Engineer</i>	1997 – 2008
<u>Buschman Conveyor Co.</u> <i>Controls Engineer</i>	1996 – 1997

Selected Project Experience

MarkWest – Cryo Plants, Compressor Stations, and De-Ethanizer Plants

- Resource coordination for controls engineering and design drafting personnel
- Specification of instrumentation, valves, and ISA datasheets
- OSBL I&C plant design
- Complete plant area classification design
- Field investigation
- Resource coordination for construction management and commissioning support

Rice Energy – Compressor Stations

- Resource coordination for controls engineering and design drafting personnel
- Specification of instrumentation, valves, and ISA datasheets
- I&C compressor station design
- Compressor station area classification design
- Resource coordination for construction management and commissioning support

Chevron – Well Sites and Compressor Stations

- Resource coordination for controls engineering and design drafting personnel
- Specification of instrumentation, valves, and ISA datasheets
- Power calculations for solar power requirements and battery back-up

Shell – Well Sites and Compressor Stations

- Resource coordination for controls engineering and design drafting personnel
- Power calculations for solar power requirements and battery back-up
- Field investigations for RTU retrofits
- Site walk downs to verify new installations meet area classification standards

Statoil – Well Sites and Compressor Stations

- Resource coordination for controls engineering and design drafting personnel
- Resource coordination for construction management and commissioning support

CONSOL – Compressor Station

- Resource coordination for controls engineering and design drafting personnel
- Resource coordination for construction management and commissioning support

BASF – Capital Project Support

- Resource coordination for controls engineering and design drafting personnel

Union Electric Steel – Capital Project Support

- Resource coordination for design drafting personnel

Indspec Chemical Plant – Capital Projects and Plant Support

- Responsible for all capital projects involving the plant control systems and historians: DeltaV, APACS, OSISOFT PI, fiber optic network, and operator station
- Train I&E Personnel on control systems, instrumentation, and trouble-shooting
- Created functional test procedures for every loop in the plant
- Plant Support 24/7/365

NOAH, FBI – Satellite Communication System for Weather tracking

- Design a 4 Satellite Antenna communication system with multiple racks of RF communication equipment

CDC – Remote Satellite Communication Systems for Disease Control

- Redesigned a 1m Ku-Band auto-pointing antenna system used for remote communications for epidemic purposes
- Designed multi-site Satellite Antenna communication system with C-Band Antennas and racks of RF communication equipment
- Managed Production floor personnel

MEVA – Satellite Communication Systems for Flight Safety

- Designed multi-site Satellite Antenna communication system with C-Band Antennas and racks of RF communication equipment
- Designed Monitor & Control system to incorporate Digital I/O, Relay Controls, Ethernet, RS485, RS232, and Dial In/Out capabilities
- Designed L-Band communications box to handle multiple modems on a single transponder
- Designed outdoor box to provide AC Power, Ethernet, RS485 and Phone at the antenna
- Managed Production floor personnel

FEMA – Remote Satellite Communication Systems for Disaster Communications

- Manufactured and Deployed several 1m Ku-Band auto-pointing antenna systems used for hurricane disaster relief

Intel, Texas Instruments, Micron, TSMC, Samsung – Semiconductor Capital Equipment Design and Support

- Responsible for wafer-handling/cleanroom environment used on semiconductor capital equipment design. This included power distribution, robotics, loaders, electro-mechanical control systems, communication systems, gas delivery systems, and vacuum systems
- Led systems integration/systems DVT testing of new products from prototypes through early commercialization
- Designed PCB interface boards, power distribution boards, and communication boards.
- Supported field service
- Trained engineering and manufacturing personnel on assembly, debug, and operation of new products
- Worked with technical writers to produce manuals, technical bulletins, and procedures

Pep Boys, Farner Bocken, Staples – Conveyor Distribution and Sorting System

- Programmed conveyor controls with PLM86 and C-Language
- Designed HMI Screens
- Commissioning and Support

Education

DeVry University, 196

- *B.S., Electronics Engineering Technology*



Appendix 2 – Price Proposal

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**PRICE PROPOSAL
HUGHESVILLE WATER AUTHORITY TOWER SITE**

Descriptoin	COST (\$)
Site Grading/Site Layout	\$ 9,810.00
Stormwater Drainage Design	\$ 8,600.00
Erosion/Sediment Control	\$ 16,866.00
Civil Permitting	\$ 30,000.00
Geotechnical	\$ 10,976.00
Geotechnical Boring Stakeout	\$ 1,975.00
Construction Stakeout	\$ 7,090.00
Soil Resistivity	\$ 1,800.00
Preliminary and Final Construction Drawings	\$ 3,824.00
Utility Coordination	\$ 2,636.00
Zoning Information	\$ 2,636.00
FAA/FCC	\$ 16,000.00
Field Surveying/Courthouse Research	\$ 24,460.00
Survey Plans	\$ 3,560.00
Environmentla Investigation	\$ 840.00
Infiltration Testing	\$ 460.00
Wetland/Stream Delineation	\$ 2,542.50
Phase I Investigation and Report	\$ 3,638.65
Hearing Attendance (if Needed)	\$ 5,886.00
Phase 2 Investigation and Report (If Needed)	\$ 11,260.00
NEPA/SHPO Services	\$ 2,155.00
Deliveries, Copies, Etc.	\$ 775.00
SUBTOTAL FOR HUGHESVILLE	\$ 167,790.15

**PRICE PROPOSAL
HESKER HILL TOWER SITE**

Description	COST (\$)
Site Grading/Site Layout	\$ 8,710.00
Stormwater Drainage Design	\$ 3,836.00
Erosion/Sediment Control	\$ 18,066.00
Civil Permitting	\$ 5,024.00
Geotechnical	\$ 10,976.00
Geotechnical Boring Stakeout	\$ 2,935.00
Construction Stakeout	\$ 3,230.00
Soil Resistivity	\$ 1,800.00
Preliminary and Final Construction Drawings	\$ 5,024.00
Utility Coordination	\$ 2,636.00
Zoning Information	\$ 2,636.00
FAA/FCC	\$ 16,000.00
Field Surveying/Courthouse Research	\$ 16,760.00
Survey Plans	\$ 3,010.00
Environmentla Investigation	\$ 840.00
Infiltration Testing	\$ 1,041.00
Wetland/Stream Delineation	\$ 2,542.50
Phase I Investigation and Report	\$ 3,638.65
Hearing Attendance (if Needed)	\$ 5,886.00
Phase 2 Investigation and Report (If Needed)	\$ 11,260.00
NEPA/SHPO Services	\$ 2,155.00
Deliveries, Copies, Etc.	\$ 775.00
SUBTOTAL FOR HESKER HILL	\$ 128,781.15

The undersigned, as Bidder, hereby declares that the total project costs as indicated above, includes all necessary work to complete this project in full according to the general specifications contained in the RFP. Products and services not specifically mentioned, but are necessary to provide the functional capabilities shall be listed and included as part of the cost elements.

The undersigned further understands and agrees that if the County accepts the bid, no additional funds will be allowed beyond the stated total project costs.

Company Name: Audubon Field Solutions, Inc.

Address: 4600 J. Barry Court, Suite 100, Canonsburg, PA 15317

Point of Contact: Philip Horne, PLS Phone Number: 724.749.3452

Fax Number: _____ Email address: phorne@auduboncompanies.com

Name of person submitting proposal: Philip Horne, PLS/Survey Operations Manager-Northeast

Signature:  Date: August 21, 2020

When submitting a bid, place the bid form sheet as the top page of the bid package and the bid price schedule as the second page of the bid package.



Appendix 3 – Project Schedule

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ID	Task Name	Task Mode	Start	Finish	Duration	Task
1	Lyscoming County Towers Project	1 day	Mon 10/5/20	Mon 10/5/20		
2	Project Kickoff	1 day	Mon 10/5/20	Tue 2/9/21		
3	Survey	92 days	Mon 10/5/20	Mon 10/5/20		
4	Title & Deed Search	10 days	Fri 10/16/20	Fri 10/16/20		
5	Boundary Survey	10 days	Mon 10/5/20	Fri 10/16/20		
6	Topographic & Utility	15 days	Mon 10/5/20	Fri 10/23/20		
7	Survey Plans	10 days	Mon 10/5/20	Fri 10/16/20		
8	Construction Stakeout	5 days	Wed 2/9/21	Tue 2/9/21		
9	Environmental	20 days	Tue 10/6/20	Mon 11/2/20		
10	PNDI Search	1 day	Tue 10/6/20	Tue 10/6/20		
11	Phase 1 Investigation	20 days	Tue 10/6/20	Mon 11/2/20		
12	Wetland Definition	15 days	Wed 10/7/20	Tue 10/27/20		
13	Engineering	60 days	Mon 10/5/20	Fri 12/25/20		
14	Preliminary Site Grading	5 days	Tue 10/6/20	Mon 10/12/20		
15	Stormwater/EES Design	20 days	Mon 10/7/20	Fri 11/20/20		
16	Electrical/Grading	60 days	Mon 10/5/20	Fri 12/25/20		
17	Utility Coordination	20 days	Mon 10/5/20	Fri 10/30/20		
18	Geotechnical Bore Staking	10 days	Tue 10/13/20	Mon 10/26/20		
19	Site Drilling & Analysis	25 days	Tue 10/27/20	Mon 11/30/20		
20	Infiltration Testing	10 days	Tue 12/1/20	Mon 12/14/20		
21	Resistivity	20 days	Tue 10/27/20	Mon 11/23/20		
22	Permitting	86 days	Tue 10/6/20	Tue 2/2/21		
23	NPDES NOI	70 days	Wed 10/28/20	Tue 2/2/21		
24	County	80 days	Tue 10/13/20	Mon 2/1/21		
25	Zoning	80 days	Tue 10/13/20	Mon 2/1/21		
26	HOP	60 days	Tue 10/13/20	Mon 1/19/21		
27	NEPA	80 days	Tue 10/6/20	Mon 2/25/21		
28	Project Kickoff	1 day	Mon 10/5/20	Tue 2/9/21		
29	Survey	92 days	Mon 10/5/20	Mon 10/5/20		
30	Title & Deed Search	10 days	Mon 10/5/20	Fri 10/16/20		
31	Boundary Survey	10 days	Mon 10/5/20	Fri 10/16/20		
32	Topographic & Utility	10 days	Mon 10/12/20	Fri 10/23/20		
33	Survey Plans	10 days	Mon 10/5/20	Fri 10/16/20		
34	Construction Stakeout	5 days	Wed 2/9/21	Tue 2/9/21		
35	Environmental	20 days	Tue 10/6/20	Mon 11/2/20		
36	PNDI Search	1 day	Tue 10/6/20	Tue 10/6/20		
37	Phase 1 Investigation	20 days	Tue 10/6/20	Mon 11/2/20		
38	Wetland Delineation	15 days	Wed 10/7/20	Tue 10/27/20		
39	Engineering	60 days	Mon 10/5/20	Fri 12/25/20		
40	Preliminary Site Grading	5 days	Tue 10/6/20	Mon 10/12/20		
41	Stormwater/EES Design	20 days	Mon 10/7/20	Fri 11/20/20		
42	Electrical/Grading	50 days	Mon 10/19/20	Fri 12/25/20		
43	Utility Coordination	10 days	Mon 10/5/20	Fri 10/16/20		
44	Geotechnical Bore Staking	10 days	Tue 10/13/20	Mon 10/26/20		
45	Site Drilling & Analysis	25 days	Tue 10/27/20	Mon 11/30/20		
46	Infiltration Testing	10 days	Tue 12/1/20	Mon 12/14/20		
47	Resistivity	20 days	Tue 10/27/20	Mon 11/23/20		
48	Permitting	81 days	Tue 10/6/20	Tue 2/2/21		
49	NPDES NOI	70 days	Wed 10/28/20	Tue 2/2/21		
50	County	70 days	Tue 10/27/20	Mon 2/1/21		
51	Zoning	70 days	Tue 10/27/20	Mon 2/1/21		
52	HOP	60 days	Tue 10/13/20	Mon 1/19/21		
53	NEPA	70 days	Tue 10/20/20	Mon 1/25/21		

Inactive Milestone Summary Project Summary Inactive Task Manual Task
 Duration only Manual Summary Manual Summary Manual Task
 Start only Finish only External Milestone External Task
 Deadline Progress Manual Progress

PRELIMINARY SCHEDULE
 Project: Project Schedule
 Date: Thu 8/20/20



Appendix 4 – Non-Collusion Affidavit

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(SEE PAGE THAT FOLLOWS)

INSTRUCTIONS FOR NON-COLLUSION AFFIDAVIT

This Non-Collusion Affidavit is material to any contract awarded pursuant to this proposal. According to the Pennsylvania Antibid-Rigging Act, 62 Pa.C.S.A. § 4501, et seq, government agencies may require Non-Collusion Affidavits to be submitted together with proposals.

This Non-Collusion Affidavit must be executed by the member, officer or employee of the Bidder who makes the final decision on prices and the amount quoted in the proposal.

Bid rigging and other efforts to restrain competition and the making of false sworn statements in connection with the submission of proposals are unlawful and may be subject to criminal prosecution. The person who signs the affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the Bidder with responsibilities for the preparation, approval or submission of the proposal.

In the case of a proposal submitted by a joint venture, each party to the venture must be identified in the proposal documents, and an Affidavit must be submitted separately in behalf of each party.

The term "complementary bid" as used in the Affidavit has the meaning commonly associated with that term in the bidding process, and includes the knowing submission of proposals higher than the proposal of another firm, and intentionally high or noncompetitive proposal, and any other form of proposal submitted for the purpose of giving a false appearance of competition.

Failure to file an Affidavit in compliance with these instructions will result in disqualification of the proposal.

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal Proposal

State of Pennsylvania

County of Lycoming

I state that I am Regional Manager, Survey(Title) of Audubon Field Solutions, Inc. (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. Audubon Field Solutions, Inc. (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

N/A

I state that Audubon Field Solutions, Inc. (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

A statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: Philip Horne

Signature: *Philip R. Horne*

Title: Regional Manager- Survey

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 21st DAY
OF AUGUST, 20 20

[Signature]
Notary Public

My Commission Expires: MARCH 23, 2023

Commonwealth of Pennsylvania - Notary Seal
Alexis Cruz, Notary Public
Franklin County
My Commission Expires March 23, 2023
Commission Number 1289231



Appendix 5 – Exception Form

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(SEE PAGE THAT FOLLOWS)

EXCEPTION FORM

SECTION NUMBER	EXPLANATION
Miscellaneous B.1	Lycoming County will be responsible for payment of all applicable permit application fees or will reimburse Audubon for all permit application fees remitted by Audubon on behalf of Lycoming County.
Environmental Surveying, A.	Delineation verification may be required by PADEP if delineation was completed outside of the growing season. This is not included within this scope of work or cost estimate.
Miscellaneous B.2	Threatened and endangered species (or habitat) evaluations or details surveys are not included in this proposal. However, they can be provided if required.
Miscellaneous B.2	Delays due to inclement weather are not included in this Proposa
Miscellaneous B.2	The construction stakeout cost estimate assumes the entire project will be staked out continuousl
Miscellaneous B.2	If archaeological sites are identified, Audubon will develop a separate scope for analysis and reporting.
General Requirements, 3.	Plans and drawings will be prepared in AutoCAD and ArcGIS formats.
	Deliverables to Lycoming County will be submitted electronically and require one review cycle to incorporate comments and revisions.
General Requirements, 8.	FCC Registration Number is provided or Lycoming County will log in and file using its FCC Registration Number

PROPOSAL FORM

Important note to Bidders:

It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to:

Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 21, 2020. **This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: PennCore Consulting LLC

Company Address: 328 Quiet Valley Road

Cogan Station, PA 17728

Main Telephone: 570-980-3994 Main Fax: _____

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Ryan K. Frenya / Director of Engineering & Environmental

Contact Telephone: 717-319-5407 Fax: _____

Contact Email: rfrenya@penncoreconsulting.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Ryan K. Frenya

Office Address: 328 Quiet Valley Road

Cogan Station, PA 17728

Telephone: 717-319-5407 Fax: _____

Email: rfrenya@penncoreconsulting.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	<u>1</u>	Date	<u>7/30/2020</u>
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

Company Type (check one):

- Sole Proprietorship Partnership Corporation Joint Venture

Bidder attests that:

1. He/she has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements;

2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor and material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

PennCore Consulting LLC
Company Name

83-3079395
Federal ID#

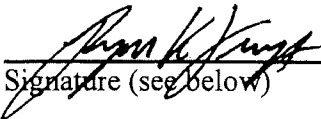
328 Quiet Valley Road
Street Address

Cogan Station PA 17728
City State Zip

570-980-3994
Telephone #

Fax #

WITNESS:


Signature (see below)

Ryan K. Frenya
Name (print)

Director of Engineering & Environmental
Title (print)

COMPANY:


Signature (see below)

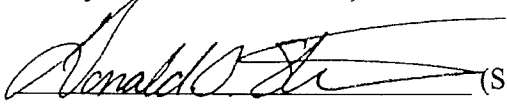
Donald O. Stevenson
Name (print)

CEO
Title (print)

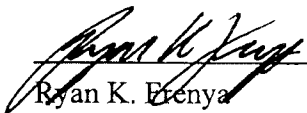
MINUTES OF THE DIRECTORS' MEETING

MINUTES OF A MEETING OF DIRECTORS of PennCore Consulting LLC (the "Corporation") held at 328 Quiet Valley Road, Cogan Station PA 17728 on this 20th day of August, 2020.

1. The following members were present, constituting the entire board:
Donald O. Stevenson; and
Ryan K. Frenya.
2. All the directors of the Corporation being present, formal notice calling the meeting was dispensed with, and the meeting declared to be regularly called.
3. **UPON A MOTION DULY MADE**, seconded and unanimously carried, Donald O. Stevenson acted as Chairperson of the meeting and Donald O. Stevenson as Secretary of the meeting.
4. The following memorandum was then read and ordered to be inserted in these minutes: "We, the directors of the Corporation consent to this meeting being held at the above time and place and do waive notice and publication of this meeting, and consent to the transaction of such business, as may have come before it, as testified by our signatures below.



Donald O. Stevenson (Signature)



Ryan K. Frenya (Signature)

5. Minutes of the last regular meeting were read and, upon motion duly made, seconded and carried, were adopted as read.
6. The Chairperson presented to the meeting and thereupon the following resolutions were offered, seconded and unanimously adopted.

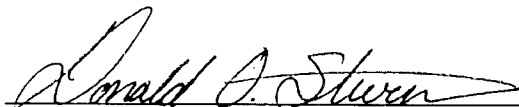
IT WAS RESOLVED THAT:

1. The following individual is appointed and confirmed as signing officer for the Corporation for a term of one year or until replaced and is authorized to manage bank accounts that have been

established for the benefit of the Corporation, sign and endorse checks, drafts, and other orders of payment for those bank accounts, and is authorized to sign bills of lading, and other documents, as needed and reasonable, for the normal conduct of the business of the Corporation:

Ryan K. Frenya.

2. There being no further business to come before the meeting, the meeting was adjourned.
3. Dated in the Commonwealth of Pennsylvania on the 20th day of August, 2020.

 (Signature)

Chairperson Name: Donald Stevenson

Legal Ad
Sun Gazette
To Be Run: July 30th and August 3rd

NOTICE TO BIDDERS

ADDENDUM NO. 1 RFP FOR ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE

The additions and/or deletions contained in this Addendum shall be made a part of the plans and specifications and contract documents for the above-referenced solicitation, and shall be subject to all applicable requirements thereunder, as if originally shown and/or specified. In case of any conflict between the specifications, and this Addendum, this Addendum shall govern.

This Addendum must be returned with your bid as acknowledgment of its receipt. Bidders may obtain the Addendum on the County website at www.lyco.org and Request for Bids.

The following modification is made to the text for the referenced solicitation:

The scope of the project has changed from one (1) tower site to two (2) tower sites, resulting in a number of changes to the RFP issued. Please see the following changes for the Lycoming County RFP for E&S services.

1. Change from “Hughesville Water Authority Tower Site” to “Hughesville Water Authority Tower Site and Hesker Hill Tower Site: (1) on the cover page, (2) on Notice to Bidders page 1-1, second paragraph, and (3) on Section 2, page 2-2, paragraph 2.9, third line.

2. Change to Scope of Work & Technical Specifications, Introduction, page 5-1 is as follows:

Lycoming County is currently upgrading our existing radio system to better serve the residents, businesses, tourists and public safety agencies of the county. In order to achieve the overall plan, Lycoming County will be contracting for the construction of two (2) raw lands to finish tower sites to improve RF coverage for our first responders. Additionally, on the one site, a second plot of land is to be cleared for the water authority to use (no further development of the second plot is required).

3. Changes to Scope of Work & Technical Specifications, General Requirements, item 1, page 5-1 are as follows:

1. The names and locations of the two (2) new proposed tower sites are:

- a. Hughesville Water Authority tower site
 - i. Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
 - ii. Street address: 279 Reservoir Road, Hughesville, PA
 - iii. Township: Wolf
 - iv. County: Lycoming
 - v. Size of site plot: 100'x100'
 - vi. Height of tower: 250'

Hughesville Water Authority land which is to be cleared (not developed) for water authority use is:

- i. Street address: 279 Reservoir Road, Hughesville, PA
- ii. Township: Wolf
- iii. County: Lycoming
- iv. Approximate size of plot to be cleared for the water authority: 100'x100'

- b. Hesker Hill tower site
 - i. Latitude: 41-14-19.1 N, longitude: 77-14-35.1W
 - ii. Street address: 1324 Hesker Hill Road, Jersey Shore, PA
 - iii. Township: Piatt
 - iv. County: Lycoming
 - v. Size of site plot: 75'x75'
 - vi. Height of tower: 250'

The County will be responsible for procurement of site and leasing of property.

4. Change to Mandatory Site Walk on Notice to Bidders, page 1-1, paragraph 4 is as follows:

A mandatory site walk will be held on Wednesday, August 5, 2020, at 10:00 AM for the two (2) tower sites, starting at the Hughesville Water Authority site located at 279 Reservoir Road, Hughesville, PA.

5. Change to Price Proposal, section 6.1 Cost Elements is as follows:

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	3,500
Stormwater Drainage Design	4,000
Erosion/Sediment Control	1,750
Civil Permitting*	2,500
Geotechnical	9,420
Geotechnical Boring Stakeout	500
Construction Stakeout	2,865
Soil Resistivity	3,675
Preliminary and Final	see next line item


Construction Drawings (CDs)	8,240
Utility Coordination	1,680
Zoning Information	4,000
FAA/FCC	1,060
Field Surveying/Courthouse Research	5,000
Survey Plans	2,130
Environmental Investigation	250
Infiltration Testing	750
Wetlands/Stream Delineation	900
Phase 1 Investigation and Report	2,305
Hearing Attendance (If Needed)	460
Phase 2 Investigation and Report (If Needed)	1,985
NEPA/SHPO Services	500
Deliveries, Copies, Etc.	200
SUBTOTAL FOR HUGHESVILLE	57,670

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	3,505
Stormwater Drainage Design	3,750
Erosion/Sediment Control	1,500
Civil Permitting*	2,500
Geotechnical	8,370
Geotechnical Boring Stakeout	500
Construction Stakeout	2,050
Soil Resistivity	3,675
Preliminary and Final Construction Drawings (CDs)	8,240
Utility Coordination	1,680
Zoning Information	3,790
FAA/FCC	1,060
Field Surveying/Courthouse Research	2,500
Survey Plans	1,500
Environmental Investigation	250
Infiltration Testing	750

Wetlands/Stream Delineation	900
Phase 1 Investigation and Report	2,305
Hearing Attendance (If Needed)	460
Phase 2 Investigation and Report (If Needed)	1,985
NEPA/SHPO Services	740
Deliveries, Copies, Etc.	200
SUBTOTAL FOR HESKER HILL	52,210
GRAND TOTAL FOR BOTH SITES	109,880

ACKNOWLEDGEMENT

I hereby acknowledge receipt of this Addendum for the above noted project.

Signature  Date 8/20/2020



**REQUEST FOR PROPOSAL (RFP)
FOR
ENGINEERING & SURVEYING SERVICES
FOR
HUGHESVILLE WATER AUTHORITY TOWER SITE

AUGUST 2020**

**PREPARED BY:
PENNCORE CONSULTING LLC
328 QUIET VALLEY ROAD
COGAN STATION, PA 17728
570-980-3994
WWW.PENNCORECONSULTING.COM**

PREPARED FOR:



REQUEST FOR PROPOSAL FOR ENGINEERING & SURVEYING SERVICES

PennCore Consulting LLC (PennCore) has prepared this Request for Proposal (RFP) based on the publication issued by the County of Lycoming on July 20, 2020 and mandatory site walk on August 5, 2020. This RFP is being submitted to the Lycoming County Board of Commissioners to provide an overview of PennCore's capabilities and scope of work.

The RFP forms provided by the County as well as any Addendums have been signed by PennCore and are included in Appendix A of this Proposal.

HISTORY OF THE FIRM:

PennCore is a civil engineering and surveying consulting firm based in the Williamsport, Pennsylvania Area with additional Pennsylvania locations in Selinsgrove, Lewisburg, Tower City, and Herndon. PennCore was established to provide commonsense and simple solutions for the most complex projects while focusing on the client's main goal. The senior members of the PennCore team each provide at least a decade of experience in design and project consulting. PennCore will lead you in the right direction no matter what size the project while holding true to your end goal.

The PennCore team includes designers, engineers, surveyors, and a wetland scientist. PennCore has licensed Professional Engineers (PE) in PA and WV, a licensed Professional Land Surveyor (PLS), Engineers- In- Training (E.I.T.), and Certified Floodplain Managers (CFM). PennCore also has close relationships with professional geotechnical and structural engineers who we have worked closely on many projects PennCore designed, permitted, and managed during construction.

PennCore's extensive experience in designing and managing various projects include but are not limited to:

- Municipal Engineering/Consulting
- Stormwater Management System Design & Permitting
- Site Grading/Layout
- Zoning Support and Coordination
- Transportation Engineering (H.O.P.s, Road & Drainage Design)
- Erosion & Sediment Control Design
- Land Surveying & Drone Services
- Construction Management/Inspections
- Subdivision and Land Development
- Hydrologic & Hydraulic Modeling

- Geotechnical Recommendations
- State Historic Preservation Office Compliance, Permitting, and Submittals
- Floodplain Management & Permitting
- Oil & Gas Facilities/Pipeline Permitting, Management, and Design Assistance
- Municipal CDBG and DCED Funding Support

PennCore is the municipal engineer for Buffalo Township, Union County, PA, Gregg Township, Union County, PA, Renovo Borough, Clinton County, PA, and the alternate county engineer for Union County, PA. PennCore also provides professional engineering and surveying services to the Blythe Township Landfill, Schuylkill County, PA.

PennCore provides expertise in the preparation of feasibility studies, plans, construction drawings/specifications, cost estimates, recommendations on contract awards, preparation of contract documents, and administration of contracted work. Our municipal experience provides local municipalities guidance with their established local ordinances. PennCore provides development reviews for municipalities to ensure all requirements are met.

Refer to the team resumes provided in Appendix E for a more detailed list of completed projects.

PROJECT/OPERATIONAL COSTS:

PennCore provided a spreadsheet for both the Hughesville Water Authority Tower Site and Hesker Hill Tower Site in Appendix A.

An hourly fee rate sheet for work which may arise due to a change in the proposed scope of work is provided in Appendix B.

VENDOR REFERENCES:

PennCore has permitted, design, and provided construction monitoring for many projects which serve residents, businesses, and public agencies throughout Pennsylvania. Below are a few projects PennCore has been associated with recently.

- Lancaster Meter & Receiving Facility:
 - Proposed natural gas metering and receiving facility which will allow for the safe transmission of natural gas throughout the City of Lancaster, PA.
- Evergreen Solar Farm:
 - Proposed solar farm which would supply solar power to the electric grid which would supply families across the Commonwealth

- Getgen Meter Station:
 - Natural gas metering station which supplies gas to market for thousands of individuals across the Commonwealth.

The Project Director assigned to this project will be Ryan Frenya, PE, CFM. Mr. Frenya is currently the Project Director for similar projects and will see this project through to the end.

Additional key personnel include Daniel Dunkelberger, PLS, Brian Schultz, PE CFM, Colton Zimmerman, E.I.T., and Steven Bason, PWS. Each of these team members are well versed on projects of this size and scope. Please see Appendix E for key personnel resumes.

PennCore's Organization Chart is provided in Appendix C.

PROJECT IMPLEMENTATION SCHEDULE:

The entire team at PennCore has been working with one another for the past 10 years. Some members of the team have worked together continually since 2006. It is with these relationships and working together that makes PennCore unique and stand out within the consulting firm community. The PennCore team is fully dedicated to every project, no matter the size and scope. The staff and management at PennCore were hand-picked in order to ensure the stability, success, and integrity of PennCore.

Based on experience of similar ongoing and past projects, PennCore is confident that the project team presented above will fully deliver on the proposed projects above and beyond the County's needs and expectations. PennCore develops and manages a structured QA/QC process utilizing a multi-step review process. Each project will be assigned a project manager, design engineer, and QA/QC manager along with support staff to ensure a smooth implementation for project success.

As the projects progress, PennCore will be in contact with the County to provide a minimum weekly update and anticipated key dates of deliverables. PennCore strives to be competent and cost-effective while staying focused on the County's main goals and objectives.

PennCore will have contract funds encumbered within 30 days of contract award and complete the services as described within the RFP, including engineering, surveying, permitting, and related site design to construct the communications towers and sites at both locations by February 28, 2021, unless mutually extended by both parties.

PennCore provided an anticipated Project Timeline in Appendix D.

Sincerely,



Ryan K. Frenya, PE
Director of Engineering and Environmental

APPENDIX A -
RFP FORMS, ADDENDUMS, & COST SPREADSHEETS



COUNTY OF LYCOMING

PURCHASING OFFICE

Mya Toon, Lycoming County Chief Procurement Officer, CPPB
Lycoming County Executive Plaza ♦ 330 Pine Street, Suite 404, Williamsport, PA 17701
Tel: (570) 327-6746 ♦ Fax: (570) 320-2111 ♦ Email: mtoon@lyco.org

REQUEST FOR PROPOSAL (RFP) FOR ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE

**ISSUE DATE: JULY 20, 2020
DUE DATE: AUGUST 21, 2020**

Bidders may download proposals by going to www.lyco.org and clicking on Top 10 Links, Request for Bids/Proposals. All Bidders are required to contact the Lycoming County Chief Procurement Officer and place his/her company name on the Bidders' List. This will ensure that each Bidder receives any and all addenda that may apply to the current proposal package. Failure to receive all current information could result in your company submitting an inaccurate proposal, which may be disqualified by the County.

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SECTION 1
NOTICE TO BIDDERS

Legal Ad
Sun Gazette
To Be Run: July 20th & July 24th

NOTICE TO BIDDERS

The County of Lycoming is requesting sealed proposal for Engineering and Surveying services for Hughesville Water Authority tower site. Proposals are due by **Friday, August 21, 2020, at 5:00 P.M. EST.** Proposals will be opened on **Tuesday, August 25, 2020 at 10:00 A.M. EST** in the Commissioners' Meeting Room, Lycoming County Executive Plaza Building.

Proposals shall be mailed or delivered to the Lycoming County Controller's Office, Lycoming County Executive Plaza Building, 330 Pine Street, 2nd Floor, Williamsport, PA 17701. Proposals must be enclosed in a sealed envelope and marked "**RFP for Engineering and Surveying Services for Hughesville Water Authority Tower Site.**"

All bids shall remain firm price for 60 days after the date of bid opening.

A mandatory site walk will be held on **Wednesday, August 5, 2020, at 10:00 AM** at the Hughesville Water Authority site located at 279 Reservoir Road, Hughesville, PA. Attendance at the site walk is a prerequisite for submitting a bid. Bids will only be accepted from those who are represented at the site walk. Attendance at the site walk will be evidenced by the representative's signature on the attendance roster.

Questions regarding this request for proposal shall be directed to Mya Toon, Chief Procurement Officer, at mtoon@lyco.org.

Bidders may download the proposal by going to www.lyco.org and clicking on Top 10 Links, Request for Bids/Proposals.

The Lycoming County Board of Commissioners reserve the right to accept or reject any or all proposals, or to accept any part of a proposal without accepting the whole thereof, or to accept such proposal as they deem to be in the best interest of the County.

COUNTY OF LYCOMING

Scott L. Metzger
Tony R. Mussare
Richard Mirabito

Attest:
Matthew M. McDermott
Chief Clerk

SECTION 2

**PROPOSAL INFORMATION
AND
INSTRUCTIONS**

PROPOSAL INFORMATION AND INSTRUCTIONS

2.1 **Definitions**

Request for Proposal (RFP)	All documents, whether attached or incorporated by reference, used to solicit competitive sealed bids / proposals.
County	County shall be synonymous with the Lycoming County Board of Commissioners.
Bidder / Respondent	A firm, individual, or corporation submitting a proposal in response to this RFP.
Addendum	A written change, addition, alteration, correction or revision to a proposal or contract document.
Bid / Proposal	The formal response to the RFP.
Contract	The agreement that results from this competitive procurement, if any, between the County and the vendor identified.
Contractor / Vendor / Successful Bidder / Firm	The Bidder(s) that will be awarded a contract pursuant to this solicitation and are responsible performing the service or supplying the good as defined in the contract.
Subcontractor	Any person other than an employee of Respondent who performs any services listed in this RFP.
Services	The work identified in this RFP as to be performed by Vendor under the ensuing contract.
Goods	The equipment or items identified in this RFP as to be supplied by Vendor under the ensuing contract.
Work	The required services and required goods.

2.2 Receipt of Proposal Package. The County's Purchasing Department and the Controller's Office are the sole authorities to provide the RFP package to Bidders. Bidders who are working from an RFP package obtained from any other source may be working from an incomplete set of documents. The County assumes no responsibility for a proposal's errors, omissions or misinterpretations resulting from a Bidder's use of an incomplete RFP package.

Bidders are advised to contact the Purchasing Department to provide his/her company's name, address, telephone number, fax number and contact name. This will ensure the Bidder will receive all communication regarding the RFP such as addenda and clarifications.

2.3 Examination of Proposal. Bidders shall carefully examine all documents in the solicitation to obtain knowledge of existing conditions, limitations, and requirements. Failure to examine the documents will not relieve the Bidder of responsibility for same nor will extra payment or change order requests be considered for conditions which could have been determined by examining the solicitation.

Proposals will be considered as conclusive evidence of complete examination and understanding of the terms and conditions of the proposal documents including the specifications and all requirements thereof of the RFP. It is understood that submission of a proposal indicates full acceptance of the same by the parties submitting the proposal. Furthermore, by submitting a proposal the Bidder waives the

right to claims for additional time or monetary compensation for all work without limit required to complete the contract which could have been obtained by the Bidder through examination of all documents, or raising a question regarding requirements prior to submitting a proposal.

- 2.4 **Preparation of Proposal.** The County shall not be responsible for any costs associated with the preparation or submittal of any proposal. All costs are entirely the responsibility of the Bidder.
- 2.5 **Communications.** All questions regarding this RFP shall be submitted in writing to Mya Toon, Lycoming County Chief Procurement Officer, at mtoon@lyco.org. Questions which require a more detailed or complex reply or require an answer that may affect responses to this RFP or may be prejudicial to other prospective Bidders, will be answered by issuing an addendum. Questions must be received by the Chief Procurement Officer no later than Friday, August 14, 2020 at 5:00 P.M. EST.
- 2.6 **Addenda/Amendments to Proposal.** All changes in connection with this proposal will be issued by the Purchasing Department in the form of a written addendum. All addenda will be posted to the County Purchasing Department's page on the County website (www.lyco.org) at least seven (7) days prior to the deadline for RFP submissions. It is the Bidder's responsibility to check the website and ensure they have all applicable addenda prior to proposal submission. Signed acknowledgement of receipt of each addendum must be submitted with the proposal.
- 2.7 **Deadline and Opening of Proposal.** Proposals must be received no later than Friday, August 21, 2020, 5:00 P.M. EST. Proposals will be opened publicly at 10:00 A.M., EST, on Tuesday, August 25, 2020, in the Commissioners' Board Room located on the 1st Floor of the Lycoming County Executive Plaza Building. A summary of proposals received, including company name and proposal amount will be posted on the Purchasing Department's page on the County's website (www.lyco.org) within 48 hours of the proposal opening.

The Bidder warrants the proposal price(s), terms and conditions stated in his/her proposal shall be firm for a period of 60 days from the date of the proposal opening.

- 2.8 **Important Dates.** The following lists important events and deadlines regarding the RFP.

Issue Date:	July 20, 2020
Mandatory Site Walk:	August 5, 2020
Final Date for Written Questions:	August 14, 2020
Deadline for Submitting Proposals:	August 21, 2020
Opening of Proposals:	August 25, 2020

- 2.9 **Submission of Proposal.** An original and five (5) complete copies must be enclosed in a sealed envelope or package. The outside of the envelope or package shall be clearly marked, "RFP for Engineering and Surveying Services for Hughesville Water Authority Tower Site." Proposals shall be submitted to the Lycoming County Controller's Office, Executive Plaza Building, 330 Pine Street, 2nd Floor, Williamsport, PA 17701. Late proposals shall not be accepted. Proposals must be mailed or hand-delivered. Proposals delivered by fax or electronic mean are not acceptable and will not be considered.

All proposals must be submitted on the forms provided by the County and in accordance with the requirements and instructions contained in the RFP package. The County may waive minor informalities or irregularities in the proposals received where such is merely a matter of form and not substance, and the correction or waiver of which is not prejudicial to other Bidders. Minor irregularities

are defined as those that will not have an adverse effect on the County's interest and will not affect the price of the proposal by giving a Bidder an advantage of benefits not enjoyed by other Bidders.

- 2.10 Public Disclosure.** All Bidders should be aware that the County is an agency subject to the Right-to-Know Law. Any documents submitted should be considered as subject to potential public disclosure once the proposal is awarded. A summary of proposals received, including company name and proposal amount will be posted on the Purchasing Department's page of the County's website (www.lyco.org) within 48 hours of the proposal opening.
- 2.11 Exceptions.** A proposal submitted in response to this RFP constitutes a binding offer to comply with all terms, conditions, special conditions, general specifications, and requirements stated in this RFP, except to the extent that a Bidder takes exception to such provisions. To take exception to a provision of this RFP, the Bidder must clearly identify in the PROPOSAL EXCEPTION FORM: (a) the number and title of each section of this RFP that the Bidder takes exception to; (b) the specific sentence within such section that the Bidder takes exception to; and (c) any alternate provision proposed by the Bidder.
- 2.12 Modifications/Withdrawal of Proposal.** Proposals may be modified or withdrawn prior to the submittal deadline. Requests for withdrawals or modifications of proposals received after the proposal submittal deadline will not be considered except as otherwise provided in the following paragraph. Bidders desiring to modify or withdraw his/her proposal, must submit the purpose for modification or withdrawal in writing to the County Chief Procurement Officer prior to the submittal deadline. Bidders may resubmit proposals provided it is prior to the scheduled submittal deadline.

After proposal opening, the Chief Procurement Officer may allow a Bidder to modify or withdraw its proposal without prejudice if clear and convincing evidence supports the existence of a material and substantial error, an unintentional arithmetical error or an unintentional omission of a substantial quantity of work, labor, material, or services made directly in the compilation of the proposal. Requests to modify or withdraw the proposal must be made in writing to the Chief Procurement Officer within two (2) business days after opening the proposals.

- 2.13 Evaluation of Proposals.** Proposals will be evaluated in accordance with the required scope of work as listed in this RFP. At the County's discretion, a proposal may be eliminated from consideration for failure to comply with any required specification, depending on the nature and extent of non-compliance. In addition to meeting mandated specifications, proposals will be evaluated for the ability of the Bidder to provide, in the County's opinion, the best overall solution to meet the County's objectives.

Accepted proposals will be reviewed by an evaluation team and scored against the stated criteria. This scoring will determine the ranking of proposers based upon his/her written proposals. If the team determines that it is in the best interest of the County to require oral presentations and/or interviews, the highest ranking proposers will be invited to make such presentations and/or demonstrations. Those proposers that participate will then be scored, and the final ranking will be made based upon those scores.

- 2.14 Rejection or Disqualification of Proposals.** A proposal that is incomplete, obscure, conditioned or contains additions not called for or irregularities of any kind, (including alterations or erasures), which are not initialed, may be rejected as non-conforming.

The County reserves the right to waive a proposal's minor irregularities if rectified by Bidder within three (3) business days of the County's issuance of a written notice of such irregularities.

The County reserves the right to disqualify proposals, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices upon the part of the Bidder.

Issuance of this RFP in no way constitutes a commitment by the County to award a contract. The County reserves the right to accept or reject, in whole or part, all proposals submitted and/or cancel this solicitation if it is determined to be in the best interest of the County.

Any Bidder who has demonstrated poor performance during a current or previous Agreement with the County may be considered a non-responsible Bidder and his/her proposal may be rejected. The County reserves the right to exercise this option as is deemed proper and/or necessary.

The Lycoming County Board of Commissioners reserve the right to accept or reject any or all proposals, or to accept any part of a proposal without accepting the whole thereof, or to accept such proposal as they deem to be in the best interest of the County.

- 2.15 Award of Proposal.** Award of any proposal is contingent upon available budget funds and approval of the Lycoming County Board of Commissioners.

The County will award the contract(s) to the best responsible, responsive Bidder who meets all terms, conditions, and specifications of the RFP, within 60 days of the opening of the proposals. Submitted proposals shall remain valid during this 60 day period.

The County reserves the right, in its sole and absolute discretion, to accept or reject any and all proposals or parts thereof, or to accept such proposal as they deem to be in the best interest of the County.

An official letter of acceptance will be forwarded by the County to the successful Bidder after proposal selection and prior to contract award.

SECTION 3

**GENERAL TERMS
AND
CONDITIONS**

3.1 **Bidder's Certification.** By submitting a proposal, the contractor is certifying that it and its Principals and/or subcontractors are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by the State of Pennsylvania or any Federal department or agency.

3.2 **Use of Proposal Forms.** Any and all documents required by the RFP that require a notarization must include the signature and seal of the notary public as required by the state in which the notary is commissioned. For those states that do not require an embossed notary seal, a Notarization Affidavit must be completed and submitted with the proposal. Proposals and required documentation submitted without the embossed seal and without the Notarization Affidavit, as applicable, may be rejected at the time of proposal opening.

For each line item offered, Bidders shall show both the unit price and extended price. In case of a discrepancy between the unit price and extended price, the unit price will be presumed to be correct and the extended price shall be corrected accordingly.

3.3 **Non-Collusion Affidavit.** The County requires that a Non-collusion Affidavit be submitted with all proposals pursuant to its authority according to the Pennsylvania Antibid-Rigging Act, 62 Pa. C.S.A. §4501 et seq.

This Non-Collusion Affidavit must be executed by the member, officer, or employee of the Bidder who makes the final decision on prices and the amount quoted in the proposal.

Bid rigging and other efforts to restrain competition and the making of false sworn statements in connection with the submission of proposals are unlawful and may be subject to criminal prosecution. The person who signs the Affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the Bidder with responsibilities for the preparation, approval or submission of the proposal.

If a proposal is submitted by a joint venture, each party to the venture must be identified in the proposal documents, and a Non-Collusion Affidavit must be submitted separately on behalf of each party. The term "complementary bid" as used in the Affidavit has meaning commonly associated with that term in the bidding process, and includes the knowing submission of proposals higher than the proposal of another firm, any intentionally high or non-competitive proposal, and any form of proposal submitted for the purpose of giving a false appearance of competition.

Failure to file a Non-Collusion Affidavit in compliance with these instructions may result in disqualification of the proposal.

SECTION 4

**CONTRACT TERMS
AND
CONDITIONS**

- 4.1 **Agreement/Contract.** Upon acceptance and award of a Bidder's proposal, the contract between the Bidder and the County shall be drafted from (a) the RFP and addenda, (b) the selected proposal (response to the RFP by the Bidder) and any attachments thereto, and (c) all written communications between the County and the Bidder concerning the transactions. The contract shall constitute the entire and only agreement and shall supersede all prior negotiations, commitments, understandings, or agreements, whether oral or written.
- 4.2 **Execution of Contract.** The successful Bidder must execute a written contract with the County. If the successful Bidder fails or refuses to execute the formal contract within ten (10) days of the date of contract award, award of the contract shall be voided, and all obligations of the County in connection herewith shall be canceled.
- 4.3 **Contents of Contract.** The entire contents of this RFP shall become a part of the contract.
- 4.4 **Term of Contract.** The contract, which results from the award of this RFP, shall commence upon award and shall terminate on February 28, 2021.
- 4.5 **Option to Extend Contract Period.** The contract may be extended up to three (3) months at the bid pricing, provided mutual agreement by both parties in written form. This extension will be utilized only to prevent a lapse of contract coverage and only for the time necessary to issue and award a new Invitation to Bid, but not to exceed three (3) months.
- 4.6 **Option to Renew Contract.** This contract may be renewed for either a one, two, or three year term at the bid pricing by mutual agreement of both parties in written form.
- 4.7 **Pricing.** Bidders warrant the proposal price(s), terms and conditions stated in his/her proposal shall be firm for a period of 60 days from the date of the proposal opening. Once an award is made and a contract is in place, prices shall remain firm and fixed for the entire contract period. If the proposal includes price increases over the term of the contract, such increases must be clearly indicated in the Proposal Price Schedule. All proposal prices must include freight.
- 4.8 **Subcontracting.** The Contractor shall not subcontract any of its obligations under this contract without the County's prior written consent. In the event the County does consent in writing to a subcontracting arrangement, the Contractor shall be the prime contractor and shall remain fully responsible for performance of all obligations which it is required to perform under this contract.
- 4.9 **Payment.** The County will make payment within thirty (30) days of receipt invoice for properly received goods and services after inspection and acceptance of the material and/or work by the County. Advance billings are not allowed. Where partial delivery is made, invoice for such part shall be made upon delivery, and payment made within thirty (30) days under conditions as above.

If the Bidder's method of billing and payment is different than what is stated above, the Bidder must indicate the preferred method. The County will consider paying on a periodic basis as substantial portions of the work as performed, but not more than one time per month.

The County offers vendors the option to enroll in electronic payment via automated clearing house (ACH) to the vendor's provided bank account of record.

SECTION 5

SCOPE OF WORK
&
TECHNICAL SPECIFICATIONS

SCOPE OF WORK & TECHNICAL SPECIFICATIONS

INTRODUCTION

SEE ADDENDUM #1

Lycoming County is currently upgrading our existing radio system to better serve the residents, businesses, tourists and public safety agencies of the county. In order to achieve the overall plan, Lycoming County will be contracting for the construction of one (1) raw land to finish tower site to improve RF coverage for our first responders. Additionally, on the same site, a second plot of land is to be cleared for the water authority to use (no further development of the second plot is required).

Lycoming County is soliciting engineering and surveying services proposals from qualified Firm to provide design services for the tower site as described herein. Below, is a scope of services of the engineering and surveying services requested for this project. The Firm must outline their qualifications and fee for the scope of services listed below. Lycoming County is seeking a 'turnkey' approach, where the Firm will provide the following:

PROJECT SCOPE OF WORK

Provide complete engineering, surveying, permitting, and related site design to construct the tower and site at the locations provided by the County. No tower design services or coordination with a tower manufacturer are required.

GENERAL REQUIREMENTS

1. The names and locations of the new proposed tower site is:
 - a. Hughesville Water Authority tower site
 - i. Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
 - ii. Street address: 279 Reservoir Road, Hughesville, PA
 - iii. Township: Wolf
 - iv. County: Lycoming
 - v. Size of site plot: 100'x100'
 - vi. Height of tower: 250'
 - b. Hughesville Water Authority land which is to be cleared (not developed) for water authority use is:
 - i. Street address: 279 Reservoir Road, Hughesville, PA
 - ii. Township: Wolf
 - iii. County: Lycoming
 - iv. Approximate size of plot to be cleared for the water authority: 100'x100'

The County will be responsible for procurement of site and leasing of the property.

2. All plan review fees shall be paid by the County and included in the cost proposal.
3. All drawings shall be produced in AutoCAD 2013 or compatible. Final AutoCAD files shall be submitted to the County.
4. Firm shall be 100% responsible for their respective discipline in order to meet all code requirements and shall revise drawings to meet County/City plan review comments at no additional cost to the County.
5. All Firms shall be fully authorized and licensed to provide professional engineering services and surveying in the State of Pennsylvania, be in good standing with their respective state boards and not be under investigation for unethical practice or standards.

6. All drawings shall be produced in 24"X36" sheet size for both digital and printing format. Drawing package shall also be provided in PDF form for reproduction purposes.
7. Firm will be required to attend an initial site visit at the proposed site to review the project for an initial design review.
8. All FAA + FCC required filings to be completed by Firm.

ENGINEERING SERVICES

A. Civil Site Engineering

The Firm shall provide a 'turn-key' proposal for civil engineering services with a lump sum price. The proposal shall include line item costs for the following services:

1. Site Grading/Site Layout – provide access road (typically gravel, typically 12' wide), to parking area (typically 20' x 30'), and tower pad (typically 100' x 100' or less). Dimensions are provided for planning purposes and are subject to change based on site and layout.
2. Storm water drainage design – meet all applicable local and state design and permitting requirements for Post Construction Stormwater Management.
3. Erosion and Sediment (E&S) control design – meet all applicable local and state design and permitting requirements for permit acquisition and construction purposes.
4. Firm shall prepare and submit all applicable Permitting documents including but not limited to; City and County E&S and PCSM permits, Site Specific E&S Applications, NPDES Permit Submittals including Notice of Intent (NOI), Local Grading Permits, and Highway Occupancy Permits (HOP's).
5. Geotechnical Testing and Report for tower design by tower manufacturer – Typical Bores to a depth of 35' below grade. Three (3) bores are required.
6. Soil resistivity Testing and Report by a qualified professional (to be used in development of site grounding design). Both a soil resistivity testing/report and geotechnical testing/report are required. The length and spacing of the resistivity intervals should be every 30' out to 300'. Two (2) line tests are required.

B. Site Design

All work to be completed in compliance with existing regulatory codes, industry standards and FAA/FCC regulations.

1. Firm will provide a preliminary legible drawing of the proposed site that shall include:
 - a. Compound layout with all applicable facilities, shelter, propane tank, generator, construction details, and tower drawings.
 - b. Lease area of site
 - c. Fencing, grounding, and electrical plan and details.

2. Firm is responsible for utility coordination and includes: submission of one-calls, coordination of site walks with the appropriate utility Firms for utility routing and any associated ROW that will be required for utility corridors.
3. Firm shall prepare Construction Drawings based on all information collected and agreed upon during the site walk phase. It should also incorporate results based on geotechnical and soil resistivity reports, tower drawings, foundations, shelter, propane tank and generator), FAA Notice, permitting and site survey (included as separate section below).
4. Facilities required at each of the tower sites are power and communications.

C. Shelter and Tower Designs

Shelter and tower designs will be completed by tower manufacturer and under a separate Scope of Work.

SURVEYING SERVICES

The Firm shall verify the metes and bounds of the parent parcel of interest given by bearing to the nearest whole second and distance to the nearest hundredth of a foot. Easements and/or rights of ways shall be shown graphically and described, as well as the proposed lease parcel and proposed and existing easements. All legal names and widths of any adjoining streets or dedicated public rights of way shall be shown. A Survey map will include a North Arrow showing deed bearing north, magnetic north and geographic true north. A bounded survey is required.

All tax maps, blocks and lot numbers and the deed book and page numbers should be verified and shown for the parent parcels and adjoining parcels within 100 feet.

Location and description of all structures within 50 feet of the proposed site shall be shown, to include any abandoned structures.

Location and description of all above ground utilities including power and telephone poles, overhead wires and other items shall be shown. Underground utilities shall be also shown and noted within 25 feet of proposed construction area. Any and all utility Firms or other owners shall be labeled and shown.

All corners of proposed lease parcels, easements and other boundaries shall be permanently marked with iron pins or pipes not less than 18 inches in length and 1" in diameter. Elevations shall be field measured and shown to within 1.0 feet of the U.S.G.S. datum or NGVD 88 datum when not in a special flood hazard zone. Where a particular benchmark is used as the starting point, its description, location and elevation shall be noted on the drawing. Topographic coverage will usually include at a minimum the area within 100 feet of new construction including all access and utility easements. Where the terrain has a slope of 6% or more, a profile of the access easement centerline will be required. Contours shall be shown over the full area of requested coverage at 2-foot intervals. A permanent benchmark shall be set in the immediate vicinity of the proposed new construction. Firm will provide a 2C letter accurate within the FAA Horizontal Accuracy Code 2, (+/- 50 feet) and the elevation provided is accurate within FAA Vertical Accuracy Code C, (+/- 20 feet).

A. Survey Plan

The Firm shall insert his/her own name and other identifying data in the appropriate blocks. The survey plan scale shall normally be 1"=20' or 1"=30' if necessary and 24 inches in depth by 36 inches in width. A key map at a scale of 1"=2000' will be included in the area designated on the standard drawing format sheet (upper right-hand corner) and shall usually consist of a reproduction of the U.S.G.S. 7.5-minute quadrangle map with the site location noted in heavy outline and circled for clarity.

The original drawings shall bear the signature of the Supervising Professional Land Surveyor.

ENVIRONMENTAL SURVEYING

A. Wetland and Stream Delineation and Permitting

The Firm shall provide a site-specific Wetland, Stream and Natural Resources investigation complying with local, state, and national procedures. The Firm is responsible for conveying wetland, stream, and natural resource finding with the client and advising a viable permitting solution for any field finding that will require mitigation, permitting, or site re-design. The Firm shall prepare all applicable environmental permit submittals for construction of the proposed project if applicable.

ADDITIONAL SERVICES:

Additional services that may be required based on site specific issues. It is the Firm's responsibility to advise the client as issues and unforeseen circumstances arise.

A. SHPO Compliance Permitting

The Firm is responsible to provide State Historic Preservation Office compliance (SHPO) permitting and submittals. The Firm is responsible for all compliance with the Pennsylvania State Historic Code, PHMC Submissions, FCC Form 620, and all applicable compliance permitting.

B. Coordinate/Prepare Phase I and II Site Assessments

Environmental Site Assessment (ESA) of proposed site if required. A Phase I ESA is required. Based on the findings of the Phase I ESA, a Phase II ESA could be required.

C. Zoning Permitting

Include Zoning Drawings, Zoning Package Submittal, and Attendance to Zoning Hearings. All information must be compliant with county and city zoning requirements. The Firm shall have an intimate knowledge of the Zoning process.

MISCELLANEOUS

A. Expenses

1. As part of the proposal, in addition to the lump sum, list all reimbursable expenses and rates.
2. The engineer shall document and bill all reimbursable costs with a 0% mark-up.

B. Change in Scope of Work

1. Provide hourly fee rate sheet for work which may arise due to a change in the proposed scope of work.
2. All additional services arising from a change in the scope of work shall be not be commenced without a fully executed contract amendment. It shall be the responsibility of the civil engineer to indicate to the County if they believe that services to be rendered are outside of the scope of work. Lycoming County shall not be required to honor any requests for compensation for additional services that begin or are completed before a fully executed contract amendment is issued.

EVALUATION / SELECTION PROCESS

The criterion upon which the evaluation of the proposals will be based includes, but is not limited to, the following:

- a. Submission of a proposal implies the Vendor's acceptance of the evaluation criteria and Vendor recognition that subjective judgments must be made by an evaluation committee.

- b. The evaluation committee will examine all proposals. A proposal that does not conform to the instructions contained in this document or that does not address all questions and/or requirements as specified may be eliminated from consideration. However, Lycoming County reserves the right to accept such a proposal if it is determined to be in Lycoming County's best interest.
- c. Lycoming County may initiate discussions with Vendors during the evaluation process and reserves the right to request an on-site presentation/demonstration by the Vendor. Modifications to proposals will be accepted during this period but only when such modifications are requested by Lycoming County. Vendors may not initiate discussions and/or presentations. Lycoming County expects to conduct any discussion sessions with Vendor personnel authorized to contractually obligate the Vendor with an offer.
- d. The award of the contract shall be made to the Vendor whose proposal best meets the goals and objectives of Lycoming County as set forth in the RFP. The evaluation criteria shall take all of the following into consideration: hardware, software, and/or services, pricing, and other factors set forth in the RFP.
- e. Lycoming County may hold negotiating sessions with the successful Vendor. If Lycoming County and the selected Vendor are unable to agree to contract terms and conditions, Lycoming County reserves the right to terminate contract negotiations with the Vendor and initiate negotiations with another Vendor(s).
- f. Lycoming County will select the Vendor whom, in the opinion of Lycoming County, has made the best overall proposal and shall award to contract to that Vendor. Final selection will be made by Lycoming County. Lycoming County may reject any or all proposals.

EVALUATION CRITERIA

1. Technical Compliance – To the degree that the functional requirements of this RFP are met, evaluation shall include all elements as outlined in the “Technical Specifications”.

MAXIMUM SCORE: 25 POINTS

2. Project / Operational Costs – Shall include a spreadsheet identifying all costs that will be supported (by prime and subcontractors, if applicable).

MAXIMUM SCORE: 25 POINTS

3. Vendor References – Shall include Vendor’s experience and qualifications to include a list of recent projects from like sized (approx. 320,000 pop. or larger) counties in the Commonwealth. Vendor shall include a list of professional references to include financial reports to support this project, and an organizational list of all key personnel in this project (prime and subcontractors), defining their tasks.

MAXIMUM SCORE: 25 POINTS

4. Project Implementation Schedule – Vendor’s ability to have contract funds encumbered within 30 days of contract award and complete the services as described in the RFP, including engineering, surveying, permitting, and related site design to construct the communications towers and sites at the locations provided by the County by February 28, 2021, unless mutually extended by both parties.

MAXIMUM SCORE: 25 POINTS

SECTION 6
PRICE PROPOSAL

PRICE PROPOSAL

SEE ADDENDUM #1

6.1 Cost Elements. Services not specifically mentioned in this RFP, but are necessary to provide the functional capabilities described, shall be included as part of the cost elements. Bidders should utilize this table below to justify costs.

Description	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	
Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
GRAND TOTAL	

The undersigned, as Bidder, hereby declares that the total project costs as indicated above, includes all necessary work to complete this project in full according to the general specifications contained in the RFP. Products and services not specifically mentioned, but are necessary to provide the functional capabilities shall be listed and included as part of the cost elements.

The undersigned further understands and agrees that if the County accepts the bid, no additional funds will be allowed beyond the stated total project costs.

Company Name: PennCore Consulting LLC

Address: 328 Quiet Valley Road, Cogan Station, PA 17728

Point of Contact: Ryan K. Frenya Phone Number: 717-319-5407

Fax Number: _____ Email address: rfrenya@penncoreconsulting.com

Name of person submitting proposal: Ryan K. Frenya

Signature:  Date: 8/20/2020

When submitting a bid, place the bid form sheet as the top page of the bid package and the bid price schedule as the second page of the bid package.

SECTION 7
PROPOSAL FORM

PROPOSAL FORM

Important note to Bidders: It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to: Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 21, _____, 2020 _____. **This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: PennCore Consulting LLC

Company Address: 328 Quiet Valley Road
Cogan Station, PA 17728

Main Telephone: 570-980-3994 Main Fax: _____

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Ryan K. Frenya / Director of Engineering & Environmental

Contact Telephone: 717-319-5407 Fax: _____

Contact Email: rfrenya@penncoreconsulting.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Ryan K. Frenya

Office Address: 328 Quiet Valley Road
Cogan Station, PA 17728

Telephone: 717-319-5407 Fax: _____

Email: rfrenya@penncoreconsulting.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	<u>1</u>	Date	<u>7/30/2020</u>
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

Company Type (check one):

- Sole Proprietorship Partnership Corporation Joint Venture

Bidder attests that:

1. He/she has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements;

2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor and material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

PennCore Consulting LLC	83-3079395
_____ Company Name	_____ Federal ID#

328 Quiet Valley Road	Cogan Station	PA	17728
_____ Street Address	_____ PO Box	_____ City	_____ State
			_____ Zip

570-980-3994	
_____ Telephone #	_____ Fax #

WITNESS:

COMPANY:

Signature (see below)

Signature (see below)

Ryan K. Frenya

Donald O. Stevenson

Name (print)

Name (print)

Director of Engineering & Environmental

CEO

Title (print)

Title (print)

SECTION 8

NON-COLLUSION AFFIDAVIT

INSTRUCTIONS FOR NON-COLLUSION AFFIDAVIT

This Non-Collusion Affidavit is material to any contract awarded pursuant to this proposal. According to the Pennsylvania Antibid-Rigging Act, 62 Pa.C.S.A. § 4501, et seq, government agencies may require Non-Collusion Affidavits to be submitted together with proposals.

This Non-Collusion Affidavit must be executed by the member, officer or employee of the Bidder who makes the final decision on prices and the amount quoted in the proposal.

Bid rigging and other efforts to restrain competition and the making of false sworn statements in connection with the submission of proposals are unlawful and may be subject to criminal prosecution. The person who signs the affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the Bidder with responsibilities for the preparation, approval or submission of the proposal.

In the case of a proposal submitted by a joint venture, each party to the venture must be identified in the proposal documents, and an Affidavit must be submitted separately in behalf of each party.

The term “complementary bid” as used in the Affidavit has the meaning commonly associated with that term in the bidding process, and includes the knowing submission of proposals higher than the proposal of another firm, and intentionally high or noncompetitive proposal, and any other form of proposal submitted for the purpose of giving a false appearance of competition.

Failure to file an Affidavit in compliance with these instructions will result in disqualification of the proposal.

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal RFP for Engineering & Surveying Services for Hughesville Water Auth. Tower Site

State of Pennsylvania

County of Lycoming

I state that I am CEO (Title) of PennCore Consulting LLC (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. PennCore Consulting LLC (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

I state that PennCore Consulting LLC (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

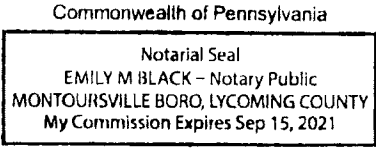
A statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: Donald O. Stevenson

Signature: *Donald O. Stevenson*

Title CEO

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 20 DAY
OF August, 20 20



Emily M Black
Notary Public

My Commission Expires: 9/15/2021

SECTION 9
EXCEPTION FORM

EXCEPTION FORM

Section Number	Explanation

Legal Ad
Sun Gazette
To Be Run: July 30th and August 3rd

NOTICE TO BIDDERS

ADDENDUM NO. 1 RFP FOR ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE

The additions and/or deletions contained in this Addendum shall be made a part of the plans and specifications and contract documents for the above-referenced solicitation, and shall be subject to all applicable requirements thereunder, as if originally shown and/or specified. In case of any conflict between the specifications, and this Addendum, this Addendum shall govern.

This Addendum must be returned with your bid as acknowledgment of its receipt. Bidders may obtain the Addendum on the County website at www.lyco.org and Request for Bids.

The following modification is made to the text for the referenced solicitation:

The scope of the project has changed from one (1) tower site to two (2) tower sites, resulting in a number of changes to the RFP issued. Please see the following changes for the Lycoming County RFP for E&S services.

1. Change from “Hughesville Water Authority Tower Site” to “Hughesville Water Authority Tower Site and Hesker Hill Tower Site: (1) on the cover page, (2) on Notice to Bidders page 1-1, second paragraph, and (3) on Section 2, page 2-2, paragraph 2.9, third line.

2. Change to Scope of Work & Technical Specifications, Introduction, page 5-1 is as follows:

Lycoming County is currently upgrading our existing radio system to better serve the residents, businesses, tourists and public safety agencies of the county. In order to achieve the overall plan, Lycoming County will be contracting for the construction of two (2) raw lands to finish tower sites to improve RF coverage for our first responders. Additionally, on the one site, a second plot of land is to be cleared for the water authority to use (no further development of the second plot is required).

3. Changes to Scope of Work & Technical Specifications, General Requirements, item 1, page 5-1 are as follows:

1. The names and locations of the two (2) new proposed tower sites are:

- a. Hughesville Water Authority tower site
 - i. Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
 - ii. Street address: 279 Reservoir Road, Hughesville, PA
 - iii. Township: Wolf
 - iv. County: Lycoming
 - v. Size of site plot: 100'x100'
 - vi. Height of tower: 250'

Hughesville Water Authority land which is to be cleared (not developed) for water authority use is:

- i. Street address: 279 Reservoir Road, Hughesville, PA
- ii. Township: Wolf
- iii. County: Lycoming
- iv. Approximate size of plot to be cleared for the water authority: 100'x100'

- b. Hesker Hill tower site
 - i. Latitude: 41-14-19.1 N, longitude: 77-14-35.1W
 - ii. Street address: 1324 Hesker Hill Road, Jersey Shore, PA
 - iii. Township: Piatt
 - iv. County: Lycoming
 - v. Size of site plot: 75'x75'
 - vi. Height of tower: 250'

The County will be responsible for procurement of site and leasing of property.

4. Change to Mandatory Site Walk on Notice to Bidders, page 1-1, paragraph 4 is as follows:

A mandatory site walk will be held on Wednesday, August 5, 2020, at 10:00 AM for the two (2) tower sites, starting at the Hughesville Water Authority site located at 279 Reservoir Road, Hughesville, PA.

5. Change to Price Proposal, section 6.1 Cost Elements is as follows:

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	3,500
Stormwater Drainage Design	4,000
Erosion/Sediment Control	1,750
Civil Permitting*	2,500
Geotechnical	9,420
Geotechnical Boring Stakeout	500
Construction Stakeout	2,865
Soil Resistivity	3,675
Preliminary and Final	see next line item


Construction Drawings (CDs)	8,240
Utility Coordination	1,680
Zoning Information	4,000
FAA/FCC	1,060
Field Surveying/Courthouse Research	5,000
Survey Plans	2,130
Environmental Investigation	250
Infiltration Testing	750
Wetlands/Stream Delineation	900
Phase 1 Investigation and Report	2,305
Hearing Attendance (If Needed)	460
Phase 2 Investigation and Report (If Needed)	1,985
NEPA/SHPO Services	500
Deliveries, Copies, Etc.	200
SUBTOTAL FOR HUGHESVILLE	57,670

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	3,505
Stormwater Drainage Design	3,750
Erosion/Sediment Control	1,500
Civil Permitting*	2,500
Geotechnical	8,370
Geotechnical Boring Stakeout	500
Construction Stakeout	2,050
Soil Resistivity	3,675
Preliminary and Final Construction Drawings (CDs)	8,240
Utility Coordination	1,680
Zoning Information	3,790
FAA/FCC	1,060
Field Surveying/Courthouse Research	2,500
Survey Plans	1,500
Environmental Investigation	250
Infiltration Testing	750

Wetlands/Stream Delineation	900
Phase 1 Investigation and Report	2,305
Hearing Attendance (If Needed)	460
Phase 2 Investigation and Report (If Needed)	1,985
NEPA/SHPO Services	740
Deliveries, Copies, Etc.	200
SUBTOTAL FOR HESKER HILL	52,210
GRAND TOTAL FOR BOTH SITES	109,880

ACKNOWLEDGEMENT

I hereby acknowledge receipt of this Addendum for the above noted project.

Signature 

Date 8/20/2020

APPENDIX B -
PENNCORE FEE SCHEDULE



**PennCore Consulting LLC
2020 Fee Schedule**

<u>Labor Classification</u>	<u>Hourly Rate (\$)</u>
Clerical	50
Regulatory Specialist	65
Senior Biologist	100
Survey Tech	60
Surveyor 1	75
Surveyor 2	95
Survey Manager	110
Environmental Inspector	90
Project Engineer 1	80
Project Engineer 2	90
Project Engineer 3	105
Senior Project Engineer 1	110
Senior Project Engineer 2	130
Construction Inspector	90
Construction Manager	125
Regulatory Manager	110
Senior Project Manager	145
Principle Consultant	150

<u>Survey Classification</u>	<u>Hourly Rate (\$)</u>
Survey Crew (1 Man)	100
Survey Crew (2 Man)	140
Drone & Pilot*	115
Drone, Pilot, & Observer	170

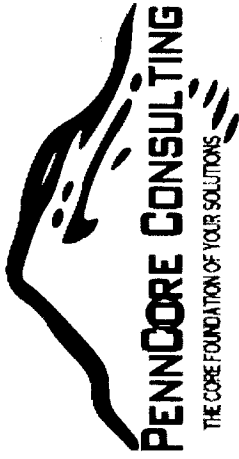
*Observer to be provided by Client

Reimbursable Expenses

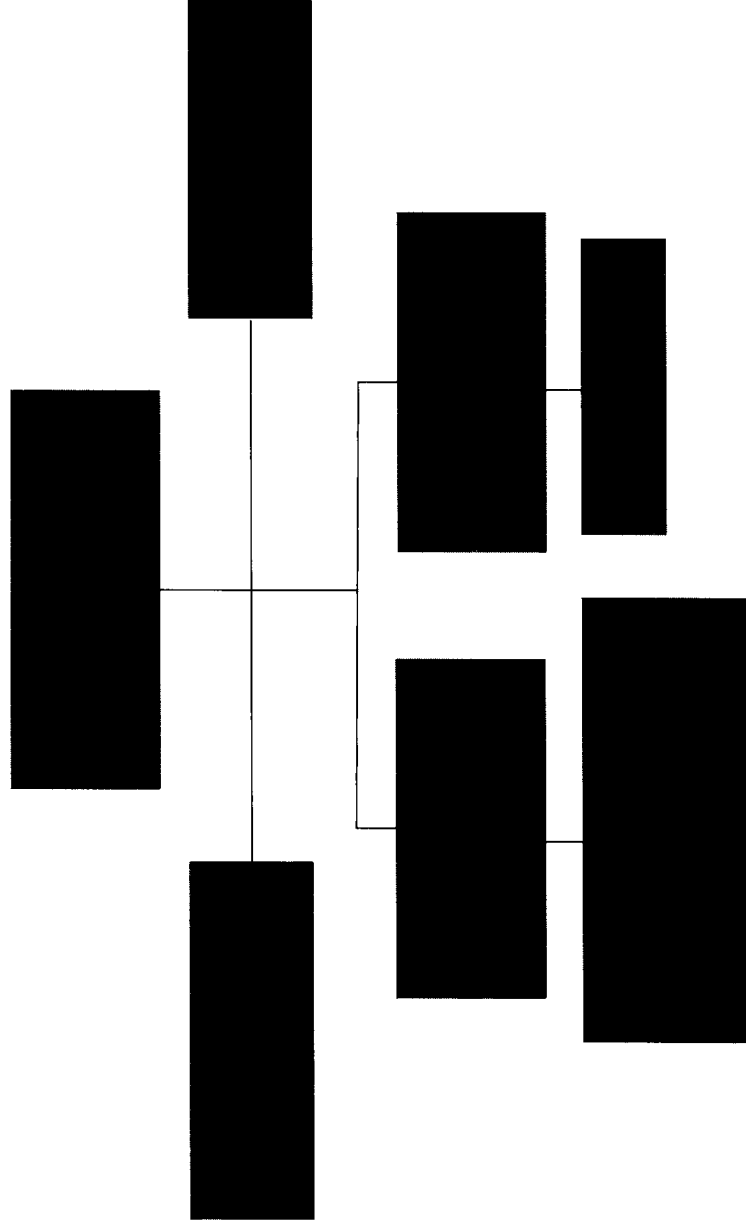
1. Travel at IRS current approved rate and direct cost for parking and toll fees.
2. Direct cost for meals and lodging during required overnight travel.
3. Direct cost for mailing and specific equipment rentals.
4. A 5% markup will be applied to subcontractor invoices. A 10% markup will be applied to subcontractor invoices if not paid within 30 days of the date printed on the invoice.
5. UTV rental with trailer is \$125/day.
6. Expert witness testimony, including preparation time, and other special services generally require a dedicated commitment of staff. Therefore, hourly billing rates for providing these dedicated services will be charge at a rate of 150% of the above schedule

PennCore Consulting LLC
328 Quiet Valley Rd
Cogan Station, PA 17728
(570) 980-3994
www.penncoreconsulting.com

APPENDIX C -
PROJECT TEAM ORGANIZATIONAL FLOW CHART



ORGANIZATIONAL CHART
FOR
LAND DEVELOPMENT & SURVEYING SERVICES



APPENDIX D -
PROJECT TIMELINE

HUGHESVILLE WATER AUTHORITY SITE & HESKER HILL SITE

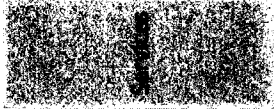
PROJECT TIMELINE FOR ENGINEERING & SURVEYING SERVICES



Thu 10/1

Contract Approval

- Surveying Tasks [redacted] Oct 15 - Oct 30
- Concept Plan/Finalize [redacted] Oct 15 - Nov 2
- Wetland Delineation [redacted] Oct 19 - Oct 23
- Geotechnical Services/NEPA-SHPO Coord. [redacted] Nov 2 - Nov 6
- Ph. 1 & 2 Study; FAA/FCC Coord. [redacted] Nov 2 - Nov 13
- Prepare E&S, NPDES, & LDP Permits [redacted] Nov 2 - Dec 11
- Submit Permits (E&S, NPDES, & LDP) [redacted] Dec 18
- Address Permit Review Comments for Final Approvals [redacted] Dec 19 - Feb 1



APPENDIX E -
KEY TEAM RESUMES

Ryan K. Frenya, PE, CFM
Director of Engineering and Environmental
PennCore Consulting, LLC
328 Quiet Valley Road
Cogan Station, PA 17728
rfrenya@penncoreconsulting.com
(570) 980-3566

Areas of Expertise

Stormwater Management Design
Water Resources Engineering
Oil & Gas Permitting
Land Development
Mining Support
Project Management
Construction Management
Construction Inspection
Floodplain Management
Municipal Engineering
GP-7/JPA Permitting
HydroCAD
HEC-RAS Modeling
HOP Permitting
AutoCAD-Civil 3D

Years of Experience

With PennCore: <1 Year
With Other Firms: 14 Years

Education

BSCE/Civil Engineering
Technology/2007/Pennsylvania College
of Technology

Licenses

- Professional Engineer (PE)
-PA/PE081786
-WV/20786
- Certified Floodplain Manager (CFM)
-US-10-05404

Overview

Mr. Frenya is a civil & water resource engineer and project manager with over 14 years of design and construction related experience. He has designed various commercial, residential, and mining development projects, including the design of drainage and stormwater management facilities, utilities, sediment and erosion control plans, driveway and road design, and permitting (NPDES, ESCGP, GP, JPA, FERC and HOP). He has also provided construction observation, project management, and municipal engineering consultation. Mr. Frenya also assisted in the development of Countywide Act 167 Plans throughout various locations throughout Pennsylvania as being responsible for preparing hydrologic studies, data collection, and analysis as well as project management.

Project Specific Experience - (Land Development & Permitting)

Beech Resources, Pennsylvania-

Role: Senior Engineer. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA;s). Beech proposed numerous Oil & Gas projects in central Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, pipelines, meter stations, water withdrawals, and well pad designs.

Inflection Energy LLC, Pennsylvania-

Role: Senior Engineer. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA;s). Inflection Energy LLC proposed numerous Marcellus Shale well pads through the state of Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, and well pad design.

Specialty Granules LLC (SGI), Pennsylvania- Role: Senior Engineer. Responsible for the "Life of the Mine" Projects at SGI's Charmian Mine Site located in Blue Ridge Summit, PA. Projects include site permitting, stockpile design, roadway design, stormwater management, erosion & sediment control, and construction monitoring. SGI mines, processes, and supplies asphalt-based roofing granules to the North American Roofing industry.

SWEPI, LP, Pennsylvania-

Role: Project Engineer. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA;s) for over 250 locations. SWEPI, LP proposed numerous Marcellus Shale well pads through the state of Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, and well pad design.

Howard Energy Partners (HEP), Pennsylvania-

Role: Project Engineer. Responsible for the stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA;s) for the installation of numerous natural gas gathering lines, meter stations, and compressor stations.

Confidential Client, Pennsylvania-

Role: Project Manager. Responsible for a \$2 million-dollar project associated with the coordination of various natural resource investigations, field work, client communication, invoicing, data collection-management, client and agency presentations, and analysis of oil & gas sites, for an Environmental Audit.

Cabot Oil & Gas Corporation, Pennsylvania-

Role: Project Engineer. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA;s). Cabot Oil & Gas proposed numerous Marcellus Shale well pads through the state of Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, and well pad design.

Sunbury Pipeline Project for UGI Sunbury, LLC (UGI), Pennsylvania-

Role: Project Engineer. Responsible for the stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA;s) for the installation of a 35-mile natural gas gathering line. Improvements included installation of a 20" natural gas pipeline, temporary and permanent access roads, water resource crossings, and erosion & sediment pollution control features. Improvements also included the permitting and design of three-meter stations, including one receiving station and two delivery stations.

Auburn Line Loop Pipeline Project for UGI Energy Services, LLC (UGI), Pennsylvania-

Role: Project Engineer. Responsible for the stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA;s) for the installation of a 9-mile natural gas gathering line. Improvements included installation of a 24" natural gas pipeline, temporary access roads, water resource crossings, and erosion & sediment pollution control features.

Angelina Gathering Company, LLC (AGC), Pennsylvania-

Role: Project Engineer. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA;s). AGC proposed numerous pipeline projects associated with the Marcellus Shale development throughout the state of Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, and erosion and sediment control facilities.

Williams Partners, LP, Pennsylvania-

Role: Project Engineer. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA;s). Williams Partners, LP proposed numerous pipeline projects associated with the Marcellus Shale development throughout the state of Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, and erosion and sediment control facilities.

Specialty Granules, Inc. (SGI), Pennsylvania-

Role: Project Engineer. Responsible for stormwater management facility design, erosion and sediment pollution control design, and NPDES permitting for mining activities. SGI mines, processes, and supplies asphalt-based roofing granules to the North American Roofing industry.

Highway Occupancy Permitting for Shell Appalachia, Cabot Oil and Gas, Southwestern Energy, and CNX Gas Company, LCC, Various Locations, PA – Role: Project Engineer. Review Engineer for numerous sites throughout Pennsylvania. Responsible for managing and reviewing any HOP's required for the project. Projects entail coordinating and gathering information with clients, creation of permitting plans, submission of required documents to the appropriate permitting source, and oversight of HOP submissions for multiple projects.

Hydro Recovery , LP, Lawrence Township, Clearfield County, PA-

Role: Site Design Engineering Technician. Responsible for the site layout, stormwater management facilities, site investigations and erosion and sediment pollution control design. Hydro Recovery LP proposed to locate multiple treatment/mixing facilities with the Marcellus Shale drilling area of Pennsylvania to allow for the treatment of frac wastewater and the reuse of that wastewater into a product suitable for fracing additional wells.

Borough of Lewisburg Street Improvements, Borough of Lewisburg, Union County, PA- Role: Site Design Engineering Technician. Responsible for stormwater conveyance system, grading improvements, site investigations, and erosion and sediment pollution control design. Numerous projects entailed the construction of a stormwater conveyance system and street improvements to alleviate stormwater problems for particular streets in the Borough of Lewisburg. Improvements included the construction of the stormwater conveyance system, improved roadway grading, and utility relocation.

East Walnut Street Improvements for the Borough of Mifflinburg, Mifflinburg Borough, Union County, PA - Role: Site Design Engineering Technician. Responsible for stormwater conveyance system, grading improvements, site investigations, and erosion and sediment pollution control design. Project entailed the construction of a stormwater conveyance system and street improvements to alleviate stormwater problems for East Walnut Street in the Borough of Mifflinburg. Improvements included the construction of the stormwater conveyance system, improved roadway grading, and utility relocation.

Hemlock Road Culvert Project, Fox Township, Elk County, PA - Role: Site Design Engineering Technician. Responsible for the design and permitting of replacement of the existing culverts crossing Hemlock Road as well as stream restoration downstream of the culverts.

Middle Smithfield Elementary School Additions and Renovations for the Middle Smithfield School District, East Stroudsburg Township, Monroe County, PA - Role: Site Design Engineering Technician. Responsible for NPDES permitting, stormwater facility design, stormwater conveyance system design, and erosion and sediment control design. Project entailed property additions and renovations to increase facility capacity to 1,100 students at the existing 16.75-acre Middle Smithfield Elementary School. The site was located just east of the intersection of State Route 0209 and Hollow Road in East Stroudsburg. Improvements included the construction of the proposed school additions, parking lots, soccer field, baseball field, stormwater management facilities, and the installation of utilities.

Windsor Property Holdings, LLC Land Development Plan for Frederick Kessler, East Buffalo Township, Union County, PA - Role: Site Design Engineering Technician. Responsible for stormwater management facilities, stormwater conveyance systems, erosion and sediment control designs, and the preparation of general permits along with NPDES permitting. Project entailed the development of approximately 29.5-acres into an open space residential development. The development encompassed 52 residential lots and community center while preserving in excess of 50 percent of the existing parcel as open space. The site is located at the intersection of Smoketown Road and Hard Scrabble Lane in Lewisburg. Improvements included the construction of residential homes, a community center, walking trails, private streets, stormwater management facilities, and installation of utilities.

Watsonstown Brick Company Plant Expansion for Michael Fisher, Delaware Township, Northumberland County, PA - Role: Site Design Engineering Technician. Responsible for stormwater management facilities, stormwater conveyance system, infiltration testing, and site investigations. Project entailed an expansion to Watsonstown Brick's existing manufacturing facility located approximately 0.6 miles south of Watsonstown, along the east side of Route 405. Work included the construction of an 85,000 square-foot building to house an additional brick manufacturing facility. Other improvements included additional access drives, stormwater management control, on-lot sanitary facilities, and modification to existing utilities.

Gregg's Run Court Land Development Plan for Yoder Development Group, Inc., Wolf Township, Lycoming County, PA - Role: Site Design Engineering Technician. Responsible for stormwater management facilities, stormwater conveyance system, infiltration testing, site investigations, erosion and sediment pollution control design, and NPDES permitting. Project entailed the development of 20 single-family dwellings located at the intersection of Gregg Run Road and Penn Drive in Hughesville. Improvements included the construction of five buildings consisting of four single-family attached dwellings, parking/access areas, stormwater management facilities, and related infrastructure.

Hornberger Residential Subdivision for James & Suzanne Hornberger, Delaware & Lewis Townships, Northumberland County PA - Role: Site Design Engineering Technician. Responsible for stormwater management facilities, stormwater conveyance systems, infiltration testing, site investigations, erosion and sediment pollution control design, and NPDES permitting. Project entailed the subdivision of eight lots within the clients' property located along T-603 outside of McEwensville. Improvements included access driveways, parking areas, stormwater management facilities, and installation of utilities.

Watsonstown United Methodist Church Land Development Plan, Delaware Township, Northumberland County, PA - Role: Site Design Engineering Technician. Responsible for stormwater management facilities, stormwater conveyance systems, infiltration testing, site investigations, erosion and sediment pollution control design, and NPDES permitting. Project entailed the development of a 16,000 square-foot education/fellowship hall located on the north side of Eighth Street in Delaware Township. Improvements included the facility construction, parking lot, on-lot septic system, and stormwater management facility.

Clover Hill Estates Land Development Plan, Borough of Berwick, Columbia County, PA - Role: Site Design Engineering Technician. Responsible for stormwater management facilities, stormwater conveyance systems, site investigations, erosion and sediment pollution control design, and NPDES permitting. The development is composed of 12 residential duplex buildings and a community building. The entrance to the property is located along Orange Street in Berwick, PA. Improvements include the construction of the residential buildings, community center, access drive, and stormwater management facility.

River Valley Gymnastics Center, Turbot Township, Northumberland County, PA - Role: Site Design Engineering Technician. Responsible for stormwater management facilities, stormwater conveyance systems, site investigations, erosion and sediment pollution control design, and NPDES permitting. The development includes the construction of a 32,500 square-foot gymnastics center with associated parking and entrance drive. The 12.55-acre property is located along the west side of State Route 1021 and the north of Chappell Road (T-603) in Turbot Township, Northumberland County. Improvements include parking area, access drives, on-lot sewage facility, and stormwater management facility.

Job 8, LLC-Sunbury Site, City of Sunbury, Northumberland County, PA - Role: Site Design Engineering Technician. Responsible for the site layout, stormwater management facilities, site investigations and erosion and sediment pollution control design. The development included construction of a 1,960 square-foot telecommunications building, located on 0.39 acres along the Walnut Street Extension in the City of Sunbury, to house fiber optic amplifier equipment. Improvements include construction of the telecommunications building, parking area, and access drive.

Job 8, LLC-Mahanoy City Site, Mahanoy Township, Schuylkill County, PA - Role: Site Design Engineering Technician. Responsible for the site layout, stormwater management facilities, site investigations and erosion and sediment pollution control design. The development included the construction of a 1,960 square-foot telecommunications building located along West Center Street across from Golden Bear Drive. Improvements include parking area, access drive, and stormwater facility.

Star Seal of PA, Kelly Township, Union County, PA - Role: Site Design Engineering Technician. Responsible for the site layout, stormwater management facilities, site investigations and erosion and sediment pollution control design. The development included improvements to Star Seal's existing building site at 266 Hafer Road (Dauphin Electric Building site). Improvements include the installation of an access drive, stabilized area, and stormwater management facility.

Muncy Industrial Park ~ Lot 11, Muncy Creek Township, Lycoming County, PA- Role: Site Design Engineering Technician. Responsible for the site layout, stormwater management facilities, site investigations and erosion and sediment pollution control design. The Central Pennsylvania Development Associates intends to develop Lot No. 11 within the Muncy Industrial Park located in Muncy Creek Township, Lycoming County. The project will include construction two 12,600-sf metal buildings, an access drive onto Industrial Parkway, parking areas, as well as the installation of utilities and stormwater facilities.

Penn Hills School District-High School Athletic Field Improvements, Penn Hills Township, Allegheny County, PA- Role: Site Design Engineering Technician. Responsible for the site layout, stormwater management facilities, site investigations and erosion and sediment pollution control design. The Penn Hills School District is proposing renovations and additions to their athletic stadium at their High School which is located on Garland Drive, Pittsburgh, PA. The renovations and additions include the installation of a synthetic surface on their existing football field, new running track with spectator area, tennis courts, associated event areas, and stormwater management facilities. Stormwater facilities have been previously designed as part of the school's land development project by CMX Engineering and approved by the Township and the Allegheny County Conservation District. The school's current land development project includes the demolition of their administration building and the construction of a new school building.

535 Inc.-Medical Office Building, Kelly Township, Union County, PA- Role: Site Design Engineering Technician. Responsible for the site layout, stormwater management facilities, site investigations and erosion and sediment pollution control design. 535, Inc. intends to construct a medical office building at the intersection of Hospital Drive and JPM Road in Kelly Township, Union County. The proposed project will include the construction of a medical office building, access drive onto Hospital Drive, utilities, and stormwater management facilities.

Keck Park Improvements Project, City of Allentown, Lehigh County, PA- Role: Site Design Engineering Technician. Responsible for the site layout, stormwater management facilities, site investigations and erosion and sediment pollution control design. The City of Allentown proposes to make maintenance repairs and upgrades to their existing neighborhood park located at the end of South Carlisle Street. The existing Keck Park area was a former mixed municipal and industrial waste landfill, known as the Carlisle Street Dump. The site was closed in 1967 and was subsequently capped with clay, sewage sludge and fill from Lehigh River dredging activities. The site is partially wooded and has open athletic fields. The site is located on a ridge above the Lehigh River, but the park has no direct access to the river as a rail yard is located between the river and the park. The total property area of the park is approximately 36.65 acres.

Saucon Valley School District, Lower Saucon Township, Northampton County, PA- Role: Site Design Engineering Technician. Responsible for the site layout, stormwater management facilities, site investigations and erosion and sediment pollution control design. Saucon Valley School District project proposed four distinct projects, they are: construction of a clay infield for a softball field/grading for a varsity competition level soccer field, both to be located along Academic Way; construction of a building addition (approximately 2,800 SF) at the rear of the existing bleachers building and adjacent to the wrestling room; construction of an all-weather track (with field event areas) at the existing track location; and the construction of a varsity competition level field hockey field.

Southern Columbia School District, Franklin Township, Columbia County, PA- Role: Site Design Engineering Technician. Responsible for the site layout, stormwater management facilities, site investigations and erosion and sediment pollution control design. Southern Columbia School District proposed renovations and additions to their existing Middle and High Schools. This project proposes additions and renovations to provide for consolidation of Middle School students into one building, addition to the cafeteria/kitchen, additional storage and a new gymnasium.

Project Specific Experience - (Hydrologic and Hydraulic Analysis)

Shell Appalachia, Richmond Township, Tioga County, PA – Role: Project Engineer. Responsible for managing and reviewing the hydraulic and hydrologic modeling, contraction/local scour analysis, technical writing and H&H plan development for the Bechtel 488 Stream Crossing. Project entailed modeling, quality control and assurance, and development of a methodology for hydraulic and hydrologic modeling for the Canoe Camp Creek watershed, watershed model calibration, analysis of existing and future runoff conditions, and stormwater problem areas. The hydraulic analysis was performed using the Hydraflow Hydrographs and HEC-RAS software packages. A Hydrologic & Hydraulic and Floodplain Impact Report was prepared for submission with the JPA permit package. Coordination efforts were conducted with civil design, biology, geotechnical and geologic team members.

Plunkett's Creek Township, Lycoming County, PA – Role: Project Engineer. Responsible for managing and reviewing the hydraulic and hydrologic modeling, streambed scour analysis, in-stream sediment size sampling, technical writing and H&H plan development for the Dunwoody Road Restoration Project. Project entailed modeling, quality control and assurance, and development of a methodology for hydraulic and hydrologic modeling for the Bear Creek watershed, watershed model calibration, analysis of existing and future runoff conditions, and stormwater problem areas. The hydraulic analysis was performed using the Hydraflow Hydrographs and HEC-RAS software packages. A Hydrologic & Hydraulic and Floodplain Impact Report was prepared for submission with the JPA permit package. Coordination efforts were conducted with civil design, biology, geotechnical and geologic team members.

Zerbe Township, Trevorton, PA – Role: Project Engineer. Responsible for managing and reviewing the design of a culvert replacement along Zerbe Run. Project entailed a review of site constraints, construction document preparation, construction administration, hydrologic and hydraulic studies utilizing the Hydraflow Hydrographs and HY8 software packages, and collaboration with other members of the permitting team. Reviewed all hydrologic and hydraulic modeling of Zerbe Run for appropriate sizing of the culvert along with the construction documents associated with the culvert construction.

Shell Appalachia, Multiple Townships & Counties, PA – Role: Project Engineer. Responsible for managing and reviewing the hydraulic and hydrologic modeling, technical writing and H&H plan development for the Shughart 534, Reisler 516 and minor stream crossings. Projects entailed modeling, quality control and assurance, and development of a methodology for hydraulic and hydrologic modeling for the watershed, watershed model calibration, analysis of existing and future runoff conditions, and stormwater problem areas. The hydraulic analysis was performed using the Hydraflow Hydrographs and HEC-RAS software packages. A Hydrologic & Hydraulic and Floodplain Impact Report was prepared for submission with the GP-7 permit package. Coordination efforts were conducted with civil design, biology, geotechnical and geologic team members.

Cabot Oil & Gas Corporation, Dimock Township, Susquehanna County, PA – Role: Project Engineer. Responsible for managing and reviewing the hydraulic and hydrologic modeling, technical writing and H&H plan development for the Ely Water Well Minor Stream Crossing. Project entailed modeling, quality control and assurance, and development of a methodology for hydraulic and hydrologic modeling for the watershed, watershed model calibration, analysis of existing and future runoff conditions, and stormwater problem areas. The hydraulic analysis was performed using the Hydraflow Hydrographs and HEC-RAS software packages. A Hydrologic & Hydraulic and Floodplain Impact Report was prepared for submission with the GP-7 permit package. Coordination efforts were conducted with civil design, biology, geotechnical and geologic team members.

Milton Regional Sewer Authority's (MRSA), Waste Water Treatment Facilities Upgrade Phase 1-Floodplain Study, West Chillisquaque Township/Milton Borough, Northumberland County, PA - Role: Site Design Engineering Technician. Responsible for determining the impact on flood elevations due to the expansion of the existing facilities at MRSA's waste water treatment plant. MRSA is proposing to construct treatment plant upgrades within the FEMA regulatory floodway along the West Branch Susquehanna River. To determine the impact of the proposed development, a hydraulic model was prepared using HEC-RAS to compare the water surface elevations within and without the proposed development.

Tulpehocken Creek Restoration Project, Jackson Township, Lebanon County, PA- Role: Site Design Engineering Technician. Responsible for determining the impact on flood elevations due to the relocation of a portion of Tulpehocken Creek. The project entailed data collection, modeling using HEC-RAS, technical writing and permit preparation. Penny Supply, Inc. (Pennsy) proposed the restoration of approximately 1,400' of Tulpehocken Creek near its headwaters. The primary purpose of the project is to prevent the loss of surface water flow through a sinkhole-prone area along and within the existing active stream channel. A secondary design consideration is to create a natural and biologically function stream channel capable of sustaining the existing cold-water fishery and brown trout reproduction.

Countywide Act 167 Plans, Various Locations throughout PA - Responsible for preparing hydrologic and hydraulic modeling, data collection, technical writing and development of Act 167 plans for the following counties. Projects entailed modeling, quality control and assurance, and development of a methodology for hydraulic and hydrologic modeling for various watersheds, watershed model calibration, analysis of existing and future runoff conditions, and stormwater problem areas. Performed the technical analyses HEC-GeoHMS, HEC-HMS, HEC-RAS and other programs where necessary.

- Mifflin County
- Warren County
- Jefferson County
- McKean County
- Potter County
- Crawford County
- Erie County
- Montour County

Also, assisted in the development of and provided guidance for the Venango, Washington, and Pike County Act 167 Plans.

Chronology

05/05 - 08/05: PA Department of Transportation, Harrisburg, PA

05/06 - 08/06: PA Department of Transportation, Harrisburg, PA

01/07 - 11/11: Herbert, Rowland & Grubic, Inc., Lewisburg, PA

11/11 – 4/19: AECOM (Legacy URS Corporation), Mechanicsburg, PA

4/19 – Present: PennCore Consulting, LLC, Cogan Station, PA

Daniel Dunkelberger, PLS

Director of Surveying

PennCore Consulting, LLC

328 Quiet Valley Road

Cogan Station, PA 17728

ddunkelberger@penncoreconsulting.com

(570) 980-3570

Areas of Expertise

Boundary Surveying
Topographic Surveying
Construction Stakeout
As-Built Surveying
UAS Services

Years of Experience

With PennCore: 1 Year
With Other Firms: 18 Years

Education

AAS/Surveying
Technology/2000/Pennsylvania College
of Technology
AAS/Civil Engineering
Technology/2000/Pennsylvania College
of Technology

Licenses

- Professional Land Surveyor (PLS)
-PA/SU075392
- FAA UAS Pilot
-Certificate #4025310

Professional Societies

Pennsylvania Society of Land Surveyors
National Society of Professional Surveyors

Overview

Mr. Dunkelberger is a Professional Land Surveyor with over 18 years of experience. He is responsible for overseeing the surveying operations in Pennsylvania which includes but is not limited to: UAS Services, preparation of subdivision plans, computation of existing and proposed boundaries, land development plans, highway occupancy permit plans, easement/right-of-way plats, legal descriptions, FEMA flood elevation certificates, LOMA and LOMR-F plans, ALTA/NSPS plans, condominium declaration plans, infiltration tests, field measurements and cut and fill volume calculations and managing multiple projects throughout Pennsylvania.

Project Specific Experience –

Survey for Oil and Gas Developers, Various Locations,

PA – Role: Director of Surveying (2019-Present)

Responsible for multiple sites throughout PA. Responsible for overseeing the conduct of surveys designed to establish legal boundaries and terrain characteristics for oil and gas related projects. Projects entail topographic and boundary survey, development stakeouts, well plats, unit plat and right-of-way exhibits, and As-Built for Well Pads, Compressor Stations, Meter Stations and Pipeline. Clients include: Beech Resources.

Dam Removal Project, Reading PA – Role Professional Land

Surveyor (2017-2018). Responsible for overseeing the topographic surveys for multiple dams for the removal of the dam structures.

NRCS/USDA Conservation Easement Program, Several Sites Statewide, PA – Role: Professional Land Surveyor: (2013-2015) Responsible for the existing property boundary determination for several properties where conservation easements were planned. Monumented, prepared recording plans, legal descriptions and GIS data for the newly created easements.

Snyder Boundary Survey – Role: Professional Land Surveyor (2019). Responsible for completion of a complex boundary survey where little to no monumentation exists. Determining title lines based on previous deeds and maps of record and possession lines established in the field, and resolving gaps and overlaps in deed boundaries.

Survey for Oil and Gas Developers, Various Locations, PA, WV, OH, NY – Role: Survey Crew Chief (2011-2013), Task Leader (2011-2013), Project Surveyor (2013-2015), Survey Manager (2015-2019). Responsible for multiple sites throughout PA, WV, OH and NY. Responsible for overseeing the conduct of surveys designed to establish legal boundaries and terrain characteristics for oil and gas related projects. Working closely with PLS's from other states to ensure that the data collection procedures meet the standards required by the clients and the applicable

states standards of practice. Projects entail topographic and boundary survey, development stakeouts, well plats, unit plat and right-of-way exhibits, and As-Builts for Well Pads, Compressor Stations, Meter Stations and Pipeline. Clients include: Shell Appalachia – Southwestern Energy – Range Resources Appalachia – UGI – DTE - Williams – Inflection Energy (PA), LLC. - Seneca – REX – Chesapeake – EQT – Eclipse Resources – Beech Resources.

UAS services for Oil and Gas Developers, Various Locations, PA – Role: UAS Pilot in Command. (2018)

Responsible for the site safety and mission control to complete UAS surveys on well pads to include updated aerial images and 3D modeling of the sites.

PTC Lodging ALTA Survey, City of Pittsburgh, Alleghany County, PA – Role: Project Surveyor (2016).

Responsible for the completion of an ALTA Survey for a site for a proposed Hotel development in accordance with the accuracy standards set forth in the current ALTA/NSPS standards.

Wendy's ALTA Survey, Borough of Penn Hills, Alleghany County, PA – Role: Project Surveyor (2014).

Responsible for the completion of an ALTA Survey for a site for an existing Wendy's Restaurant located within a lease area of a shopping center in accordance with the accuracy standards set forth in the current ALTA/NSPS standards.

Urban Redevelopment Authority, City of Pittsburgh, Alleghany County, PA – Role: Project Surveyor (2016-2017). Responsible for the completion Boundary and Topographic surveys throughout the City of Pittsburgh including topographic surveys for Tunnel Park, Boundary and Topographic surveys for future phases of Frick Park, and also responsible for the completion of multiple Subdivision Plans, Add-on Subdivision Plans and Lot Consolidation Plans.

PECO Linwood, Boundary Survey, Lower Chester Township, Delaware County, PA – Role: Project Surveyor (2016). Responsible for the completion of a boundary survey on a complicated site consisting of multiple parcels and multiple encroachments.

James Ulrich Subdivision, Lycoming County, PA – Role: Project Surveyor (2013). Responsible for the completion of a boundary survey and subdivision of a 10-acre parcel into two parcels. This included an elevation certificate for an existing structure on the parcel, along with a Planning module for a proposed sanitary system.

Wolfgram LOMA, Lycoming County, PA – Role: Project Surveyor (2014). Responsible for preparing a flood elevation certificate and submitting the necessary documentation to FEMA to have a structure removed from the flood zone.

CSX Railroad Boundary and Topographic Survey, Somerset Borough, Somerset County, PA – Role: Survey Crew Chief (2012). Responsible for the completion of a Boundary and Topographic Survey of one mile of tracks for a proposed rail siding.

Pennsylvania Department of Transportation (2016), Professional Land Surveyor, Responsible for coordination with the cultural resources group and overseeing multiple crews in the collection of resource data along the I-78 & I-80 Corridor.

Pennsylvania Turnpike Commission (2017-2018), Professional Land Surveyor. Responsible for overseeing the field work and creation of Easement Plats for 13 Digital Media Signs at various locations along the Turnpike.

Watsonstown Brick Co. Land Development, Delaware Township, Northumberland County, PA – Role: CADD Designer. Responsible for preparing final land development plans. Project entailed access drive alignment and grading, site balance calculations, and stormwater/erosion and sediment control measures for multiple phases of the plant expansion.

Wildflower Village LOMR-F, Buffalo Township, Union County, PA – Role: CADD Designer. Responsible for the computation of the base flood elevation and preparing a plan and legal descriptions for the areas to be removed from the FEMA base flood elevation (1% annual chance flood).

Greggs Run Court, Wolf Township, Lycoming County, PA – Role: CADD Designer. Responsible for the computation and legal descriptions of the convertible and submitted real estate as well as the preparation of a plan that complies to the standards of the Uniform Condominium Act. Also responsible for the completion of the FEMA Flood Elevation Certificates for the existing condominium units.

Brown Avenue Park, Phase II and III, Borough of Milton, Northumberland County, PA – Role: CADD Designer.

Responsible for completion of contract drawings for the Borough of Milton. Project entailed final design and drafting for the addition of ADA Accessible parking and walking paths, pavilions, and site grading.

Lower Swatara Township Park Master Plan and Contract Drawings, Lower Swatara Township, Dauphin County, PA – Role: CADD Designer. Responsible for preparation of Master Plan and Land Development Plan including roadway design and grading, roadway and existing/proposed utility profiles, quantity calculations to balance site, coordinate closely with the Project Manager and other Offices to complete the stormwater management requirements and providing construction documents including spot elevations and roadway alignment geometry. Project entailed development of a recreation facility.

South Seventh Street Corridor Improvements, Borough of Lewisburg, Union County, PA – Role: CADD Designer. Responsible for preparing contract documents for the Borough of Lewisburg. Project entailed design of a complex storm sewer network, curb and sidewalk replacement, a raised crosswalk and micro-grading of a nearly flat site.

St. Paul Street Improvements, Borough of Lewisburg, Union County, PA – Role: CADD Designer.

Responsible for contract documents for the Borough of Lewisburg.

Project entailed centerline alignment and widening of St. Paul Street and the addition of curb and a storm sewer system.

Chronology

1/01 – 6/02: T. Bryce James and Associates, Elysburg, PA

6/02 - 05/06: New Enterprise (Legacy Eastern Industries, Inc.), Winfield, PA

05/06 - 11/11: Herbert, Rowland & Grubic, Inc., Lewisburg, PA

11/11 – 4/19: AECOM (Legacy URS Corporation), Williamsport, PA

4/19 – Present: PennCore Consulting, LLC

Brian Schultz, PE, CFM

Project Engineer 3

PennCore Consulting, LLC

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Areas of Expertise

Water Resources Engineering
Stormwater Management Design
Oil & Gas Permitting
GP-7/JPA Permitting
HOP Permitting
Land Development
Project Management
Construction Inspection
Floodplain Management
Municipal Engineering
Hydrologic Modeling
Hydraulic Modeling
Stream Restoration Design
Dam Removal Design
AutoCAD Civil 3D

Years of Experience

With PennCore: <1 Year
With Other Firms: 7 Years

Education

MSCE/Civil Engineering/2012/Bucknell University
BSCE/Civil Engineering/2010/Bucknell University
AAS/Civil Engineering Technology/2000/Pennsylvania College of Technology

Licenses

- Professional Engineer (PE)
-PA/PE084377
- Certified Floodplain Manager (CFM)
-US-18-10539

Publications

Newlin J. T., and Schultz B. P. (2014), "Hydraulic Interaction Between Rock Cross Vane Stream Restoration Structures and a Bridge Crossing." River Research and Applications, doi: 10.1002/rra.2809

Overview

Mr. Schultz is a Civil and Water Resource Engineer with over 7 years of experience. Working in consulting, he worked on a wide variety of project types including various types of permitting (Stormwater, E&S, GP, JPA and HOP), E&S and SWM Inspections, Dam Removals, Hydrology & Hydraulics Modeling, and Major/Minor Land Development. After acquiring his Project Management Certification, he began managing projects as well as junior staff. He has provided field supervision and construction inspection for various types of projects. During his time spent in graduate school, Mr. Schultz focused on the hydrologic, hydraulic and sediment transport modeling and field monitoring of stream restoration structures near bridges.

Project Specific Experience

Well Pad Site Development for Multiple Clients, Various Locations, PA – Role: Project Manager & Lead Engineer (2012-Present) Responsible for multiple sites throughout PA. Project Manager for multiple sites responsible for proposal creation, project setup, budget tracking, invoicing, QA/QC, deliverables and project closeout. Lead Project Engineer in the preparation of well pad site development plans, permit applications, construction plans and bid documents

Roadway Improvement Work, Shell Appalachia, Various Locations, PA – Role: Project Manager & Lead Engineer (2015-2019) Project Manager for multiple sites responsible for proposal creation, project setup, budget tracking, invoicing, QA/QC, deliverables and project closeout. Provide coordination between client and agencies when required. Lead Project Engineer for the preparation of permit applications, design/construction plans and bid documents

Geotechnical Investigation of Subsurface, Shell Appalachia, Various Locations, PA. - Engineer responsible for oversight of geotechnical services, subsurface borings/rock coring, lab testing and the creation of the geotechnical recommendation report.

Site E&S/Stormwater Design for Specialty Granules, Inc. (SGI), PA - Engineer responsible for the site design, stormwater management facilities and erosion and sediment control plans. Perform H&H design as required to control and protect multiple channels during mining operations.

Oil Leak / Site & Stream Remediation, PADEP, Lock Haven, PA - Engineer responsible for the erosion and sediment control plans, streambank protection design and construction sequence during removal of contaminated soils. Provide on-site construction supervision for E&S Controls and Streambank stabilization installation.

Pipeline Facility Site Development & Permitting for Multiple Clients, Various Locations, PA –

Lead Design Engineer for design of compressor stations, sales point and meter station development plans, E&S calculations, stormwater calculations and permit applications. Project Management Assistant responsible for the QA/QC of the design of the pipeline route, erosion and sediment pollution control and ESCGP-2 permit application.

Culvert Replacement Design, Bid and Construction Inspection, Zerbe Township, Trevorton, PA –

Lead Design Engineer/Construction Inspector for the design, project bidding/award and replacement of a culvert along Zerbe Run

Stormwater Management Plan Development Confidential Client, PA –

Lead Design Engineer for hydraulic and hydrologic modeling and SWM plan development for an NPDES Permit.

Stormwater Management Plan and Facilities, Hughesville, PA –

Lead Design Engineer in the development of a SWM Plan and Facilities for ESCGP-2 and Land Development Permits.

Natural Channel Design, Chester County, PA–

Responsible for the design of a natural channel, the removal of an existing culvert and the sequence of a pond breach at a nature preserve. Development of construction sequencing/plan set and E&S Plan.

Dam Removal Projects, Reading, PA –

Responsible for preparation of dam removal plans and breach sequence for the Willow Creek Dam and Bernhart Dam. Development of construction sequencing, E&S Plan and quantity estimates of impounded sediment.

Stream & Roadway Restoration Design, Plunkett's Creek Township, Lycoming County, PA –

Lead Engineer for performing hydraulic and hydrologic modeling, streambed scour analysis, in-stream sediment size sampling, stream restoration design and H&H plan development for a Joint Permit Application.

Hydrologic & Hydraulic Analysis, Various Locations, PA–

Multiple Counties, PA - Lead Project Engineer for the hydrologic and hydraulic modeling, technical writing and creation of the H&H Report for GP-7 & GP-11 Permit Packages.

Bridge Scour Analysis and Hydrologic & Hydraulic Report, Richmond Township, Tioga County, PA –

Lead Design Engineer for performing hydraulic and hydrologic modeling, contraction/local scour analysis, stream restoration design and H&H plan development for a Joint Permit Application.

Highway Occupancy Permitting for Multiple Clients, Various Locations, PA–

Project Manager and Lead Permitting Engineer for the management and permitting of any PennDOT HOP's and township driveway permits required for a project (>250 Permits). Provided guidance and training to several new team members to provide support for multiple offices throughout PA.

Facility Site Development, Montoursville, PA –

Lead Design Engineer for the design of a storage facility site with E&S and stormwater management facilities, the preparation of development plans and permit applications. Coordination with reviewing agencies and client for project revisions and deliverables.

Township Engineer, Buffalo Township & East Buffalo Township PA –

Engineer responsible to assist the township in technical reviews and stormwater/E&S inspections as necessary. Coordination with the municipality and other engineering firms with comments and responses to assist in the local permitting and construction process.

Private Development Stormwater Management Design, Lewisburg, PA –

Lead Design Engineer for the design of stormwater management facilities associated with private residential development.

Chronology

05/12 – 12/19: AECOM (Legacy URS Corporation), Williamsport, PA

01/20 – Present: PennCore Consulting, LLC

Colton Zimmerman, E.I.T.

Project Engineer

PennCore Consulting, LLC

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Areas of Expertise

Stormwater Management
Design Water Resources
Engineering Oil & Gas
Permitting
Land Development
Mining Support
Construction
Management
Construction Inspection
GP Permitting
HydroCAD
HOP Permitting
AutoCAD-Civil 3D

Years of Experience

With PennCore: <1
Years With Other Firms: 5

Education

BSCE/Civil Engineering
Technology/2018/Pennsylvania College
of Technology

Overview

Mr. Zimmerman is a civil & water resource engineer in training with 5 years of experience performing field surveying, developing site designs, and preparing associated permitting documents. He has designed various commercial, residential, and mining development projects, including the design of drainage and stormwater management facilities, utilities, sediment and erosion control plans, driveway and road design, and permitting (NPDES, ESCGP, GP, and HOP). He has also provided construction observation.

Project Specific Experience - (Land Development & Permitting)

Beech Resources, Pennsylvania-

Role: Design Engineer. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA;s). Beech proposed numerous Oil & Gas projects in central Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, pipelines, meter stations, water withdrawals, and well pad designs.

Inflection Energy LLC, Pennsylvania-

Role: Site Design Engineering Technician. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA;s). Inflection Energy LLC proposed numerous Marcellus Shale well pads through the state of Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, and well pad design.

SWEPI, LP, Pennsylvania-

Role: Site Design Engineer Technician. Responsible for preparing the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA;s) for over 50 locations. SWEPI, LP proposed numerous Marcellus Shale well pads through the state of Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, and well pad design.

Cabot Oil & Gas Corporation, Pennsylvania-

Role: Site Design Engineering Technician. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA;s). Cabot Oil & Gas proposed numerous Marcellus Shale well pads through the state of Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, and well pad design.

Specialty Granules, Inc. (SGI), Pennsylvania-

Role: Project Engineer. Responsible for stormwater management facility design, erosion and sediment pollution control design, and NPDES permitting for mining activities. SGI mines, processes, and supplies asphalt-based roofing granules to the North American Roofing industry.

Highway Occupancy Permitting for Shell Appalachia, Cabot Oil and Gas, and Southwestern Energy, Various Locations, PA – Role: Site Design Engineering Technician. Design for numerous sites throughout Pennsylvania. Responsible for creating plans for HOP's required for the project. Projects entail coordinating and gathering information with clients, creation of permitting plans, submission of required documents to the appropriate permitting source, and oversight of HOP submissions for multiple projects.

45 West Brewpub, LLC Land Development Plan for Scott Baylor, East Buffalo Township, Union County, PA - Role: Site Design Engineering Technician. Responsible for stormwater management facilities, stormwater conveyance systems, erosion and sediment control designs, and the preparation of general permits along with NPDES permitting. Project entailed the development of approximately 2-acres into a restaurant and parking lot. With limited space stormwater BMPs were designed and placed under the parking area. The site is located across from Fairfield Ford dealer in Lewisburg. Improvements included the construction of a restaurant, parking, driveways, stormwater management facilities, and installation of utilities.

Classic Hills Subdivision and Land Development Plan for Classic Quality Homes, Inc. East Buffalo Township, Union County, PA - Role: Site Design Engineering Technician. Responsible for stormwater management facilities, stormwater conveyance systems, erosion and sediment control designs, and the preparation of general permits along with NPDES permitting. Project entailed the development of approximately 14-acres into a 5 lot subdivision for 5 single family dwellings. A private cul-de-sac street was designed to access the lots. With site conditions very steep each lot was graded individually to provide evidence that each lot could be developed within the requirements of the SALDO. With limited space stormwater BMPs were designed and placed under the parking area. The site is located to the West of Fairfield Road, South of the intersection with Smoketown Road. Improvements included the construction of 5 residential lots, driveways, stormwater management facilities, and installation of utilities.

Moran-Building No. 19 Land Development Plan for John Moran, Moran Logistics. Delaware Township, Northumberland County, PA - Role: Site Design Engineering Technician. Responsible for stormwater management facilities, stormwater conveyance systems, erosion and sediment control designs, and the preparation of general permits along with NPDES permitting. Project entailed the development of approximately 30-acres into 500,000 Sq. Ft. Warehouse. The site is located just outside of Watsonstown along 8th street behind the existing Moran Warehouse and trucking facilities. Improvements included the construction of a warehouse, driveways, parking, stormwater management facilities, and installation of utilities.

Project Specific Experience - (Hydrologic and Hydraulic Analysis)

Reading City, PA – Role: Site Design Engineering Technician. Responsible for conducting and drafting the site survey along with running the hydraulic and hydrologic modeling, contraction/local scour analysis, technical writing and H&H plan development for the Reading Dam removal project. Project entailed modeling, quality control and assurance, and development of a methodology for hydraulic and hydrologic modeling for the watersheds, watersheds model calibration, analysis of existing and future runoff conditions, and stormwater problem areas. The hydraulic analysis was performed using the Hydraflow Hydrographs and HEC-RAS software packages.

Chronology

06/14 - 07/19: AECOM (Legacy URS Corp.), Williamsport, PA

07/19 - Present: PennCore Consulting, LLC

Donald Stevenson, EIT

Regulatory Manager

PennCore Consulting, LLC

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Areas of Expertise

Stormwater Management Design
Water Resources Engineering
Oil & Gas Permitting
Land Development
Project Management
Construction Management
Construction Inspection
Municipal Engineering
GP-7/JPA Permitting
HydroCAD
HOP Permitting
AutoCAD-Civil 3D
Boundary Surveying
Topographic Surveying
Construction Stakeout
As-Built Surveying
Regulatory Compliance

Years of Experience

With PennCore: 1 Year
With Oil and Gas
Operator: 5 Years
With Other Firms: 2 Years

Education

BSCE/Civil Engineering
Technology/2012/Pennsylvania College
of Technology
ASST/Survey Technology/
2012/Pennsylvania College of
Technology

Licenses

- Engineer in Training
 - ET020225

Overview

Mr. Stevenson is a civil engineer and project manager with over 8 years of design and construction related experience. He has designed various commercial development projects, including the design of drainage and stormwater management facilities, utilities, sediment and erosion control plans, driveway and road design, and permitting (NPDES, ESCGP, GP, JPA, and HOP). He has also provided construction observation, project management, survey, and regulatory consultation.

Project Specific Experience - (Land Development Regulatory, & Permitting)

Beech Resources, Pennsylvania-

Role: Regulatory Manager. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA's, Local Zoning Applications). Coordinated field surveys, geotechnical investigations, wetland delineations, stormwater management testing, and water sampling consultants. Reviewed and prepared operators natural gas production data for PADEP monthly reporting. Completed weekly and rainfall event erosion and sediment control inspections and reports on active construction sites. Reviewed and tracked residual waste streams produced from operations of natural gas development. Coordinated sampling for individual waste sources, and ensured proper documentation is prepared for disposal facilities. Prepared, reviewed, and submitted monthly waste reports and annual Residual Waste Generators, 26R reports. Prepared, reviewed, and submitted well permit applications to PADEP. Coordinated survey crews to perform boundary and water well location surveys to generate plats for natural gas wells. Managed and coordinated construction of natural gas well sites and pipelines. Provided estimates on cost, time, and materials. Ensured project deliverables were constructed as planned. Manage all regulatory activities associated with the development of Oil and Gas in Pennsylvania. Prepare PADEP and SRBC water management plans. Beech proposed numerous Oil & Gas projects in central Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, pipelines, meter stations, water withdrawals, and well pad designs.

Inflection Energy LLC, Pennsylvania-

Role: Operators Senior Engineer. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA's, Local Zoning Applications). Coordinated field surveys, geotechnical investigations, wetland delineations, stormwater management testing, and water sampling consultants. Reviewed and prepared operators natural gas production data for PADEP monthly reporting. Completed weekly and rainfall event erosion and sediment control inspections and reports on active construction sites. Reviewed and tracked residual waste streams produced from operations of natural gas development. Coordinated sampling for individual waste sources, and ensured proper documentation is prepared for disposal facilities. Prepared, reviewed, and submitted monthly waste reports and annual Residual Waste Generators, 26R reports. Prepared, reviewed, and submitted well permit applications to PADEP. Coordinated survey crews to perform boundary and water well location surveys to generate plats for natural gas wells. Managed and coordinated construction of natural gas well sites. Provided estimates on cost, time, and materials. Ensured project deliverables were constructed as planned. Inflection Energy LLC proposed numerous Marcellus Shale well pads, waterlines, and pipelines through the state of Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, pipeline design, water management, and well pad design

SWEPI, LP, Pennsylvania-

Role: Project Engineer. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA's). Conducted surveys designed to establish legal boundaries and terrain characteristics. Projects entailed topographic and boundary surveys, development stakeouts, and as-builts for well pads. SWEPI, LP proposed numerous Marcellus Shale well pads through the state of Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, and well pad design.

Cabot Oil & Gas Corporation, Pennsylvania-

Role: Project Engineer. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA's). Cabot Oil & Gas proposed numerous Marcellus Shale well pads through the state of Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, and well pad design.

NRCS/USDA Conservation Easement Program, Statewide, PA

Role: Project Surveyor. Responsible for existing property boundary surveys. Assisted in preparation of recorded plans, legal descriptions, and boundary monumentation.

Sunbury Pipeline Project for UGI Sunbury, LLC (UGI), Pennsylvania-

Role: Project Surveyor. Responsible for conducting surveys designed to establish legal boundaries and terrain characteristics.

Angelina Gathering Company, LLC (AGC), Pennsylvania-

Role: Project Engineer. Responsible for the site layout, stormwater management facilities, site investigations, erosion and sediment pollution control design, and various permitting (ESCGP, GP's, JPA's). Conducted surveys designed to establish legal boundaries and terrain characteristics. Projects entailed topographic and boundary surveys, development stakeouts, and as-builts for well pads, compressor stations, meter stations, and pipelines. AGC proposed numerous pipeline projects associated with the Marcellus Shale development throughout the state of Pennsylvania. Improvements include proposed access roads, stormwater conveyance systems, and erosion and sediment control facilities.

Chronology

05/12- 08/14: AECOM (Legacy URS Corporation), Williamsport, PA

08/14 – 2/19: Inflection Energy (PA) LLC, Williamsport, PA

2/19 – Present: PennCore Consulting, LLC, Cogan Station, PA

Statement of Professional Qualifications

Steven J. Bason is a private consultant with thirty (30) years of experience in natural resources management and wetland science. He holds a Bachelor of Arts degree in Natural Sciences/Biology from Lock Haven University (1989) and has received formal training on the use and extensive experience on the application of the *1987 Corps of Engineers Wetland Delineation Manual*.

Mr. Bason's experience in applied environmental science began with employment with the Pennsylvania Fish Commission as a fisheries biologist aide and an internship with the Pennsylvania Department of Environmental Resources (PADER), Bureau of Dams and Waterways Management Williamsport Regional Office. His work with PADER included investigation of stream and wetland encroachments and interpretation and enforcement of various aspects of 25 PA Chapter 105 (relating to Dam Safety and Waterway Management).

Mr. Bason also has been employed as the manager of a regional office of an environmental consulting firm headquartered in northeastern Pennsylvania. In this capacity, he managed daily office activities and acted as the regional office's primary consultant for wetlands related work. Mr. Bason has owned and operated his own private consulting firm located in central Pennsylvania for the last 28 years. In this capacity, he has completed thousands of wetland delineations encompassing tens of thousands of acres. Many of these delineations have been field verified by the U.S. Army Corps of Engineers (USACOE) and have received formal USACOE letters of Jurisdictional Determination. He has extensive experience in the preparation and filing of Pennsylvania Department of Environmental Protection (PADEP) General Permits and Joint Permit Applications and has received permit approvals for numerous wetland related projects.

Mr. Bason has prepared numerous wetland mitigation plans to provide compensation for unavoidable wetland encroachments. These mitigation plans have been reviewed and subsequently approved by regulatory agencies that include the U.S. Fish & Wildlife Service, the U.S. Environmental Protection Agency, the USACOE, and PADEP.

Mr. Bason is also experienced in the preparation of erosion and sedimentation control plans that meet guidelines established in 25 PA Code Chapter 102. In 2012, Mr. Bason worked as the Resource Conservationist with the Clinton County Conservation District, administering the Chapter 102 and 105 programs, with an emphasis on the NPDES program.

Mr. Bason received his formal training on the *1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands* at the Cook College of Rutgers University in May of 1990. His instructors were Mr. Ralph Tiner and Dr. Peter Veneman. He has also attended numerous technical training sessions and seminars that include the following:

USDA NRCS. 2010 Field Indicators of Hydric Soils in the United States, Version 7.0.
June, 2011, sponsored by the PA Association of Professional Soil Scientists and US Army Corps of Engineers, Baltimore District, Hesston, PA.

Professional Qualifications

Interim Regional Supplement to the Corp of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region, June 2011, sponsored by the PA Association of Professional Soil Scientists and US Army Corps of Engineers, Baltimore District, Hesston, PA.

Regional Supplement to the Corp of Engineers Wetland Delineation Manual: Northcentral and Northeast Region Workshop, April 2010, sponsored by the PA Association of Professional Soil Scientists and US Army Corps of Engineers, Baltimore District, LaPorte, PA.

Hydric Soils and Use of Field Indicators of Hydric Soils in the United States Workshop, October 2005, sponsored by the Dept of Agriculture, Natural Resources Conservation Service and US Army Corps of Engineers, Baltimore District.

Low Impact Design Workshop, March 2005, sponsored by the Centre County Conservation District and the Centre County Planning Office.

Problem Area Wetlands / Atypical Situations, May 2000, sponsored by the Pike County Conservation District and the USACOE.

Managing Water Levels for Fish and Wildlife, April 1999, sponsored by the U.S. Fish and Wildlife Service, PA Game Commission, and Ducks Unlimited, Inc.

Principles of Wetland Design, August 1998, sponsored by the Pennsylvania State University and the PSU Cooperative Wetland Center.

Mr. Bason is certified as a Professional Wetland Scientist through the Society of Wetland Scientist Certification Program, Inc. (Certification Number 000186 – issued in 1994). He is also an associate member of the Pennsylvania Association of Professional Soil Scientists. He has participated as a speaker at numerous local and regional technical workshops for municipal officials and engineering consultants and has also been an invited lecturer at local universities. He has also given expert witness testimony in legal proceedings involving wetlands. He received the 1993 Commendation from the Clinton County Conservation District for Volunteer Service in Conservation Education. In June of 1995 he was appointed to a review panel for the proposed 1995 Federal Wetland Delineation Manual. In August of 1998 he received the Special Conservation Service Award from the Pennsylvania Association of Conservation Districts. Mr. Bason served two terms (1996 - 2000) on the Pennsylvania Wetlands Protection Advisory Committee as an appointee of the Secretary of the Pennsylvania Department of Environmental Protection. He currently owns and operates Cedar Run Environmental Services, Inc. of Mill Hall, Pennsylvania.

HUNT E|A|S



Lycoming County

Hughesville Water Authority Tower Site and Hesker Hill Tower Site

Engineering Services

Darin L. Rathbun, PE
Principal-in-Charge

August 21, 2020

Progress Plaza | 1 Elizabeth Street | Suite 12 | Towanda, PA 18848
Phone: 570.265.4868 | Fax: 570.265.4872 | Web: www.hunt-eas.com

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Hesker Hill Approach
Hughesville Approach

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Exception Form
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Hughesville Water Authority Tower Site & Hesker Hill Tower Site Lycoming County

August 21, 2020

Mya Toon
Lycoming County Controller's Office,
Lycoming County Executive Plaza Building,
330 Pine Street, 2nd Floor,
Williamsport, PA 17701

RE: Hughesville Water Authority Tower Site and Hesker Hill Tower Site

Dear Mya,

Hunt Engineers, Architects, Land Surveyors & Landscape Architect, DPC (HUNT) is a full-service firm and we have been designing and implementing Site/Civil engineering projects for over 45 years. With a staff of more than 100 employees, our focus is always on fulfilling the individual needs of our clients and their projects. Best practices and regulations for civil engineering are constantly evolving; HUNT is well versed in new construction and survey and we will work with you to design and obtain approval for the best solutions at both the Hughesville Water Authority and Hesker Hill Tower Sites

I have put together an excellent team of designers and engineers for your project; as Principal-in-Charge, my role is to oversee the project and be available should any questions or concerns arise. Our Project Manager, Christopher Wood, EIT, has comprehensive experience designing and managing Civil projects in our region and will oversee everyday communications, direct project work, and will be responsible for essential design and implementation tasks. Timothy K. Steed, PE, a HUNT Principal and Site/Civil engineer for over two decades, will act as Quality Control for your project, while Joshua Woodard and Dale Kruelle will work on the design and regulation submissions needed for this project. Gary Thompson, PLS will oversee the necessary survey tasks. HUNT has partnered with Hillis-Carnas Engineering for their geotechnical and environmental expertise. Our team will be available for your project demands whenever their skills are needed during the scope of this project.

HUNT has three locations, two in Horseheads and Rochester, NY, and then our local office in Towanda, PA. Our Towanda office is within easy driving distance of the Lycoming County tower sites, making it simple for us to provide same-day service and to visit the site during design and construction as needed. We are well acquainted both with project designs similar in scope with your tower sites and with code compliance and other regulatory issues that arise for engineering projects within Lycoming County and The Commonwealth of Pennsylvania.

If you have any questions, I am available to speak with you any time by email at rathbund@hunt-eas.com, or by phone at (570) 265-4868. I look forward to meeting with you and further discussing our proposal.

Sincerely,

HUNT ENGINEERS, ARCHITECTS, LAND SURVEYORS & LANDSCAPE ARCHITECT, DPC



Darin L. Rathbun
Principal-in-Charge

PROPOSAL FORM

Important note to Bidders: It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to: Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 21, 2020. **This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: Hunt Engineers, Architects, Land Surveyors & Landscape Architect, DPC

Company Address: 1 Elizabeth Street, Suite 12
Towanda, PA 18848

Main Telephone: (570) 265-4868 Main Fax: (570) 265-4872

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Darin L. Rathbun, PE

Contact Telephone: (570) 265-4868 Fax: (570) 265-4872

Contact Email: rathbund@hunt-eas.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Christopher Wood, EIT

Office Address: 1 Elizabeth Street, Suite 12
Towanda, PA 18848

Telephone: (570) 265-4868 Fax: (570) 265-4872

Email: woodc@hunt-eas.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	Addendum No. 1	Date	August 3, 2020
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

Company Type (check one):

Sole Proprietorship Partnership Corporation Joint Venture

Bidder attests that:

1. He/she has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements;
2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor and material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

Hunt Engineers, Architects, Land Surveyors &
Landscape Architect, DPC

Company Name

161158004

Federal ID#

1 Elizabeth Street, Suite 12

Street Address

PO Box

PO Box

Towanda

City

PA

State

18848

Zip


(570) 265-4868

Telephone #

(570) 265-4872

Fax #

WITNESS:



Signature (see below)

Timothy K. Steed, PE

Name (print)

Secretary

Title (print)

COMPANY:



Signature (see below)

Darin L. Rathbun, PE

Name (print)

Vice President

Title (print)

PRICE PROPOSAL

6.1 Cost Elements. Services not specifically mentioned in this RFP, but are necessary to provide the functional capabilities described, shall be included as part of the cost elements. Bidders should utilize this table below to justify costs.

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	\$2,987.28
Stormwater Drainage Design	\$5,565.52
Erosion/Sediment Control	\$2,394.76
Civil Permitting*	\$2,044.00
Geotechnical	\$5,880.00
Geotechnical Boring Stakeout	\$760.00
Construction Stakeout	\$1,250.00
Soil Resistivity	\$7,000.00
Preliminary and Final Construction Drawings (CDs)	\$9,604.20
Utility Coordination	\$1,656.00
Zoning Information	\$1,556.00
FAA/FCC	\$984.00
Field Surveying/Courthouse Research	\$12,710.00
Survey Plans	\$1,900.00
Environmental Investigation	\$250.00
Infiltration Testing	\$1,164.00
Wetlands/Stream Delineation	\$9,500.00*
Phase 1 Investigation and Report	\$2,000.00*
Hearing Attendance (If Needed)	*See Exclusion
Phase 2 Investigation and Report (If Needed)	*See Exclusion
NEPA/SHPO Services	\$828.00
Deliveries, Copies, Etc.	\$5,850.00
SUBTOTAL FOR HUGHESVILLE	\$75,883.76

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	\$2,073.52
Stormwater Drainage Design	\$1,230.76
Erosion/Sediment Control	\$2,782.76
Civil Permitting*	\$1,268.00
Geotechnical	\$5,880.00
Geotechnical Boring Stakeout	\$760.00
Construction Stakeout	\$760.00
Soil Resistivity	\$7,000.00
Preliminary and Final Construction Drawings (CDs)	\$8,304.80
Utility Coordination	\$1,656.00
Zoning Information	\$1,816.00
FAA/FCC	\$984.00
Field Surveying/Courthouse Research	\$6,310.00
Survey Plans	\$1,900.00
Environmental Investigation	\$250.00
Infiltration Testing	*See Exclusion
Wetlands/Stream Delineation	\$9,000.00
Phase 1 Investigation and Report	\$2,000.00
Hearing Attendance (If Needed)	*See Exclusion
Phase 2 Investigation and Report (If Needed)	*See Exclusion
NEPA/SHPO Services	\$828.00
Deliveries, Copies, Etc.	\$2,945.00
SUBTOTAL FOR HESKER HILL	\$57,748.84

GRAND TOTAL FOR BOTH SITES	\$133,632.60
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The undersigned, as Bidder, hereby declares that the total project costs as indicated above, includes all necessary work to complete this project in full according to the general specifications contained in the RFP. Products and services not specifically mentioned, but are necessary to provide the functional capabilities shall be listed and included as part of the cost elements.

The undersigned further understands and agrees that if the County accepts the bid, no additional funds will be allowed beyond the stated total project costs.

Company Name: Hunt Engineers, Architects, Land Surveyors & Landscape Architect, DPC

Address: 1 Elizabeth Street, Suite 12

Point of Contact: Darin L. Rathbun, PE Phone Number: (570) 265-4868

Fax Number: (570) 265-4872 Email address: rathbund@hunt-eas.com

Name of person submitting proposal: Darin L. Rathbun, PE

Signature:  Date: 8/20/2020

When submitting a bid, place the bid form sheet as the top page of the bid package and the bid price schedule as the second page of the bid package.

Company Profile

Hunt Engineers, Architects & Land Surveyors

Hunt Engineers, Architects, Land Surveyors & Landscape Architect, DPC (dba HUNT) has its headquarters in Horseheads, New York, and currently has 11 licensed professionals, our Director of Finance and our Director of Technology as stockholders. Celebrating over 45 years in business, the firm specializes in consulting and design for educational, institutional, and private sector facilities (architecture and building systems, interior design, campus amenities, and athletic fields); municipal infrastructure (water and wastewater systems, storm water management); state and county transportation facilities; and technology consulting and design.

www.hunt-eas.com



Horseheads

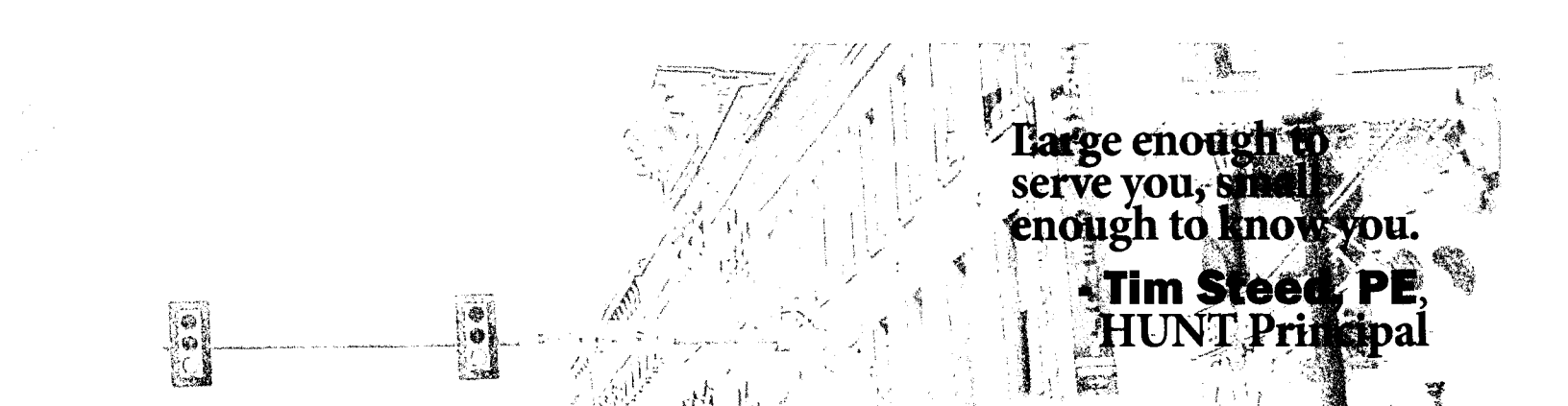
100 Hunt Center,
Airport Corporate Park
Horseheads, NY 14845
p: (607) 358-1000
f: (607) 358-1800

Rochester

4 Commercial Street,
Suite 300
Rochester, NY 14614
p: (585) 327-7950
f: (585) 327-7949

Towanda

Progress Plaza,
1 Elizabeth Street, Suite 12
Towanda, PA 18848
p: (570) 265-HUNT (4868)
f: (570) 265-4872



Large enough to
serve you, small
enough to know you.

Tim Steed, PE,
HUNT Principal

Staffing Level

128 Employees, 6 Seasonal Construction Inspectors

Licensed Professionals

37 (20 Engineers, 9 Architects, 2 Landscape Architects, 4 Surveyors, 2 Interior Designers)

Architecture & Buildings Systems:
Architecture, Interior Design, MEP Engineering

Total of 50 - 9 licensed architects, 3 licensed engineers, 2 licensed interior designers

Municipal Engineering:
Survey, Site Design, Environmental Engineering

Total of 33 - 8 licensed engineers, 4 licensed land surveyors, 2 licensed landscape architects

Transportation & Structural:

Total of 17 - 9 licensed engineers

Technology Consulting, Design & Integration:

Total of 9

Principals

Christopher J. Bond, PE (NY, PA, VT, DE) Chief Executive Officer/President

Dean C. Hackett, RLA, LEED AP (NY)
Vice President of Business Services

Kim D. Abbott
Director of Finance

Gary E. Henry, AIA (NY, PA)

Greg J. Barr, PE, LEED AP (NY, PA)
Vice President

Darin L. Rathbun, PE (NY, PA, MD, NJ)
Vice President

Barry J. Dumbauld, PE (NY, PA)

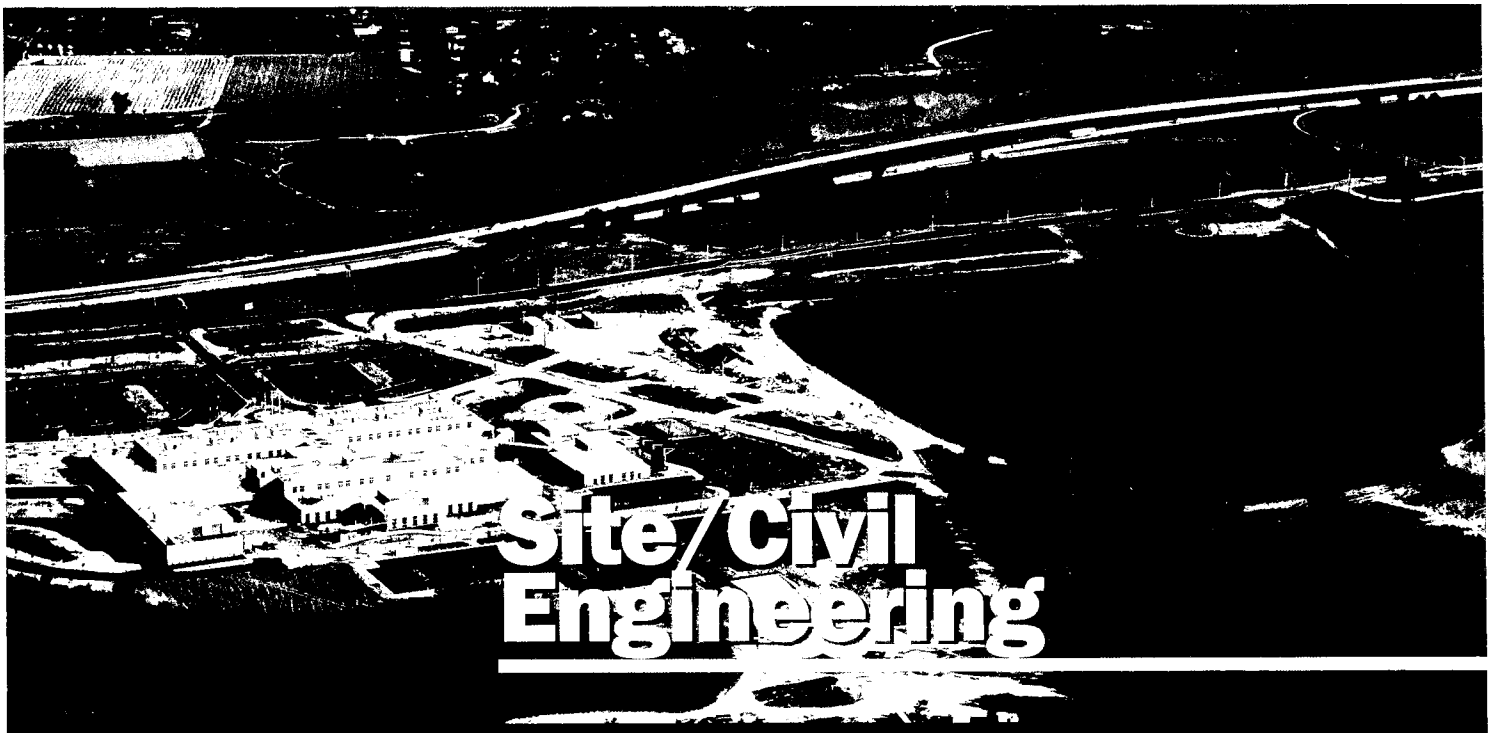
Jeffrey M. Robbins, AIA (NY, PA)

Ryan P. Garrison,
Director of Technology

Timothy K. Steed, PE (NY, PA, NJ)
Corporate Secretary

Benjamin J. Gustafson, PE (NY, PA)

Gary L. Thompson, PLS (NY)



Site/Civil Engineering

HUNT's site/civil team brings a depth of experience, and an attention to detail that will be evident in the development process and at the completion of your facility.

Site/Civil Services:

Site Planning

- Grading
- Drainage
- Parking Lot Layout
- SWPP (NPDES)
- Storm Water Mgmt. (NPDES)
- Erosion & Sediment Controls
- Utility Layout

Studies/Reporting

- Water system analysis
- Hydraulic water modeling
- Map, plan and report
- Sanitary sewer/inflow & infiltration studies
- Sewer modeling
- Stormwater pollution prevention plans
- Funding assistance

Water Infrastructure

- Groundwater supply design
- Disinfection and water quality treatment design
- Water booster pump station design
- Water transmission and distribution piping design
- Water storage facility design

Wastewater Infrastructure

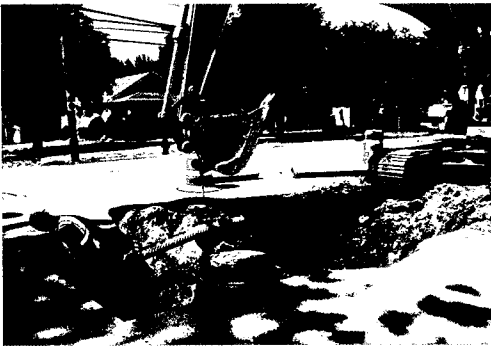
- On-site wastewater treatment and disposal systems
- Sanitary sewer collection system design
- Wastewater lift station design

Stormwater Infrastructure

- Stormwater collection system design
- Stormwater detention facility design

Transportation Services

- State and interstate highways
- County and town roads
- Urban streets and streetscapes
- Bridges
- Traffic studies
- Horizontal curve studies
- Construction inspection
- Pedestrian and bicycle paths





Land Surveying

HUNT provides a wide array of survey and mapping services to clients in the public and private sector throughout the Northeast.

HUNT is committed to maintaining state-of-the-art computers, software, internally hosted cloud, and survey equipment to maximize our efficiency for all projects. HUNT has a comprehensive understanding of how the data is utilized within your office and has the ability to provide survey data in AutoCAD Civil 3D 2015 and PDF format.

Land Surveying Services:

- Global Positioning System (GPS)
- Primary Control Surveys
- Photogrammetric Control Surveys
- Certified Boundary Surveys
- Right-of-Way Survey & Mapping
- Design Survey & Mapping
- Acquisition Mapping
- Topographic & Utility Surveys
- 3D Scanning/Underground Utilities Location
- Digital Terrain Models (DTM)
- ALTA/ACSM Land Title Surveys
- Hydraulic (HEC II) Surveys
- Construction Stakeout
- Subdivision Design
- Geographic Information Systems (GIS) Map Development
- Easement Plats

Survey Equipment and Software:

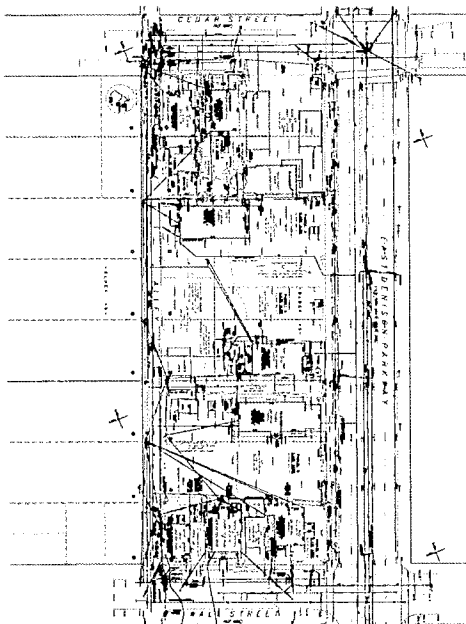
Trimble 3D Laser Scanners are utilized for various applications (interior and exterior).

Equipment

- Trimble GPS R8GNSS with radio units
- Trimble S6 Robotics and Trimble TSC2 Controllers
- Topcon GTS301 Total Stations
- Ziess NI2 Automatic Level
- RD8000 Radiodetection Equipment (underground utilities)
- Fuji Automatic Level
- TDS48 Data Collectors
- LEICA/Wild NA2002 Elect. Digital Level
- Target Control Traverse Sets
- Schoenstadt Metal Locators
- Three fully equipped survey vehicles
- Complete range of safety equipment

Software

- AutoCAD Civil 3D 2015
- Trimble Geomatic Office
- Trimble Business Center II
- Trimble/Survey Pro/TDS
- Micro-Station V8.05.02.55
- InRoads V8.05 (SP7) and InRoads Survey V8.05 (SP7)



HILLIS-CARNES

ENGINEERING ASSOCIATES

hcea.com

Geotechnical Engineering

Environmental Consulting

Testing and Inspections

Facilities Consulting

Drilling/Subsurface Exploration

Laboratory Materials Testing

INTRODUCTION

Established in 1989, Hillis-Carnes Engineering Associates, Inc. is an employee-owned consulting engineering firm that has built a reputation for being able to solve a variety of complex problems with innovative, and at the same time, practical solutions for a variety of conditions encountered before and during construction. Hillis-Carnes has grown by recruiting, training and mentoring proactive and dedicated engineering professionals who fully understand the expectations of the client. Hillis-Carnes' commitment to quality is rooted in continuous education and training, maintaining fully certified laboratory facilities, and utilizing state-of-the-art technology.

The Hillis-Carnes team has grown to over 400 experienced employees and over 20 Professional Engineers specializing in Geotechnical Engineering, Construction Materials Testing and Inspections, Drilling and Subsurface Explorations, Environmental Consulting and Industrial Hygiene services, Geotechnical Engineering, Deep Foundations, Specialty Geotechnical Construction, Facilities Consulting, Construction Consulting and Third-Party Inspections, Geoscience, and Laboratory Testing services.

Hillis-Carnes has extensive experience with soils, deep foundations, complex post-tensioned and reinforced concrete and structural steel framing projects. In addition, Hillis-Carnes has provided its expertise for private and public sector clients ranging from the following: commercial and residential developers, general contractors, construction managers, educational institutions, healthcare providers, transportation, state/government, industrial, retail, mixed-use, public works, maritime, and sports/entertainment industries.

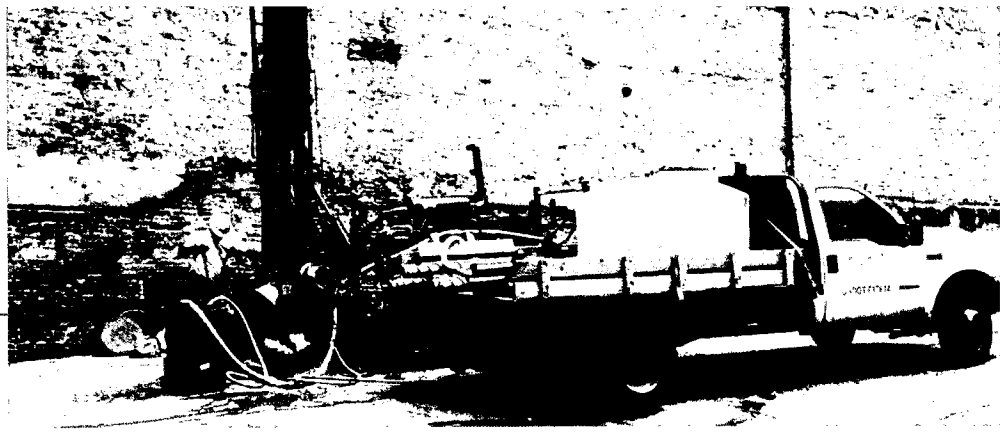
CORPORATE HEADQUARTERS

**10975 Guilford Road, Suite A
Annapolis Junction, MD 20701**

P (410) 880-4788

F (410) 880-4098





DRILLING/SUBSURFACE EXPLORATION

Full-Scale Drilling And Subsurface Explorations From A Single Company

Hillis-Carnes maintains a diverse fleet of variably mounted drill rigs to perform subsurface sampling, testing and monitoring well installation. The drill rigs vary in carrier type, size, mast height, and torque allowing us to offer the flexibility to drill with a variety of power given the subsurface conditions. This flexibility allows us to perform all types of geotechnical exploration and instrumentation installation in all environments. We specialize in difficult access drilling and have vast experience performing explorations under the most difficult circumstances.

With our own hauling capabilities, a faster turnaround time can be achieved when performing test pits, identifying conditions of existing foundations and performing environmental subsurface explorations. Hillis-Carnes can provide standard soil borings, rock coring, pressuremeter testing, piston sampling, packer testing, monitoring well installation, geotechnical instrumentation installation (piezometers, inclinometers, extensometers), core drilling of concrete caissons, as well as air track explorations for rock profiling and identification of solution activity/voids in karst geology. All crews have completed the OSHA 40-hour training and are FHWA subsurface investigation qualified.

Drilling Equipment

- Diedrich D-50 Track-Mounted Drill
- Diedrich D-50 ATV-Rubber Tire Drills
- CME 45 Radio Remote Control Track-Mounted Drill
- CME 45 ATV-Rubber Tire Drills
- CME 45 Skid Mounted Drills
- MOBILE B-30 Truck Mounted Drills
- Acker Soil Scout Radio Remote Control Track-Mounted Drill
- Tripod Drills with Motorized/Electrical Catheads
- Gill Beetle Hydraulic Air Track Drills
- RAM Extendable Boom Air Track Drill
- Gardner Denver GDHC Air Track Drill
- Geoprobe/CPT Radio Remote Control Track Mounted Drill
- Steel Barge (26' x 19') with Push Boat
- Rev Drill Model 50 HD with 14,000 lb Winch
- Low-Overhead Feed Assembly Drills (13'-2" Clearance)
- Hilti Concrete/Asphalt Coring Systems
- ATV Water Buggy





ENVIRONMENTAL CONSULTING

(CONTINUED)

Ecological Studies

- Wetland Determinations, Delineations & Permitting
- Forest Stand Delineations
- Identification of Waters of the U.S., Stream Restoration & Monitoring

Redevelopment of Impacted Properties Via Voluntary Cleanup Program (VCP)

- Evaluate Prior Investigations
- Attend Pre-Application Meeting with MDE & Preparation of VCP Applications
- Develop Scope of Work & Conduct Supplemental Investigations
- Implement Response Action Plans
- Interface with Clients' Legal Counsel

Remediation of Metals at Orchards, Golf Courses

- Delineation of Contamination
- Pilot Testing to Determine Remedial Options
- Interface with Legal Counsel
- Interface with Regulatory Authorities
- Assistance with Preparation of Real Estate Disclosures
- Oversight of Remedial Activities
- Waste Characterization
- Post-Remediation Verification Sampling

Methane Gas Studies

- Indoor Air Quality Services
- Testing of Subsurface Soils
- Determination of Mitigation Measures





SPECIALTY GEOTECHNICAL CONSTRUCTION

(CONTINUED)

perform the geotechnical/structural design, provide the installation/construction services, and next perform the necessary testing and inspections including engineering oversight during the installation/construction. We then provide any confirmation/proof-testing upon completion of construction services and issue final certifications and/or as-builts stamped by a Professional Engineer upon completion of our work.

Cost is important to our clients, so it's important to us. We can recommend the most economical and practical solutions because we employ a highly experienced staff and we own (rather than rent) specialized equipment that together allows us to fully investigate and evaluate the existing conditions of a project. We identify the problems and challenges and then consider all of the specialty geotechnical construction options available specific to your project.

Specialty Construction And General Use Equipment

Hillis-Carnes' Specialty Construction Group owns and operates a variety of equipment in-house. The following equipment is categorized here.

- General Use Equipment**
- International Road Tractor & Trailer (Lowboy)
 - Volvo Road Tractor & Drop Deck Trailer (Lowboy)
 - GMC 7500 Series Truck & Trailer
 - MACK Truck w/ Mounted IR900/350 Air Compressor
 - Various High Powered Air Compressors
 - Freightliner FL70 Single Axle Dump Truck
 - Sterling LT9501 Tandem Axle Vac-truck
 - Various Tilt-deck & Tag Along Trailers
 - Confined Space Trailer with all Safety Equipment
 - Numerous Support Trucks
 - Freightliner FL80 Mechanics Truck w/ Welder
 - Air Compressor & 10,000 lb Crane
 - Zoom Boom Series ZB8044 Fork Lift
 - Load Testing Equipment

Excavation/Earth Moving Equipment

- CAT 953 Track Loader
- Takeuchi Mini-Excavator (6,000 lbs)
- Takeuchi TB 1140 Excavator (32,000 lbs) on Rubber Tracks
- Bobcat 175 w/ various attachments
- John Deere 710 Rubber Tire Backhoe (4 x 4)
- Takeuchi TL240 Rubber Track Skid Steer

Grouting Equipment

- Reed B30 & B50 Concrete Pump
- Reed B20 High Pressure Concrete Pump
- Atlantic Drill AD10/10 Grout Plant
- Airplaco Grout Plants (Pneumatic Powered)
- Progressive Cavity 3L6 Pumps (Hydraulic Powered)
- Gardner Denver GDHL Extended Boom Grout Needle with 50' Mast
- Gardner Denver Grout Needle with 35' Mast
- Kenworth Truck with Zim-Mixer (Grout Mobile Mixer)
- Rev Drill Model 50 HD with 14,000 lb Winch Mounted on a CAT 336 Excavator





LABORATORY TESTING

Our laboratories are accredited by AASHTO for soils, aggregate, and concrete. We are one of the few labs in Maryland recognized by the Landscape Operations Division of the Maryland State Highway Administration. Our laboratory personnel are certified by NICET and ACI.

Soil Tests

- Sieve Analysis
- Hydrometer Analysis
- Atterberg Limits
- Classification as per USCS, AASHTO & USDA
- Modified & Standard Proctors
- Specific Gravity
- Direct Shear
- Hydraulic Conductivity (Permeability)
- California Bearing Ratio
- Organic Content (Loss on Ignition)
- pH
- Soluble Salts
- Electrical Resistivity
- Consolidation
- Unconfined Compression Strength
- UU Triaxial Shear Test
- Calcium Carbonate

Concrete Tests

- Compressive Strength of Concrete Grout & Mortar
- Split Tensile Strength of Concrete
- Flexural Strength of Beams
- Preparation & Compressive Strength of Concrete Core Samples
- Chloride Permeability
- Chloride Ion Content
- Length Change of Cement Mortar & Concrete

Asphalt Tests

- Bulk Specific Gravity of Core Sample & Maximum Theoretical Density
- Extraction/Gradation

Concrete Masonry Units Tests

- Compressive Strength on Masonry Units & Masonry Prisms
- Moisture, Absorption & Density

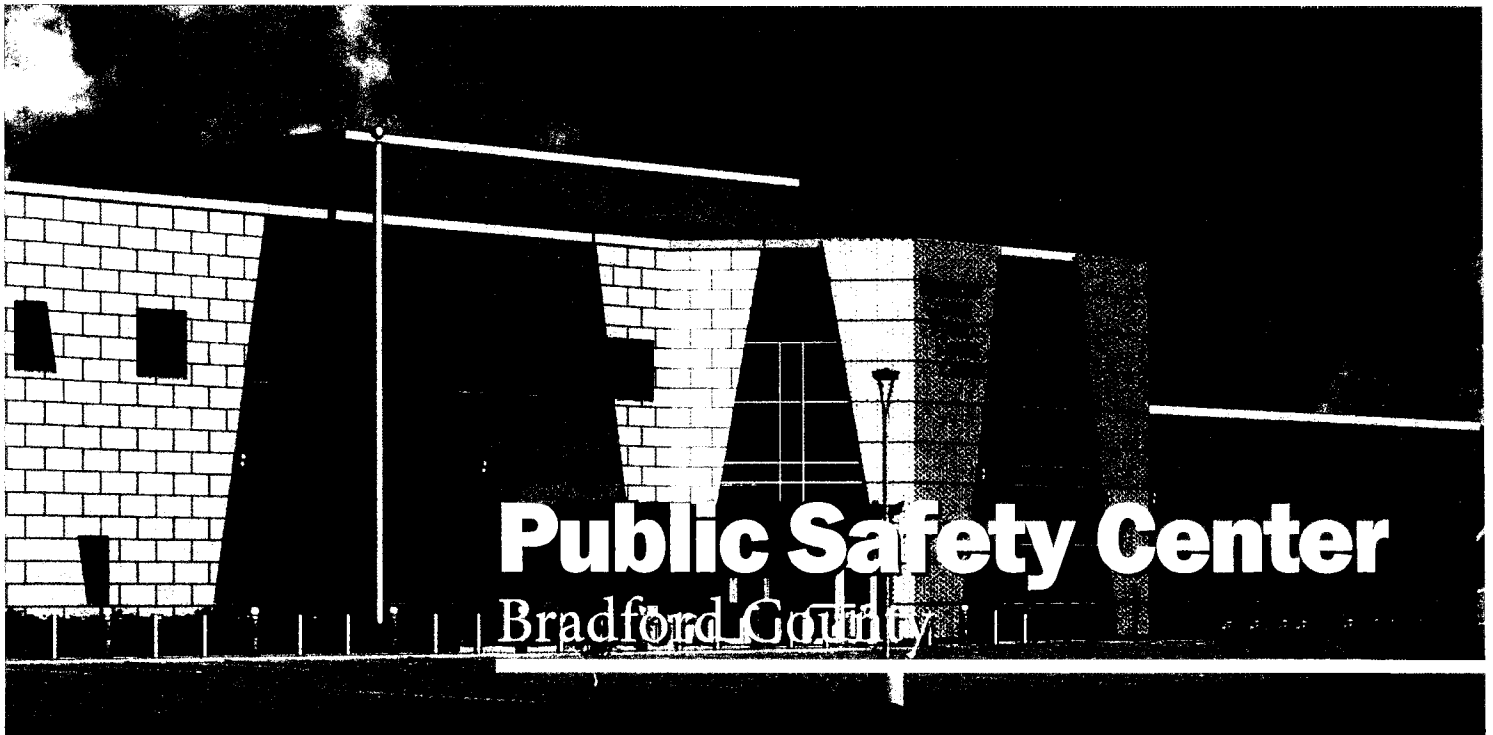
Cement Tests Include

- Fineness of Cement
- Time of Setting

Aggregate Tests

- Gradations
- Specific Gravity of Fine & Coarse Aggregate
- Organic Impurities
- Sand Equivalent
- LA Abrasion
- Sulfate Soundness
- Flat & Elongated Particles
- Aggregate Angularity





Public Safety Center Bradford County

Location: Towanda, PA

Contact: Doug McLinko
County Commissioner
570.265.1727

This project consists of a brand new facility to house a number of Bradford County Departments including the Community Planning & Mapping Services, the Bradford County Grants Department, the Emergency Management Agency, and 911 Communications. It is a two story structure planned for the existing site where these departments reside. Overall project scope also includes a new Maintenance Facility for the County which is currently nearing completion on-site.

This project posed many challenging designs for the site development, not only in design but also from permitting and utility coordination. The site design challenges began with limited area available for the new facilities while maintaining operations at the current building. The site was designed in a multi-phased approach to allow for all operation continue and improvements to be completed. The tiered site features a 17 ft site retaining wall, secured parking, a crash rated bollard system, landscaping design, parking areas, and utilities. Utility and agency coordination were highly involved with major utility relocations/extensions taking place for electrical, communication, water and natural gas services. This work required multiple meeting with the utility providers, easements and direct coordination with the utilities on service interruptions to keep the existing 911 operations office operational at all times. The project also included permitting and coordination with PennDOT to acquire property and obtain occupancy permits, as well as coordination with the township to obtain zoning approval.

The new Public Safety facility will consist of advanced technology features throughout the building to facilitate communication and efficiency during an activation event. The Emergency Operations Center is capable of being transformed from an active work room to a 100 person lecture hall and demonstration area. Flexible furniture throughout the building was incorporated in order to utilize rooms for various tasks.

A vegetative roof will be a feature on a portion of the roof for patrons to make use of during the work day. The building is constructed with Precast Insulated Concrete Panels which not only form the exterior walls but also provide the necessary protection for a building of this nature. Solid and perforated metal panels are being incorporated throughout to bring the buildings aesthetics together.

HUNT Services:

- Architectural
- Site/Civil
- Structural
- MEP
- Information Technology
- Landscape Architecture





Bradford County Dark Fiber Network

Progress Authority Bradford County

Location: Towanda, PA

Contact: Anthony Ventello
Executive Director
570.265.0937

The Central Bradford Progress Authority, Bradford County Commissioners, and HUNT partnered to address the county's many needs, including: emergency communications, connectivity for county buildings, wireless towers, and broadband services.

To accomplish this task, HUNT designed a dark (or unlit) fiber network which will provide connectivity to county buildings, towers, emergency service locations, as well as provide enterprise services to businesses in the area. This dark fiber network will provide inexpensive leases to internet service providers in the area which will be critical in the encouragement of broadband development in this county.

Due to Pennsylvania laws restricting public entities from providing internet services, HUNT is providing consulting services to find creative solutions that the Progress Authority can use to further broadband development as much as possible.

The Progress Authority is uniquely positioned to help small businesses grow and provide resources to help them. Once completed, the Bradford County Open Access Network will include 270 miles of fiber and extend to within six miles of any county residents.

HUNT Services:

- Information Technology
- Survey
- Site/Civil Engineering
- Pole Lease Agreements
- Fiber Optic Network Design





Bradford County, PA, Retainer Agreement for Subdivision and Land Development Plan Reviews

HUNT has been hired by the County commissioners and planning commission to review land development applications and recommending ordinance standards and provisions related to sound design and best management practices for land development activity in the County's jurisdiction.

Retainer Agreement for Subdivision and Land Development Plan Reviews, Asylum and Troy Townships and Lawrenceville Borough

HUNT was retained to provide routine professional services in an efficiently administered manner for such tasks as preliminary & final subdivision plan reviews, land development plan review for general consulting. Also if requested HUNT shall complete a thorough review of the proposed site improvement or development design and provide a report to the Townships in accordance with the procedures set forth within the Township's Subdivision and Land Development Ordinance.

EOG Resources, Inc, Springfield Township, Bradford County, PA

HUNT was hired to prepare a land development application and modification of the site plan for the construction of a natural gas compressor station and a freshwater impoundment. This project included modification of the existing ESCGP-1 site design to meet compliance of the Bradford County Subdivision and Land Development Ordinance. The modifications included revised stormwater management designs/reports, parking areas, and other associated site modifications.

Ferrario Auto Center, Parking Lot Expansion, Wysox Township, Bradford County, PA

HUNT was hired to prepare a site plan, land development application, and Bradford County Conservation District erosion and sedimentation control plan for the construction of an approximately 12,000 square foot parking lot addition for customer parking and showcasing of new vehicles. The project included parking lot design, driveway, ADA compliant sidewalks, stormwater management, landscaping, and erosion and sedimentation control.

Birchwood Apartment Townhouses, Sayre Borough, Bradford County, PA

HUNT was retained to prepare a site plan, floor plans, land development application, and Bradford County Conservation District erosion and sedimentation control plan for the construction of townhouse apartments. The project included floor plans, parking lot design, access drives, ADA compliant sidewalks, stormwater management, landscaping, and erosion and sedimentation control.

Municipal Office Building, Sheshequin Township, Bradford County, PA

HUNT was hired to prepare a site plan, land development application, national pollution discharge elimination system permit application, and building permit for the construction of a 11,040 square foot Municipal Office / Vehicle Storage Building. The project included site design, access drives, ADA compliant parking and sidewalks, stormwater management, landscaping, connection to public and private utilities, and erosion and sedimentation control. HUNT was also retained after site development to complete a constructability review of the building design plans as well as to perform the Construction Administration and Construction Manager throughout the bidding and construction of the project.



New Albany Borough – May Street Stormwater Collection

New Albany Borough has experienced serious flooding in the past and has done numerous projects within the borough to try and correct the issues. HUNT worked with the Borough on this round of grant funding to install stormwater piping and collection to capture stormwater and direct to collection areas. Services ranged from full design, bidding and construction administration.

Endless Mountain Mission Center – Partial Roof Replacement

HUNT provided design for the replacement of the existing asphalt roof for a portion of the existing building. The project is currently bidding and is anticipated for construction this summer.

Towanda Borough – Bill Sick Lane ADA Curb Cuts

HUNT designed the creation of two ADA curb cuts and into the existing sidewalk which required additional sidewalk

modifications to the adjacent areas. The project is currently bidding and is anticipated for construction this summer.

South Creek Lions Club – ADA Restrooms

HUNT is currently working with the South Creek Lions Club for the design of two ADA accessible restrooms within their current facility. The project includes architectural design and MEP engineering.





Site Development

Central Bradford Progress Authority/ Dresser Rand, Inc.

Location: Bradford, PA

Contact: Name
Title
000.000.0000

HUNT was retained to prepare a site plan, land development application, and national pollution discharge elimination system permit application for the construction of a 7 acre, Phase I, Development Equipment Pad.

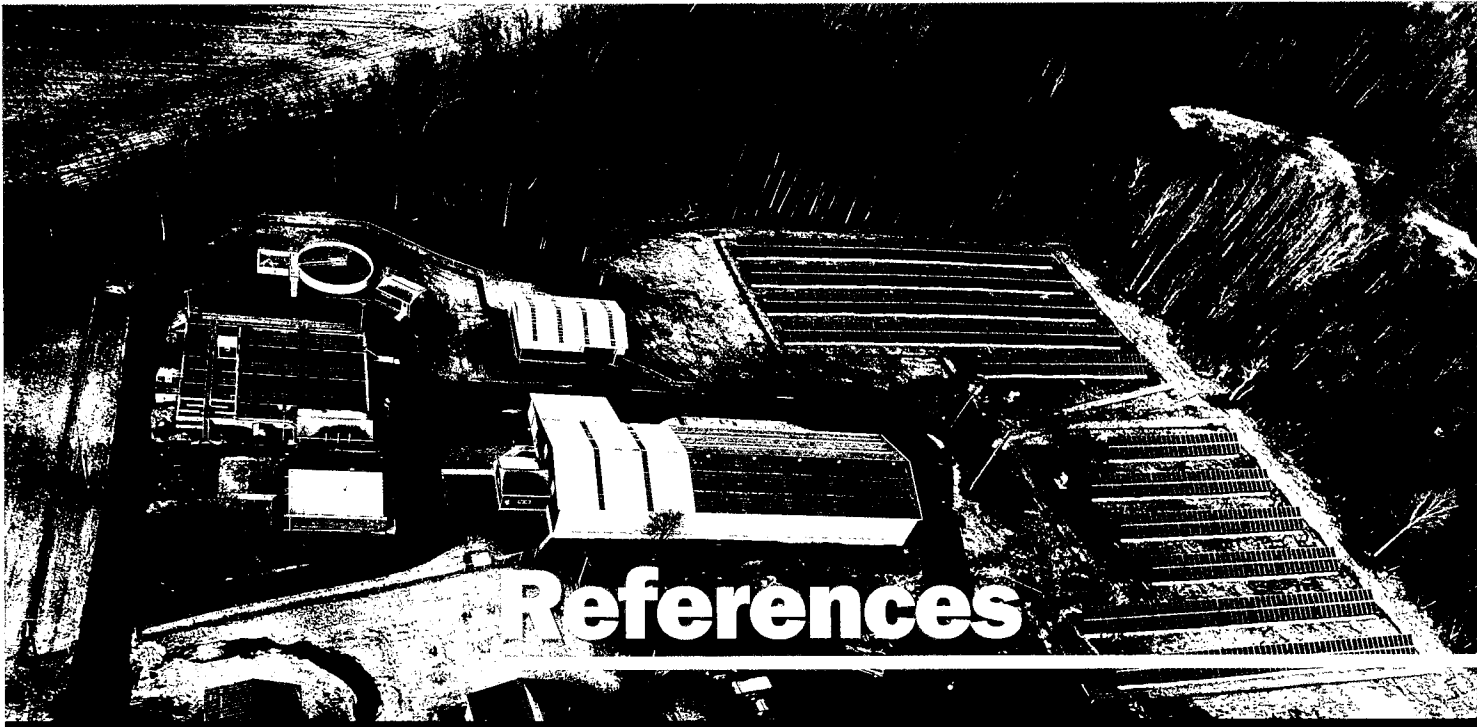
HUNT began the project design in July of 2013 and received preliminary land development approval from the Township and NPDES approval from Bradford County Conservation District in October 2013.

We worked closely with both the developer and the owner to achieve the best design for this multiphase development. The project included structurally designed concrete pads, parking design, access road, office building, stormwater management, site lighting, signage, landscaping, security gates/fencing, connection to public utilities, and erosion and sedimentation control.

HUNT Services:

- Architectural
- Site/Civil
- Structural
- MEP
- Information Technology
- Landscape Architecture





References

Doug McLinko, Commissioner- Vice Chairman

Bradford County
Commissioners Office
301 Main Street
Towanda, PA 18848
phone: 570.265.1727 fax: 570.265.1729

Anthony Ventello, Executive Director

The Progress Authority
Progress Plaza
1 Elizabeth Street, Suite 3
Towanda, PA 18848
phone: 570.265.0937 fax: 570.265.0935

Chris Brown, Vice President, Community Development

The Progress Authority
Progress Plaza
1 Elizabeth Street, Suite 3
Towanda, PA 18848
phone: 888.263.0937 fax: 570.265.0935

Marc Rycroft, Plant Manager

Leprino Foods Company
400 Leprino Avenue
Waverly, NY 14892
phone: 570.882.7263 fax: 570.882.9290

Lawrence Plesh, PE, County Engineer

Luzerne County
200 N River St
Wilkes-Barre, PA 18711
phone: 570.825.1631 fax: 570.825.1606



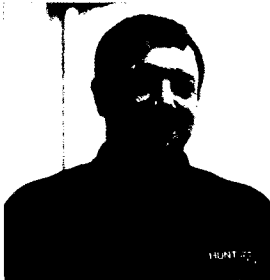
Project Team



Darin L. Rathbun, PE

Principal-in-Charge

Darin Rathbun is experienced in structural analysis, structural systems design for new buildings, and converting existing structures to new purposes. A principal in the firm since 2007 and current director of HUNT's Towanda, PA., office, Darin's project management expertise is best expressed in his efforts for architectural building structures for education, structural systems for masonry restoration, and the specialized demands of industrial processing facilities. Darin's design experience includes buildings with more than six million square feet of floor space, including several award-winning designs for America Online. Darin's skill in solving complex structural challenges have earned him a reputation as a skilled structural engineer and key contributing member on a wide range of design teams.



Christopher Wood, EIT

Project Manager

Chris Wood joined HUNT in 2013, bringing with him a wide range of practical experience in the various aspects of civil engineering for the public and private sectors. Mr. Wood is experienced in many aspects of the environmental and site development engineering and his proficiency at developing projects from concept through construction, including client coordination, municipal approvals, permitting, specifications, and construction. He is experienced at communicating among clients, state and local agencies, designing various types of sites, and at providing the end product of plans and specifications for project approvals and construction.



Timothy K. Steed, PE

QA/QC

Tim Steed is a key member of the HUNT project team that provides civil engineering services to clients in the public and private sector. Tim is an expert in municipal water modeling, design of water supply and distribution systems, designs for wastewater treatment and collection, and storm water control. His experience as a client/project manager enables him to efficiently manage environmental engineering, including developing hydrologic studies and designing pumping and wastewater treatment facilities.



Joshua Woodard

Civil Engineering

Joshua joined HUNT in 2012 and has seventeen years of experience in various disciplines of engineering and land surveying. He has extensive knowledge of industry-specific programs and is well versed in several programming languages, with developing knowledge of ACoE, HecRAS, ArcGIS, InfoWater, and InfoSewer. At HUNT Joshua created and implemented time-saving initiatives by updating outdated drainage study and SWPPP development methods. He also streamlined operation and maintenance reports and facilitated new templates that reduced turnaround time for drainage studies and reports. Joshua has experience with modeling sewer system design projects. This has lead to the design of multiple municipal waste water collection and treatment facilities and provided construction support for several stadium track/field projects.



Hesker Hill Tower

Project Approach

-
1. Conduct a kick-off meeting with the County and Tower Consultant to review the scope of work, schedule, potential options, and establish point of contacts for the project.
 2. HUNT shall complete a topographic and planimetric survey to document the existing site conditions utilizing conventional GPS control, electronic total station, robotics, data collection, as follows:
 - a. Establish horizontal and vertical project control utilizing GPS referenced to NAD83 and NAVD88 datum.
 - b. Obtain and review available record utility mapping prior to on-site survey.
 - c. Survey and measure locations of physical features, within the project area, including but not limited to, buildings, structures, roads, fences, ditches, driveways, parking lots, or other physical features important to planning and design of the project.
 - d. Location and measurement of existing above and below ground utilities based on existing structures, record information, facility personnel, and measurement of inverts and pipe sizes.
 - e. Perform deed and map research at the Bradford County Registers and Recorders Office.
 - f. Run a closed loop traverse and locate all physical boundary evidence and monumentation for use in establishing property lines.
 - g. Generate a Digital Terrain Model (DTM) for use in surface modeling and contours shall be generated at one (1) foot intervals.
 - h. Calculate and produce final boundary and topographic mapping in an AutoCAD Civil 3D 2013 digital format at a desirable scale for use by the design team.



8. HUNT shall develop engineering/permit drawings of the proposed improvements (tower compound, access drive, parking area, utility extension, and all associated site improvements. These drawings shall be accompanied by an Erosion & Sedimentation Control Plan that document the proposed conditions and complies with all current regulations.
9. Coordinate with the local Electrical Company on a utility extension to provide power to the site. The extension will provide sufficient power to provide up to four (4), 240 V, 3 phase, 200 amp services at the compound.
10. Complete a Pennsylvania Natural Heritage Program (PNHP) search/Pennsylvania Natural Diversity Inventory Environmental Review (PNDI). Any finding in these searches will be discussed with the owner. HUNT shall also perform a PA State Historic Preservation Office, Historical Museum Commission (PHMC) Search and a National Environmental Policy Act (NEPA) review for the project site.
11. Complete and prepare a Lycoming County Conservation District Erosion & Sedimentation Control Permit and submit the complete report and application to Lycoming County Conservation District for review and approval.
12. HUNT shall prepare and submit all County applications for subdivision and zoning and submit final plans to the County for review and approval. HUNT shall attend up to one (1) County Meeting if necessary.
13. Finalize the Contract Documents for bidding by incorporating all agencies comments and final owner comments into the documents. HUNT shall provide the complete bid package to the County for bidding and distribution.
14. HUNT shall provide monumentation at the four (4) corners of the tower pad. This monumentation shall be 5/8" iron rods with caps.

Project Implementation Schedule

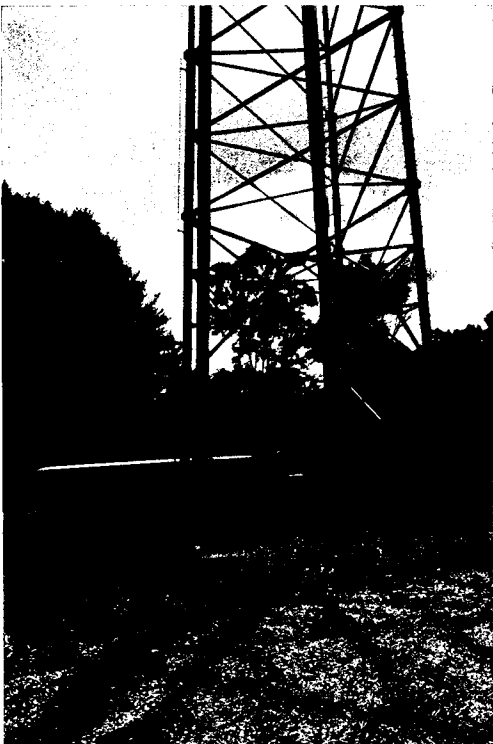
Project kick-off meeting	October 2020
Begin Geotechnical Work, Wetland Investigation, & Field Survey.	October 2020 – November 2020
Prepare Phase I ESA	October 2020 – November 2020
Site Design	November 2020 – December 2020
Permitting / Permit Submissions / Comment Response	December 2020 – January 2021
Prepare Contract Documents	January 2021 – February 2021



Hughesville Water Authority Tower Site

Project Approach

1. Conduct a kick-off meeting with the County and Tower Consultant to review the scope of work, schedule, potential options, and establish point of contacts for the project.
2. HUNT shall complete a topographic and planimetric survey to document the existing site conditions utilizing conventional GPS control, electronic total station, robotics, data collection, as follows:
 - a. Establish horizontal and vertical project control utilizing GPS referenced to NAD83 and NAVD88 datum.
 - b. Obtain and review available record utility mapping prior to on-site survey.
 - c. Survey and measure locations of physical features, within the project area, including but not limited to, buildings, structures, roads, fences, ditches, driveways, parking lots, or other physical features important to planning and design of the project.
 - d. Location and measurement of existing above and below ground utilities based on existing structures, record information, facility personnel, and measurement of inverts and pipe sizes.
 - e. Perform deed and map research at the Bradford County Registers and Recorders Office.
 - f. Run a closed loop traverse and locate all physical boundary evidence and monumentation for use in establishing property lines.
 - g. Generate a Digital Terrain Model (DTM) for use in surface modeling and contours shall be generated at one (1) foot intervals.
 - h. Calculate and produce final boundary and topographic mapping in an AutoCAD Civil 3D 2013 digital format at a desirable scale for use by the design team.





8. HUNT shall develop engineering/permit drawings of the proposed improvements (tower compound, access drive, parking area, stormwater management system, utility extension, and all associated site improvements. These drawings shall be accompanied by an Erosion & Sedimentation Control Plan and Post Construction Stormwater Management Plan that document the proposed conditions and complies with all current regulations.
9. Coordinate with the local Electrical Company on a utility extension to provide power to the site. The extension will provide sufficient power to provide up to four (4), 240 V, 3 phase, 200 amp services at the compound.
10. Complete a Pennsylvania Natural Heritage Program (PNHP) search/Pennsylvania Natural Diversity Inventory Environmental Review (PNDI). Any finding in these searches will be discussed with the owner. HUNT shall also perform a PA State Historic Preservation Office, Historical Museum Commission (PHMC) Search and a National Environmental Policy Act (NEPA) review for the project site.
11. Complete and prepare a National Pollution Discharge Elimination System (NDPES) permit application and required permit modules for the site, as well as prepare the Lycoming County Conservation District Permit Application. And submit the complete report and application to Lycoming County Conservation District for review and approval.
12. HUNT shall prepare and submit all Township applications for subdivision and zoning and submit final plans to the Township for review and approval. HUNT shall attend up to one (1) Township Meeting if necessary.
13. Finalize the Contract Documents for bidding by incorporating all agencies comments and final owner comments into the documents. HUNT shall provide the complete bid package to the County for bidding and distribution.
14. HUNT shall provide monumentation at the four (4) corners of the tower pad. This monumentation shall be 5/8" iron rods with caps.
- 15.

Project Implementation Schedule

Project kick-off meeting	October 2020
Begin Geotechnical Work, Wetland Investigation, & Field Survey.	October 2020 – November 2020
Prepare Phase I ESA	October 2020 – November 2020
Site Design	November 2020 – December 2020
Permitting / Permit Submissions / Comment Response	December 2020 – February 2021
Prepare Contract Documents	January 2021 – February 2021

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal Proposal

State of Pennsylvania

County of Bradford

Hunt Engineers, Architects, Land

I state that I am Vice President (Title) of Surveyors & Landscape Architect, DPC (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. HUNT EAS (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

Hunt Engineers, Architects, Land Surveyors & Landscape Architect, DPC

I state that _____ (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

A statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: Darin L. Rathbun, PE

Signature: 

Title Vice President

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 20 DAY
OF August, 20 20

Jennifer Waldow
Notary Public

My Commission Expires: 4/17/2021



JENNIFER WALDOW
NOTARY PUBLIC-STATE OF NEW YORK
No. 01WA6357196
Qualified In Monroe County
My Commission Expires 04-17-2021

**EXCEPTIONS FORM
HUGHESVILLE SITE**

Section Number	Explanation
Section 5, Additional Services, C. Zoning Permitting	Attendance to the Zoning Hearing Meeting is not included in the base bid as it indicates "if needed". We do not anticipate this being required as this parcel currently has a use variance from the Township to allow the construction of Towers. However, attendance to a Zoning Hearing Meeting if needed would be \$520.00 and will be billed as a change order to the project.
Section 5, Additional Services, B. Coordinate/Prepare Phase I and Phase II Site Assessments	The cost of the Phase II Environmental Site Assessment, is not included in the base bid as it indicates "if needed" We do not anticipate a Phase II being required. However, if a Phase II ESA is required the fee will be \$10,360.00 and will be added to the contract as a change order.
Q&A #2, Question 9	Creation of easements for access roads, utilities, etc have been excluded from the fee based on the response to this question. Any required easement will be billed as an additional service.
Q&A #4, Question 45	Based on this response, no grading/leveling is being provided for the future water tank pad. Should grading/leveling of the future water tank pad will be billed as an additional service.
Wetland/Stream Delineation	Should these services not be required by the County, HUNT will pass the saving directly on to the County.
Phase I ESA	Should these services not be required by the County, HUNT will pass the saving directly on to the County.

**EXCEPTIONS FORM
HESKER HILL SITE**

Section Number	Explanation
Section 5, Additional Services, C. Zoning Permitting	Attendance to the Zoning Hearing Meeting is not included in the base bid as it indicates "if needed". We do not anticipate this being required as this parcel currently has a use variance from the Township to allow the construction of Towers. However, attendance to a Zoning Hearing Meeting if needed would be \$520.00 and will be billed as a change order to the project.
Section 5, Additional Services, B. Coordinate/Prepare Phase I and Phase II Site Assessments	The cost of the Phase II Environmental Site Assessment, is not included in the base bid as it indicates "if needed". We do not anticipate a Phase II being required. However, if a Phase II ESA is required the fee will be \$10,360.00 and will be billed as an additional service for the project.
Q&A #2, Question 9	Creation of easements for access roads, utilities, etc have been excluded from the fee based on the response to this question. Any required easement will be billed as an additional service.
Q&A #4, Question 45	Based on this response, no grading/leveling is being provided for the future water tank pad. Should grading/leveling of the future water tank pad will be billed as an additional service.
Infiltration Testing	Based on the site of the development and required permitting this location does not require stormwater management or infiltration testing and therefore this work has been excluded from the free. Should infiltration testing be required do to change of scope the work will be provided as an additional service.
Wetland/Stream Delineation	Should these services not be required by the County, HUNT will pass the saving directly on to the County.
Phase I ESA	Should these services not be required by the County, HUNT will pass the saving directly on to the County.

Legal Ad
Sun Gazette
To Be Run: July 30th and August 3rd

NOTICE TO BIDDERS

ADDENDUM NO. 1 RFP FOR ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE

The additions and/or deletions contained in this Addendum shall be made a part of the plans and specifications and contract documents for the above-referenced solicitation, and shall be subject to all applicable requirements thereunder, as if originally shown and/or specified. In case of any conflict between the specifications, and this Addendum, this Addendum shall govern.

This Addendum must be returned with your bid as acknowledgment of its receipt. Bidders may obtain the Addendum on the County website at www.lyco.org and Request for Bids.

The following modification is made to the text for the referenced solicitation:

The scope of the project has changed from one (1) tower site to two (2) tower sites, resulting in a number of changes to the RFP issued. Please see the following changes for the Lycoming County RFP for E&S services.

1. Change from “Hughesville Water Authority Tower Site” to “Hughesville Water Authority Tower Site and Hesker Hill Tower Site: (1) on the cover page, (2) on Notice to Bidders page 1-1, second paragraph, and (3) on Section 2, page 2-2, paragraph 2.9, third line.

2. Change to Scope of Work & Technical Specifications, Introduction, page 5-1 is as follows:

Lycoming County is currently upgrading our existing radio system to better serve the residents, businesses, tourists and public safety agencies of the county. In order to achieve the overall plan, Lycoming County will be contracting for the construction of two (2) raw lands to finish tower sites to improve RF coverage for our first responders. Additionally, on the one site, a second plot of land is to be cleared for the water authority to use (no further development of the second plot is required).

3. Changes to Scope of Work & Technical Specifications, General Requirements, item 1, page 5-1 are as follows:

1. The names and locations of the two (2) new proposed tower sites are:

- a. Hughesville Water Authority tower site
 - i. Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
 - ii. Street address: 279 Reservoir Road, Hughesville, PA
 - iii. Township: Wolf
 - iv. County: Lycoming
 - v. Size of site plot: 100'x100'
 - vi. Height of tower: 250'

Hughesville Water Authority land which is to be cleared (not developed) for water authority use is:

- i. Street address: 279 Reservoir Road, Hughesville, PA
- ii. Township: Wolf
- iii. County: Lycoming
- iv. Approximate size of plot to be cleared for the water authority: 100'x100'

b. Hesker Hill tower site

- i. Latitude: 41-14-19.1 N, longitude: 77-14-35.1W
- ii. Street address: 1324 Hesker Hill Road, Jersey Shore, PA
- iii. Township: Piatt
- iv. County: Lycoming
- v. Size of site plot: 75'x75'
- vi. Height of tower: 250'

The County will be responsible for procurement of site and leasing of property.

4. Change to Mandatory Site Walk on Notice to Bidders, page 1-1, paragraph 4 is as follows:

A mandatory site walk will be held on Wednesday, August 5, 2020, at 10:00 AM for the two (2) tower sites, starting at the Hughesville Water Authority site located at 279 Reservoir Road, Hughesville, PA.

5. Change to Price Proposal, section 6.1 Cost Elements is as follows:

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final	


Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	
Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HUGHESVILLE	

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	

Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HESKER HILL	
GRAND TOTAL FOR BOTH SITES	

A C K N O W L E D G E M E N T

I hereby acknowledge receipt of this Addendum for the above noted project.

Signature 

Date 8/20/2020

Professional consulting services for

**Proposed Hughesville Water Authority and
Hesker Hill Towers
Site Engineering and Surveying Services**

Lycoming County Controller's Office
Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

20 August 2020

Proposal provided by

**Mead
& Hunt**



Mead & Hunt, Inc.
M & H Architecture, Inc.
400 Tracy Way, Suite 200
Charleston, West Virginia 25311
304-315-6712
meadhunt.com

20 August 2020

Lycoming County Controller's Office
Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

RE: RFP for Engineering and Surveying Services for Hughesville Water Authority
Tower Site and Hesker Hill Tower Sites
Two proposed towers in Lycoming County

Dear Commissioners:

Mead & Hunt, Inc., is submitting a quotation package for engineering and surveying tower services for the proposed 250-foot SST near Hughesville, survey and grading at the water tank, and proposed 250-ft SST near Larrysville, per the RFP, site walk, Addendum, and four sets of questions/answers. Our team has been working in the telecommunications arena since 1999 within the PA-OH-MD-KY-WV-VA-MD region. Mead & Hunt has historically provided these services to various carriers, as noted in **Appendix E-Tables 1 and 2**.

As requested, pricing has been included in a sealed envelope within the sealed bid envelop. Mead & Hunt will meet the FCC/FAA and state requirements for clearances and specifications. This package is specific to the surveying, tower design work for foundation and tower pricing, geotechnical investigation of the soils, and environmental permitting for FCC, which will include the Phase I ESA and NEPA reports.

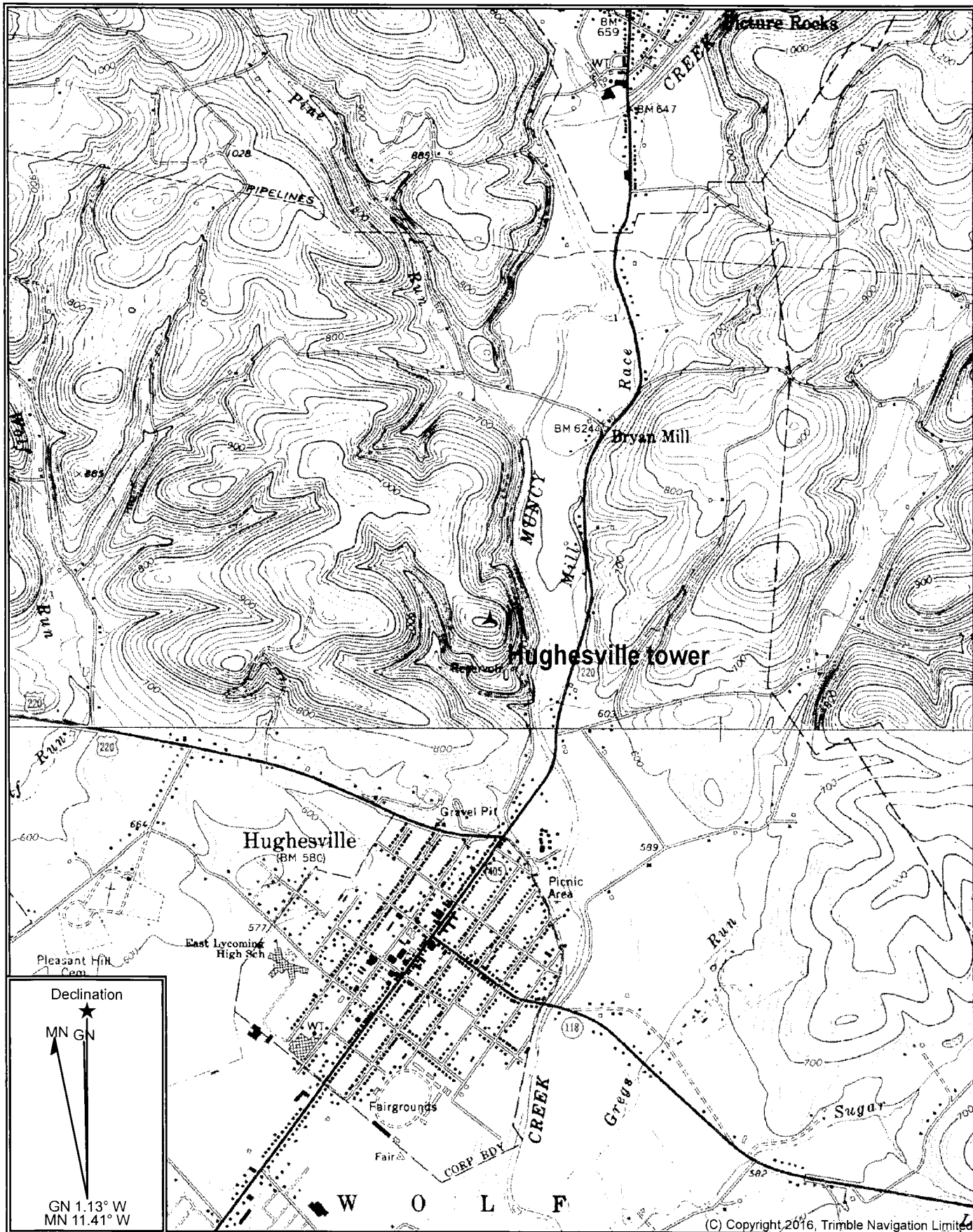
Attached are the Engineering, Surveying, Geotechnical and Environmental scope of work, references, resumes of key personnel, and our qualification sheets associated with the section in the RFP.

If you have questions, feel free to call me at 304-553-8103, or email at curtis.paxton@meadhunt.com. Thank you for your attention.

Sincerely,

Curtis G. Paxton

VP / Telecommunication Engineering Department Manager

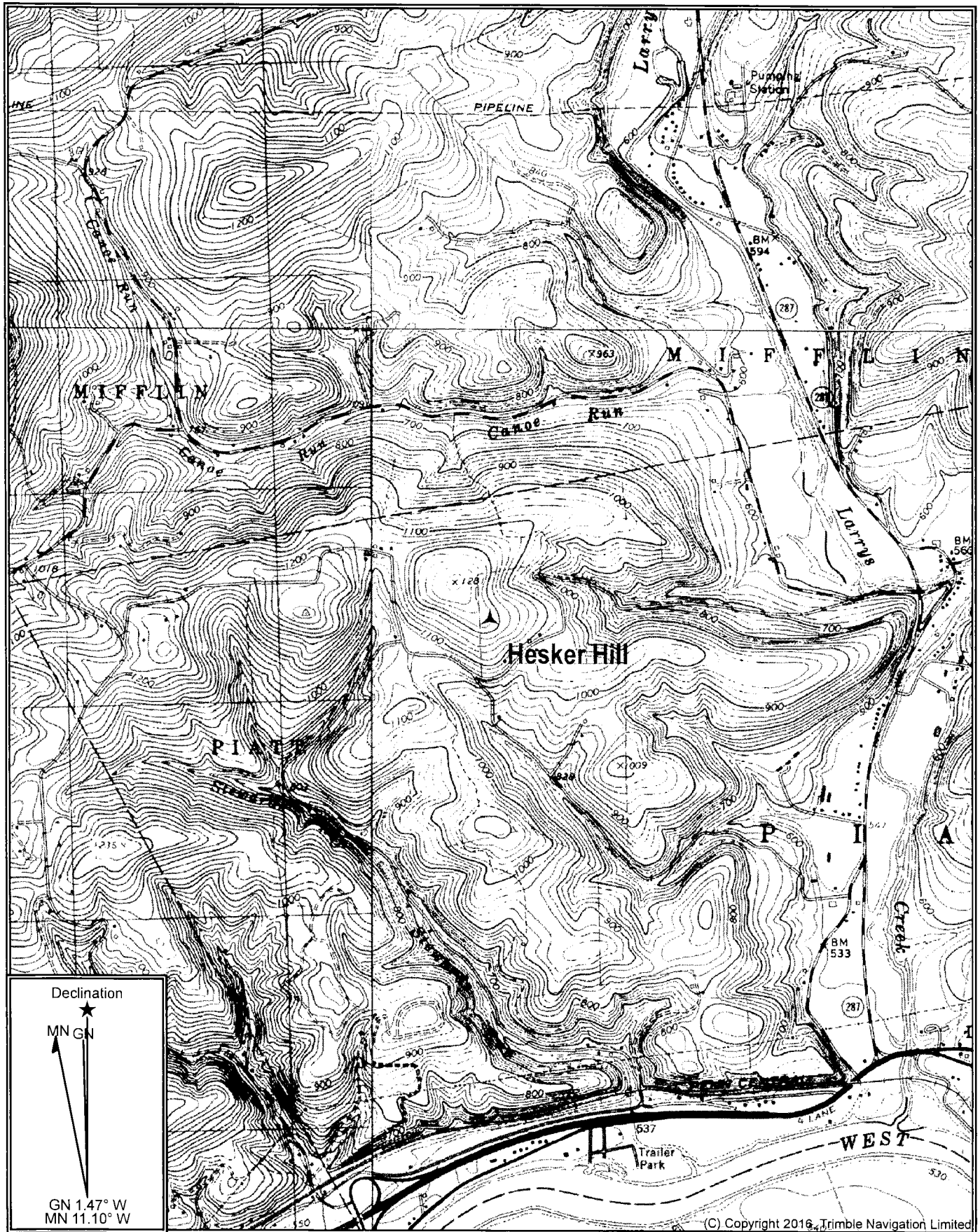


(C) Copyright, 2016, Trimble Navigation Limited

Map Name: PICTURE ROCKS
 State Name: PA

Print Date: 08/20/20
 Scale: 1 inch = 2,000 ft.

Horizontal Datum: NAD83
 Date Published: Jan 1, 1983



(C) Copyright 2016, Trimble Navigation Limited

Map Name: LINDEN
State Name: PA

Print Date: 08/20/20
Scale: 1 inch = 2,000 ft.

Horizontal Datum: NAD83
Date Published: Jan 1, 1973

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1. Proposal Form
2. Engineering and Surveying Services Tower Scope of Work
3. General Terms & Conditions (Section 3 of RFP); Contract Terms & Conditions (Section 4 of RFP); and Non-Collusion Affidavit (Section 8 of RFP); Exception Form
4. Engineering and Environmental Services Specifications
 - Project Timeline for Hughesville
 - Project Timeline for Hesker Hill
 - References
 - Organization Chart
 - West Virginia 911 experience table
 - Non-911 PA-OH-MD tower experience table
 - Key Resumes
 - Tower Qualifications
5. Pricing Proposal (in separate sealed envelope)

Appendix 1
Proposal Form

PROPOSAL FORM

Important note to Bidders:

It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to:

Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 20, 20 20. **This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: Mead & Hunt, Inc.

Company Address: 400 Tracy Way, Suite 200
Charleston, WV 25311

Main Telephone: 304-553-8103 Main Fax: 304-345-6714

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Curtis Paxton, Vice President

Contact Telephone: 304-553-8103 Fax: 304-345-6714

Contact Email: curtis.paxton@meadhunt.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Curtis Paxton, Vice President

Office Address: 400 Tracy Way, Suite 200
Charleston, WV 25311

Telephone: 304-553-8103 Fax: 304-345-6714

Email: curtis.paxton@meadhunt.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	<u>1</u>	Date	<u>7/30/2020</u>
Addendum No	<u> </u>	Date	<u> </u>
Addendum No	<u> </u>	Date	<u> </u>
Addendum No	<u> </u>	Date	<u> </u>

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

Company Type (check one):

- Sole Proprietorship
 Partnership
 Corporation
 Joint Venture

Bidder attests that:

- 1. He/she has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements;
- 2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor and material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

<u>Mead & Hunt, Inc.</u>		<u>39-0793822</u>		
Company Name		Federal ID#		
<u>400 Tracy Way, Suite 200</u>		<u>Charleston</u>	<u>WV</u>	<u>25311</u>
Street Address	PO Box	City	State	Zip
<u>304-553-8103</u>		<u>304-345-6714</u>		
Telephone #		Fax #		

WITNESS:

Janet Hughes
Signature (see below)
Janet HUGHES
Name (print)
OFFICE COORDINATOR
Title (print)

COMPANY:

Curtis Paxton
Signature (see below)
Curtis Paxton
Name (print)
VP - Department Manager Telecom
Title (print)

Appendix 2

Engineering and Surveying Services Tower Scope of Work

A&E Scope of Work

The following architectural and engineering (A&E) services are typically provided for a routine telecommunications tower project.

1. Site Walk

The site walk kicks off A&E and Environmental services. A surveyor meets the site contact at the location and they discuss access, utilities, compound size, tower type and height, compound layout, and constructability issues. A hand-drawn site sketch and field notes are prepared while a GPS coordinate is being obtained.

2. 1A

From the GPS data collected at the site, a 1A certification letter is prepared, reviewed, and stamped by a licensed surveyor. This document begins the process for the environmental work and also for any FAA filings.

3. Survey

A surveyor crew returns to the site once the client has approved the 1A and begins to survey the property corners, access road, utility corridors, layout the center of the tower, and lease corners of the compound. A benchmark is set and all points are logged into a GPS unit.

4. Preliminary Construction Drawings (PCDs)

The surveyor's data is entered into a system and compiled so that the CAD technicians can produce a full set of preliminary construction drawings. These include but are not limited to the following sheets: title; survey with lease information; existing conditions; site plan; multiple grading plans with erosion and sediment controls; tower elevation with any antennae or microwave dish azimuths, etc.; compound specifications; fencing, electrical, telco, and other specifications; and miscellaneous detail sheets for the contractor. Following a review by an engineer, the PCDs are electronically provided to the client for review and comments.

5. Geotechnical

a) Geotechnical Investigation

A preliminary review of publicly available geologic maps indicates that the site is located in the Lock Haven Rock formation. In addition, the well data adjacent to the project site indicates that bedrock is expected to be within 20 feet of the ground surface. Accordingly, Tetra Tech has developed an investigation approach that includes desktop

2. NEPA Checklist

The National Environmental Policy Act (NEPA) requires federal agencies to consider the environmental impacts of their proposed actions and reasonable alternatives to those actions. To fulfill this mandate, the Federal Communications Commission (FCC) adopted its NEPA rules (47 CFR. §1.1307), which identify eight (8) specific areas of the environment that must be reviewed to determine if a communications facility may have an adverse impact upon the environment.

Mead & Hunt will perform the NEPA review. Professional assessments are required to evaluate the presence of and possible impact on listed or proposed threatened or endangered species and designated critical habitats within the action area of a facility, the presence of and possible impact on federally listed or eligible for listing historic properties, and the impact of the facility on surface features. Mead & Hunt will also review the other NEPA categories, i.e. location of officially designated wilderness areas, officially designated wildlife preserves, and floodplains. The U.S. Secretary of the Interior describes the qualifications to conduct a historic review. Mead & Hunt utilizes personnel who meet the DOI's criteria for archaeology and architectural historians.

a) Officially Designated Wilderness Area

In order to make this determination, possible reviews would include available street directories; United States Geological Survey (USGS) topographic maps; maps and publications available from the National Park Service (NPS), United States Fish and Wildlife Services (USFWS), Bureau of Land Management (BLM), etc.; and review of the National Wilderness Preservation System database of the United States Wilderness Preservation System, or as needed by the qualified environmental professional to adequately certify the "no" response.

b) Officially Designated Wildlife Preserve

In order to make this determination, possible review would include available street maps, USGS maps, and information obtained from the USFWS to determine if the site is located within or adjacent to a designated National Wildlife Refuge (NWR), or as needed by the qualified environmental professional to adequately certify the "no" response.

c) Listed Endangered and Threatened Species or Designated Critical Habitats

Section 7 of the Endangered Species Act (Act) of 1973 (16 U.S.C. §§1536) directs federal agencies to utilize their authorities in furtherance of the purposes of the Act by carrying out programs for the conservation of listed species or designated critical habitats. In addition, Section 7 of the Act sets out the consultation process, which is further implemented by Title 50 of the Code of Federal Regulations (50 CFR §402).

Mead & Hunt will determine whether any listed or proposed threatened or endangered species or designated or proposed critical habitats are present in the “action area” of the tower. The Endangered Species Act defines the “action area” as comprised of all areas to be affected, directly or indirectly, by the facility, such as the site of the facility, its immediate vicinity, and any roads to be constructed to the facility (refer to 50 CFR§402.02(d)). If present in the action area, it will be determined if the existing tower, in fact, has an adverse impact on the species or habitat. If not present in the action area, no adverse impact exists.

To achieve this review, Mead & Hunt will seek review from the USFWS and PNDIH – Wildlife Programs. As appropriate, the NEPA report will conclude that the tower does not have an adverse impact on threatened and endangered species and designated critical habitats.

d) Districts, Sites, Buildings, Structures, or Objects, Significant in American History, Architecture, Archaeology, Engineering or Culture

Section 106 of the National Historic Preservation Act of 1966 (NHPA, 16 U.S.C. §§ 470 et seq.) and its implementing regulations, “Protection of Historic Properties” (36 CFR Part 800), require federal agencies to consider the effects of their undertakings on historic properties. Through the FCC guidelines issued in the Nationwide Programmatic Agreement for the Collocation of Wireless Antennas on March 16, 2001, and the subsequent Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the Federal Communications Commission, issued in September 2004, an assessment will be made to determine if the site adversely affects a historic and/or archaeological property.

Mead & Hunt will determine whether a historic property is present within the Area of Potential Effects (“APE”) of the proposed tower. If a historic property is present within the APE or for any other reason and Mead & Hunt determines that the existing tower may significantly affect a historic property, it will be determined whether the tower, in fact, has an unmitigated significant adverse impact on the historic property.

As appropriate, the NEPA report will conclude that the tower does not have an adverse impact on historic and archaeological sites.

e) Indian Religious Sites

Tribal review for existing towers will be undertaken to meet compliance obligations under the FCC’s NEPA rules. Section 106 of the NHPA and its implementing regulations, “Protection of Historic Properties” (36 CFR Part 800), require consultation with Native American tribal groups regarding proposed projects and potential impacts to Native American religious sites. Federally-recognized Native American tribes, Alaska Native Villages, and Native Hawaiian Organizations (NHOs) will be contacted early in the process to ensure such tribes and NHOs have an opportunity to ascertain if the tower affects Native American tribal sites. If the

applicable PHMC requires communication with “interested parties” from any state list to satisfy PHMC consultation requirements, the environmental professional will follow those guidelines.

The results of the communication with the Native American tribal groups will be summarized within the NEPA summary report. As appropriate, the NEPA report will conclude that the tower does not have an adverse impact on Indian Religious Sites.

f) Flood Plain

To determine if the existing tower is located within a 100-year flood plain, review the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map (FIRM), and any additional review as needed by the qualified environmental professional to adequately certify the “no” response. The environmental professional will make every attempt to arrive at a definitive conclusion to determine if the site is located within a 100-year flood zone.

As appropriate, the NEPA report will conclude that the tower does not have an unmitigated significant adverse impact on the 100-Year Flood Plain.

g) Construction Will Involve Significant Change in Surface Features (i.e. wetland fill, deforestation or water diversion)

Under the Clean Water Act (40 CFR § 230.3), wetlands are defined as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.” Potential wetlands under the jurisdiction of the United States Army Corps of Engineers (ACOE) include waterways, lakes, streams, and natural springs.

To determine if the tower location is located within an area that may impact wetlands, Mead & Hunt will review the National Wetlands Inventory (NWI) wetlands documentation for the area of the tower site. Further assessment will be made regarding the soil types, site conditions and types, and on-site water features, as needed by the environmental professional to determine if the site has an impact on wetlands and surface features. The NEPA will further address if deforestation or water diversion has occurred as a result of tower construction.

As appropriate, the NEPA report will conclude that the tower does not have an unmitigated significant adverse impact on Wetlands or Surface Features.

h) Antenna Towers and/or Supporting Structures That are to be Equipped with High Intensity White Lights

The heights of these towers will preclude the necessity for lighting. As appropriate, the NEPA report will conclude that the tower does not have an adverse impact on the environment.

i) RF Exposure

The client will ensure that all sites confirm to FCC MPE requirements.

3. NEPA Findings and Conclusions

If the above NEPA review demonstrates no “adverse impact” on the environment, then NEPA environmental clearance for the site has been obtained.

If the above NEPA review demonstrates an “adverse impact” on the environment, the next step depends on the nature of the environmental effect. Most likely the FCC will require an Environmental Assessment (EA) be prepared to document the steps taken to mitigate the adverse effect. The EA will be posted to the FCC national website for 30 days plus 10 days to review any comments received before a clearance can be obtained.

The NEPA report will include a narrative explaining the findings of the research conducted, as well as a NEPA Checklist. Radius maps, photographs, correspondence, responses, etc. to support the NEPA checklist responses will accompany the NEPA checklist. One hard copy of the NEPA checklist will be provided to the client contact. This document shall also be available to client in Adobe pdf file format.

4. ASR Notification and FAA Filing

On March 13, 2012, the Wireless Telecommunications Bureau (WTB) released a Final Programmatic Environmental Assessment (PEA). The Programmatic Environmental Assessment (PEA) is in response to a determination of the Court of Appeals for the District of Columbia Circuit in *American Bird Conservancy v. FCC*. The court found that the FCC had not adequately evaluated the potential effects that the Antenna Structure System (ASR) program has on threatened and endangered species and migratory birds.

The Final PEA includes various proposals to keep or revise the existing Antenna Structure Registration (ASR) program. Because WTB cannot choose for the Commission which proposal to select, the Final PEA does not include a Finding of No Significant Impact (FONSI). Instead, WTB intends to recommend to the Commission a further notice of proposed rulemaking to invite comment on what actions the Commission should take to comply with NEPA in light of the analysis in the Final PEA. At the conclusion of the rulemaking, based on the record that is developed, the Commission will either issue a FONSI or initiate further environmental processing.

The process involves publication of a legal notice in the local newspaper nearest the tower site; completion of the ASR notification application which includes the FAA Study date and number; posting on the FCC National Website for 30 days plus 10 days for any written comments; monitoring the website for any comments received; addressing any comments; and then certification of completion in order to obtain an ASR number.

Mead & Hunt will coordinate the FAA Airspace and Studies for the two towers. The FAA Study number will be utilized to complete the ASR filing, which will be completed by MCM Consulting Group, Inc per question set #4.

5. Wetland and Stream Delineation and Permitting

Mead & Hunt will evaluate site-specific wetland, stream, and other natural resources as noted during the site walks and through PNDI activities. If these items are noted during the site walks, then this information will be conveyed to the client and cost estimates based upon the attached hourly rate sheet will be provided to address the issues. Viable options to address these possible issues will be prepared and discussed with the client and Mead & Hunt will move forward with the decided approach. We are experienced in wetland and stream delineations and state permitting. Based upon a preliminary review of topographic and aerial mapping, there does not appear to be wetland or stream impacts for either tower site.

Appendix 3

General Terms & Conditions (Section 3 of RFP)
Contract Terms & Conditions (Section 4 of RFP)
Non-Collusion Affidavit (Section 8 of RFP)
Exception Form

SECTION 3

**GENERAL TERMS
AND
CONDITIONS**

3.1 Bidder's Certification. By submitting a proposal, the contractor is certifying that it and its Principals and/or subcontractors are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by the State of Pennsylvania or any Federal department or agency.

3.2 Use of Proposal Forms. Any and all documents required by the RFP that require a notarization must include the signature and seal of the notary public as required by the state in which the notary is commissioned. For those states that do not require an embossed notary seal, a Notarization Affidavit must be completed and submitted with the proposal. Proposals and required documentation submitted without the embossed seal and without the Notarization Affidavit, as applicable, may be rejected at the time of proposal opening.

For each line item offered, Bidders shall show both the unit price and extended price. In case of a discrepancy between the unit price and extended price, the unit price will be presumed to be correct and the extended price shall be corrected accordingly.

3.3 Non-Collusion Affidavit. The County requires that a Non-collusion Affidavit be submitted with all proposals pursuant to its authority according to the Pennsylvania Antbid-Rigging Act, 62 Pa. C.S.A. §4501 et seq.

This Non-Collusion Affidavit must be executed by the member, officer, or employee of the Bidder who makes the final decision on prices and the amount quoted in the proposal.

Bid rigging and other efforts to restrain competition and the making of false sworn statements in connection with the submission of proposals are unlawful and may be subject to criminal prosecution. The person who signs the Affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the Bidder with responsibilities for the preparation, approval or submission of the proposal.

If a proposal is submitted by a joint venture, each party to the venture must be identified in the proposal documents, and a Non-Collusion Affidavit must be submitted separately on behalf of each party. The term "complementary bid" as used in the Affidavit has meaning commonly associated with that term in the bidding process, and includes the knowing submission of proposals higher than the proposal of another firm, any intentionally high or non-competitive proposal, and any form of proposal submitted for the purpose of giving a false appearance of competition.

Failure to file a Non-Collusion Affidavit in compliance with these instructions may result in disqualification of the proposal.

SECTION 4

**CONTRACT TERMS
AND
CONDITIONS**

- 4.1 **Agreement/Contract.** Upon acceptance and award of a Bidder's proposal, the contract between the Bidder and the County shall be drafted from (a) the RFP and addenda, (b) the selected proposal (response to the RFP by the Bidder) and any attachments thereto, and (c) all written communications between the County and the Bidder concerning the transactions. The contract shall constitute the entire and only agreement and shall supersede all prior negotiations, commitments, understandings, or agreements, whether oral or written.
- 4.2 **Execution of Contract.** The successful Bidder must execute a written contract with the County. If the successful Bidder fails or refuses to execute the formal contract within ten (10) days of the date of contract award, award of the contract shall be voided, and all obligations of the County in connection herewith shall be canceled.
- 4.3 **Contents of Contract.** The entire contents of this RFP shall become a part of the contract.
- 4.4 **Term of Contract.** The contract, which results from the award of this RFP, shall commence upon award and shall terminate on February 28, 2021.
- 4.5 **Option to Extend Contract Period.** The contract may be extended up to three (3) months at the bid pricing, provided mutual agreement by both parties in written form. This extension will be utilized only to prevent a lapse of contract coverage and only for the time necessary to issue and award a new Invitation to Bid, but not to exceed three (3) months.
- 4.6 **Option to Renew Contract.** This contract may be renewed for either a one, two, or three year term at the bid pricing by mutual agreement of both parties in written form.
- 4.7 **Pricing.** Bidders warrant the proposal price(s), terms and conditions stated in his/her proposal shall be firm for a period of 60 days from the date of the proposal opening. Once an award is made and a contract is in place, prices shall remain firm and fixed for the entire contract period. If the proposal includes price increases over the term of the contract, such increases must be clearly indicated in the Proposal Price Schedule. All proposal prices must include freight.
- 4.8 **Subcontracting.** The Contractor shall not subcontract any of its obligations under this contract without the County's prior written consent. In the event the County does consent in writing to a subcontracting arrangement, the Contractor shall be the prime contractor and shall remain fully responsible for performance of all obligations which it is required to perform under this contract.
- 4.9 **Payment.** The County will make payment within thirty (30) days of receipt invoice for properly received goods and services after inspection and acceptance of the material and/or work by the County. Advance billings are not allowed. Where partial delivery is made, invoice for such part shall be made upon delivery, and payment made within thirty (30) days under conditions as above.

If the Bidder's method of billing and payment is different than what is stated above, the Bidder must indicate the preferred method. The County will consider paying on a periodic basis as substantial portions of the work as performed, but not more than one time per month.

The County offers vendors the option to enroll in electronic payment via automated clearing house (ACH) to the vendor's provided bank account of record.

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal Hughesville Water Authority Tower site and Hesker Hill Tower site

State of Pennsylvania

County of Lycoming

I state that I am Vice President (Title) of Mead & Hunt, Inc. (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. Mead & Hunt, Inc. (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

Nothing follows

I state that Mead & Hunt, Inc. (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: Curtis Paxton

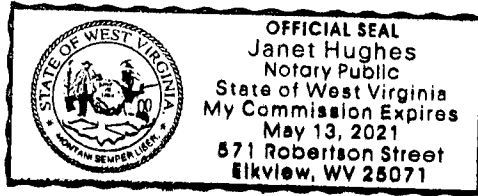
Signature: *Curtis Paxton*

Title Vice President

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 20th DAY
OF AUGUST, 20 20

Janet Hughes
Notary Public

My Commission Expires: 5-13-2021



Appendix 4

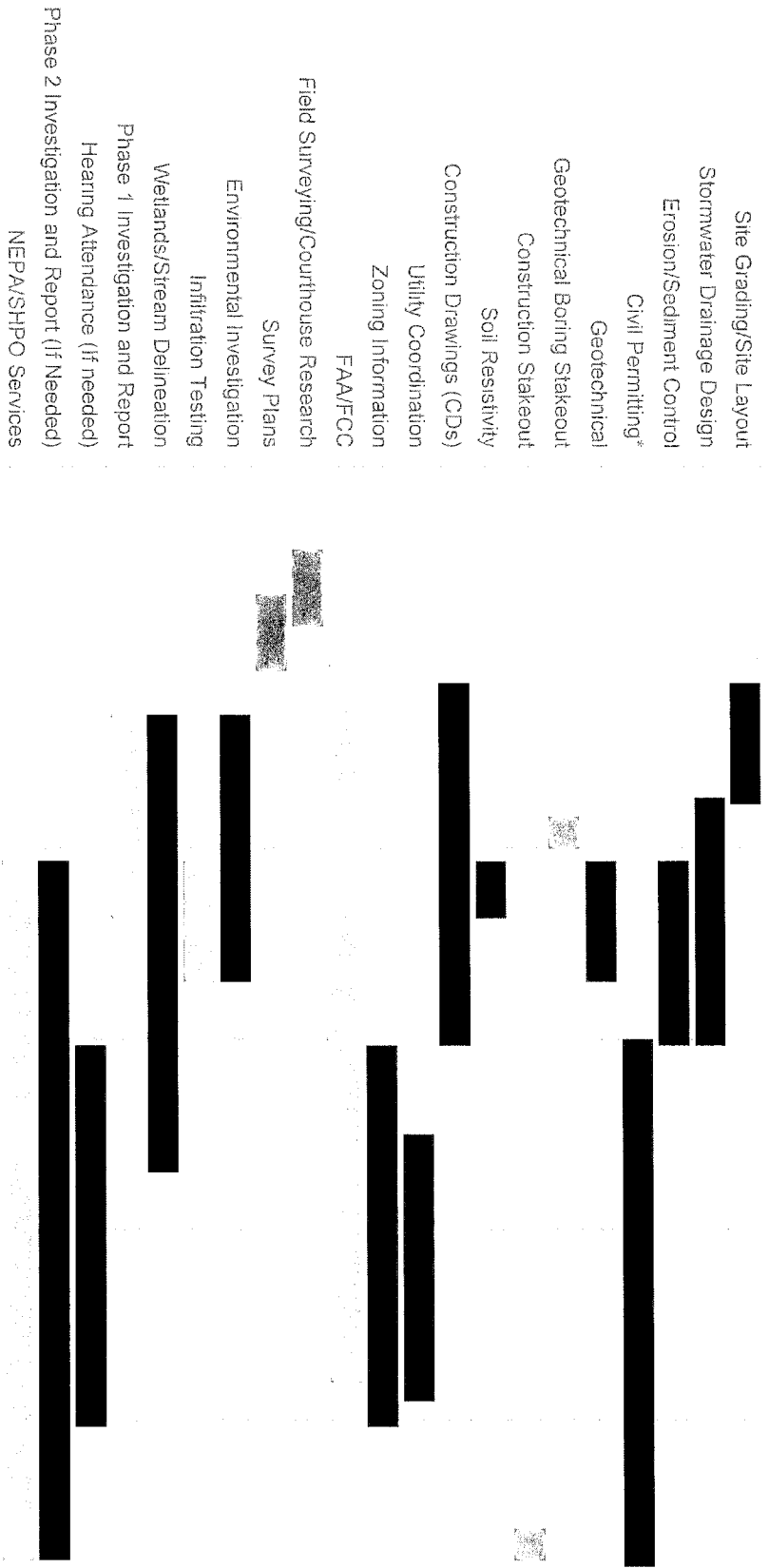
Engineering and Surveying Services Specifications

- Project Timeline for Hughesville
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- References
- Organization Chart
- West Virginia 911 experience table
- Non-911 PA-OH-MD tower experience table
- Key Resumes
- Tower Qualifications

PROJECT TIMELINE FOR HUGHESVILLE TOWER

1

Sep 1, 2020 Oct 1, 2020 Oct 31, 2020 Nov 30, 2020 Dec 30, 2020 Jan 29, 2021 Feb 28, 2021



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- 4.1 **Agreement/Contract.** Upon acceptance and award of a Bidder's proposal, the contract between the Bidder and the County shall be drafted from (a) the RFP and addenda, (b) the selected proposal (response to the RFP by the Bidder) and any attachments thereto, and (c) all written communications between the County and the Bidder concerning the transactions. The contract shall constitute the entire and only agreement and shall supersede all prior negotiations, commitments, understandings, or agreements, whether oral or written.
- 4.2 **Execution of Contract.** The successful Bidder must execute a written contract with the County. If the successful Bidder fails or refuses to execute the formal contract within ten (10) days of the date of contract award, award of the contract shall be voided, and all obligations of the County in connection herewith shall be canceled.
- 4.3 **Contents of Contract.** The entire contents of this RFP shall become a part of the contract.
- 4.4 **Term of Contract.** The contract, which results from the award of this RFP, shall commence upon award and shall terminate on February 28, 2021.
- 4.5 **Option to Extend Contract Period.** The contract may be extended up to three (3) months at the bid pricing, provided mutual agreement by both parties in written form. This extension will be utilized only to prevent a lapse of contract coverage and only for the time necessary to issue and award a new Invitation to Bid, but not to exceed three (3) months.
- 4.6 **Option to Renew Contract.** This contract may be renewed for either a one, two, or three year term at the bid pricing by mutual agreement of both parties in written form.
- 4.7 **Pricing.** Bidders warrant the proposal price(s), terms and conditions stated in his/her proposal shall be firm for a period of 60 days from the date of the proposal opening. Once an award is made and a contract is in place, prices shall remain firm and fixed for the entire contract period. If the proposal includes price increases over the term of the contract, such increases must be clearly indicated in the Proposal Price Schedule. All proposal prices must include freight.
- 4.8 **Subcontracting.** The Contractor shall not subcontract any of its obligations under this contract without the County's prior written consent. In the event the County does consent in writing to a subcontracting arrangement, the Contractor shall be the prime contractor and shall remain fully responsible for performance of all obligations which it is required to perform under this contract.
- 4.9 **Payment.** The County will make payment within thirty (30) days of receipt invoice for properly received goods and services after inspection and acceptance of the material and/or work by the County. Advance billings are not allowed. Where partial delivery is made, invoice for such part shall be made upon delivery, and payment made within thirty (30) days under conditions as above.

If the Bidder's method of billing and payment is different than what is stated above, the Bidder must indicate the preferred method. The County will consider paying on a periodic basis as substantial portions of the work as performed, but not more than one time per month.

The County offers vendors the option to enroll in electronic payment via automated clearing house (ACH) to the vendor's provided bank account of record.

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal Hughesville Water Authority Tower site and Hesker Hill Tower site

State of Pennsylvania

County of Lycoming

I state that I am Vice President (Title) of Mead & Hunt, Inc. (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. Mead & Hunt, Inc. (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

Nothing follows

I state that Mead & Hunt, Inc. (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: Curtis Paxton

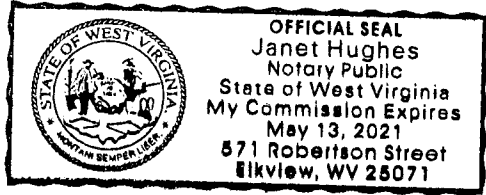
Signature: *Curtis Paxton*

Title Vice President

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 20th DAY
OF AUGUST, 20 20

Janet Hughes
Notary Public

My Commission Expires: 5-13-2021



Appendix 4

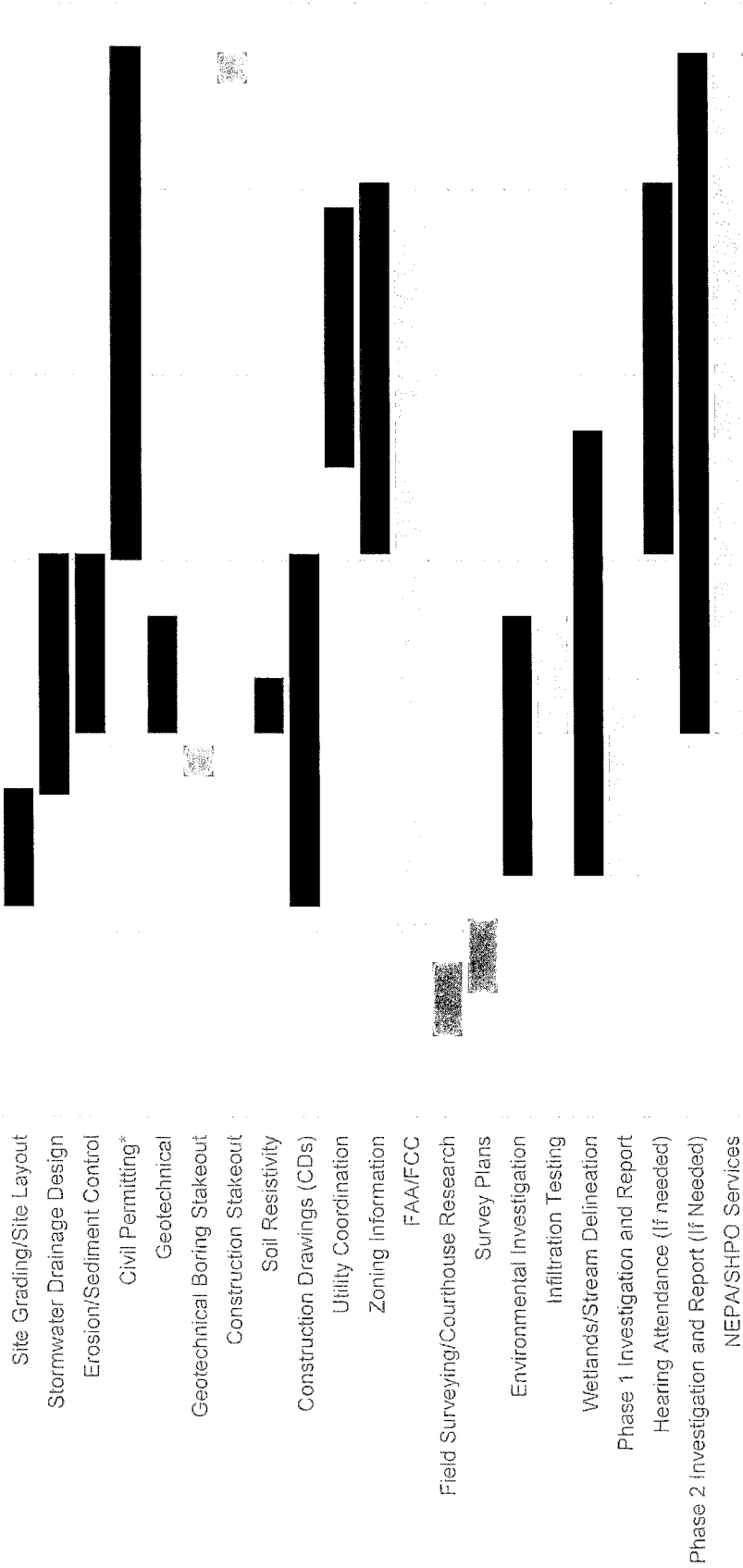
Engineering and Surveying Services Specifications

- Project Timeline for Hughesville
- Project Timeline for Hesker Hill
- References
- Organization Chart
- West Virginia 911 experience table
- Non-911 PA-OH-MD tower experience table
- Key Resumes
- Tower Qualifications

PROJECT TIMELINE FOR HUGHESVILLE TOWER

Sep 1, 2020 Oct 1, 2020 Oct 31, 2020 Nov 30, 2020 Dec 30, 2020 Jan 29, 2021 Feb 28, 2021

1



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PROJECT TIMELINE FOR HESKER HILL TOWER

Sep 1, 2020 Oct 1, 2020 Oct 31, 2020 Nov 30, 2020 Dec 30, 2020 Jan 29, 2021 Feb 28, 2021

1

- Site Grading/Site Layout
- Stormwater Drainage Design
- Erosion/Sediment Control
- Civil Permitting*
- Geotechnical
- Geotechnical Boring Stakeout
- Construction Stakeout
- Soil Resistivity
- Construction Drawings (CDs)
- Utility Coordination
- Zoning Information
- FAA/FCC
- Field Surveying/Courthouse Research
- Survey Plans
- Environmental Investigation
- Infiltration Testing
- Wetlands/Stream Delineation
- Phase 1 Investigation and Report
- Hearing Attendance (If needed)
- Phase 2 Investigation and Report (If Needed)
- NEPA/SHPO Services

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Mead & Hunt References

- Justin Gvoth, Verizon Wireless PA 412-496-6219
- Cindy Hart, Randolph County 911 304-636-0483
- Rick Woodyard, Wood County 911 304-420-0911
- John Dotson, Doddridge-Ritchie Co. 911 301-659-3770
- Chris Harris, Shentel 304-353-8917
- David McClure, Apex Towers, 304-256-6426
- Marion Dougherty, Premier Construction, 304-517-1261
- Mike Todorovich, 304-549-302
- Joe Gonzalez, 304-745-4842

Mead & Hunt, Inc. Team Organization Chart

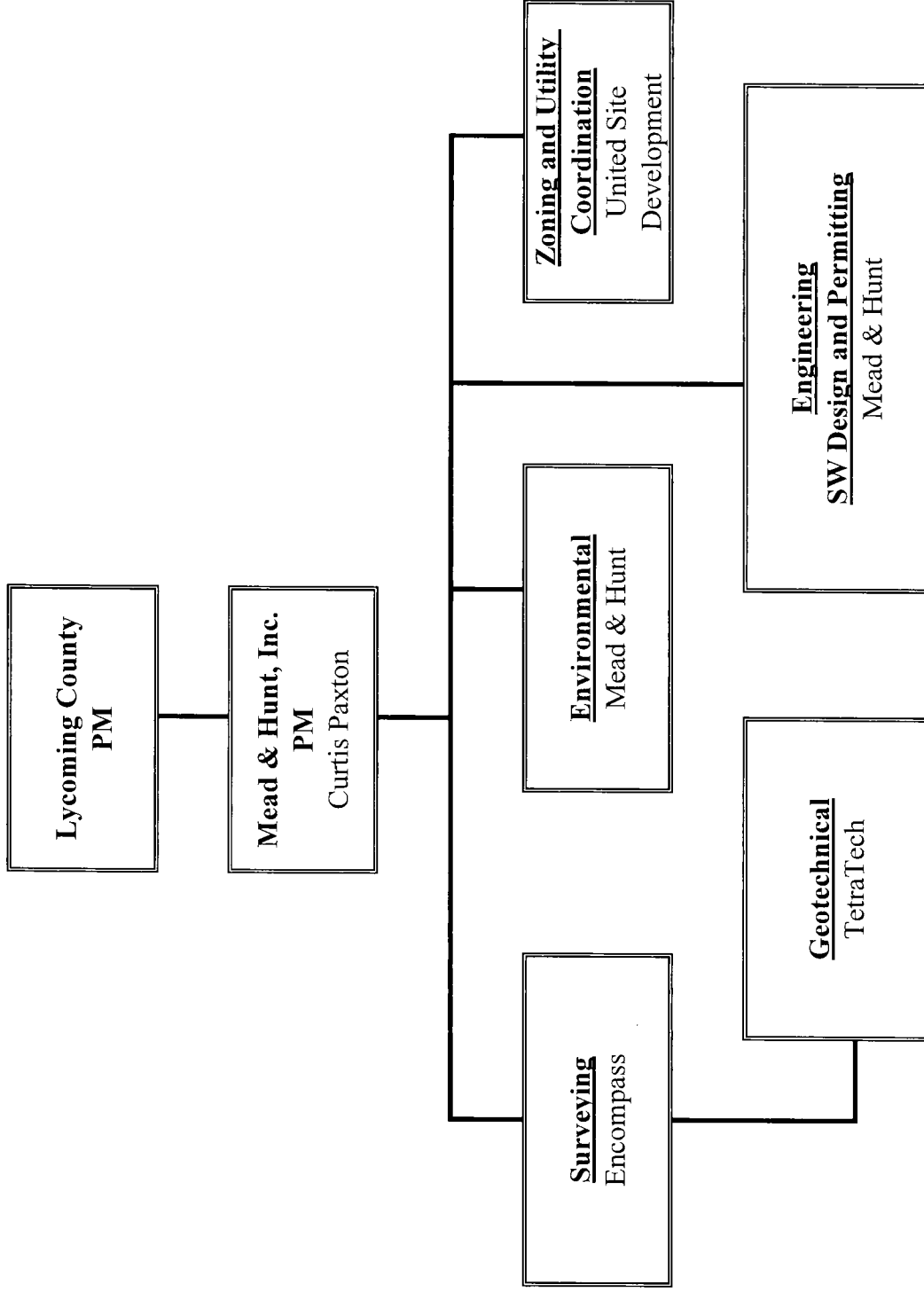


TABLE 1 - Mead & Hunt, Inc.
Previous State/County-Owned Towers - A&E and Environmental Services

County	Tower Name
Wood	Montgomery Hill
	Limestone Hill
Hardy	Wardensville
	Capon Springs
	Hardy Co 911
	Charlies Knob
Jackson	Sandyville
	Kenna
	Hargreave
	Flatwoods
Lincoln	Midkiff
	Harts
	Salt Rock
	Yawkey 1 and 2
Mineral	Fort Ashby
	Patterson Creek
Nicholas	Lone Tree
	Richwood
	Cottle Knob
Randolph	Point Mountain
	S. Rich Mountain/Beverly
	Bickle Knob
	Ware Ridge
Morgan	Berkeley Springs
	Purslane
Upshur	Cleveland Mountain
Webster	Hodam Mountain
Grant	911
	Mt. Storm
Fayette	911
	Glen Jean
	Thurmond
Lewis	911
	Weston
Preston	911
	Caddell Mountain
Ohio	Wheeling Courthouse
	Ohio Co. 911
	West Liberty 911
Wood	Belleville 911

County	Tower Name
Taylor	911
Mingo	Williamson
	Horsepen Mountain
Calhoun	Five Forks
Pendleton	Long Ridge
	Pendleton 911
	Cave Mountain
	Hunting Grounds
	North Mountain
	Catherines Knob
Pocahontas	Sharps Knob
	Snowshoe
	Gauley Mountain
Brooke	Weirton
Greenbrier	Greenbrier
Roane	Spencer
Mount Weather	
Kanawha	Yeager Guard
	Memorial Tunnel
	Paint Creek
	Capitol Complex
Wirt	Limestone 2
Berkeley	North Fork Mountain
McDowell	Welch
	Iaeger
	Carretta
Mercer	Elgood
	Windmill Gap
Marshall	Cameron
Tucker	Parsons
	911
Cabell	Barkers Ridge
Gilmer	Glenville
Harrison	Courthouse
	PK Tower
Raleigh	Lick Knob
Monongalia	Morgantown
Putnam	Confidence 911
Doddridge	Punkin Road 911
Wyoming	Twin Falls

**TABLE 2 - Non-911 Tower sites completed by Mead & Hunt
(PA-MD-OH MARKETS)**

Name
Hiller
Crafton South
Pleasant City
Sunnymeade
Grantsville West
Squaw Valley
Cuddy
Vega
Lattaville
Givens
Ball Knob
Harbor
Waterson
Dale
Myoma
Lake View Country Club
Emerickville
West Branch
Headland Road
Smith Corners
Pardus
Fountain
Mundys Corner
Monroe PA
Home Camp
Curtain Gap
Lycippus
Mount Joy
Deer Creek
Conway
Alice
Muse - Verizon 01
Fairhope
Savage - Verizon
Tyler Heights
Poplar Fork
Howards Fork
Hamilton TWP
Beaver Valley
Pleasant Union
Bear Lake
Estate Drive
Buffalo Creek
Clemtown Enviro
Mitcheltree Hollow Enviro
E & SC Plan
Rossmoyne Enviro
Mill Run Enviro
West Finley TWP
Simpson Store
Good Intent
East Finley
Beham
Ritter Park
Krouts Creek
Verizon Deep Creek
Somerset South
Sylvis
Mitcheltree Hollow

Name
Drifting
Crystal Springs (Motzer Property)
Mill Run
Elk Rock
Strawn (Tasker)
Williamson
Wayne
Union Run
Two Mile Creek
Twelve Pole Creek
Greenup
Crown Hill
Arcadia
Lockvale
Rossmoyne
Indiana Mall
Wellendorf Station
Clermont
Rixford
Rew
Bullis Mills
Meadowbrook
McHenry
Garrett Highway
Keyser Ridge
Grantsville
Evans Hill
Swissvale
Kaese Mill
Mud Lick Run
Grantsville East
Friendsville East
Grantsville West
Strawn
New German Road
Winding Ridge
Friendsville
Blooming Rose
Yellowhammer
Redclyffe
Kellettville
Fagundus
Beaver PA
Shafton
Jumonville
Hopwood
Ashville
Rockwood
Markleton
Hardensville
Compton
Salisbury
Beaverdale
Shanksville
Callimont
Delbarton
White Hill
Jordan
Cookman

Name
03030 Tenth Legion
03031 Lacey Springs
04222 York Downtown
05145 Penn Laird
05281 Altoona
07199 Gettysburg DT
10561 New Park
11678 Fort Indiantown Gap
13799 E. Chambersburg
13809 Mosby Road
13819 Cedar Haven WT
14575 Cousler Park
14576 Outdoor Country Club
14579 Annville
15142 Curtin Street
15361 Wister Street
15363 S. Dewberry Street
15379 United Methodist
15470 Dentsply
15470B Dentsply
16001 DT Mechanicsburg
16002 1 West Penn Street
16003 Wingate Drive
16004 Londonderry Road
16008 Robinwood
16399 Central Lebanon
16509 Scenery Drive
16525 Sheffler Drive
16526 Eastern Mennonite University
16528 Westfields
16531 Lebanon East
16541 Baker Heights
16566 New Kingstown
16567 West Fleet St.
16572 Oberlin
16573 N. Progress
16575 Lower Allen
16577 Windsor
16579 Skyline
16581 Lakeside
16582 Kutztown
16583 Sand Hill
16585 Fredericksburg WT
16586A Jonestown
16589 Hershey West
16593 Berkeley

CORPORATE PROFILE



**Mead
& Hunt**

EXPERIENCE EXCEPTIONAL

Mead & Hunt works nationally to deliver locally. Our highly skilled team of engineers, architects and planners partner with you to deliver innovative design solutions that help you achieve your goals. Our success is measured by your success. We are here to help you bring your vision to life.

WE ARE A NATIONAL, FULL-SERVICE ENGINEERING AND ARCHITECTURE FIRM.

"Mead & Hunt can successfully deliver projects of any size level or complexity. They are strong project managers and excellent communicators; they provide whatever resources are necessary to meet schedules and budgets."

— Derek Martin, AAE, (former)
Airport Director, Klamath Falls Airport



Teresa Schuller –
Environmental Services
400 Tracy Way, Suite 200
Charleston, West Virginia
681-313-4617
teresa.schuller@meadhunt.com

There's nothing like stability in an industry that boasts an ever-changing landscape. And it's often literally changing: earth, water, populations and regulations. Mead & Hunt's decades-long client relationships and roster of storied industry leaders proves the point. We care about people, we invest in relationships and we bring the best of who we are to bear on every client engagement.

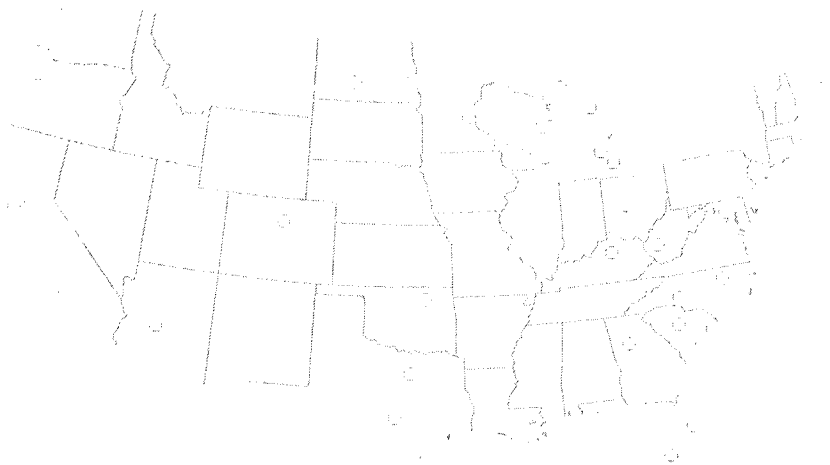
MARKETS WE SERVE

- Aviation
- Dams & Hydropower
- Developers
- Education
- Federal & State
- Food & Industrial
- Military
- Municipalities
- Renewable Energy
- Telecommunications
- Transportation
- Water Resources

SERVICES WE PROVIDE

- Air Service
- Architecture
- Construction Services
- Cultural Resources
- Engineering
- Environmental
- Information Technology
- Planning
- Program Management
- Sustainable Design
- Surveying

OFFICE LOCATIONS



meadhunt.com

WE ARE A NATIONAL, FULL-SERVICE ENGINEERING AND ARCHITECTURE FIRM.

BUILDING ENGINEERING

- Architecture
- Commissioning
- Communications
- Electrical
- Energy analysis
- Fire protection
- Heating, ventilating and air conditioning
- Instrumentation and controls
- Interior design
- Lighting
- Plumbing
- Security
- Structural engineering
- Technology

AVIATION

- Airfield engineering
- Airport planning
- Environmental services
- Air service consulting
- Program management
- Financial and business services
- Electrical engineering
- NAVAIDs and instrumentation
- Security systems
- Architecture – terminals, hangars, control towers and facilities
- Construction management

COMMUNICATIONS

- Agency coordination
- Public information meetings
- Public and media relations
- Website development
- 3-D imaging

CONSTRUCTION SERVICES

- Building commissioning
- Commercial and residential construction inspection
- LEED® certification
- Right-of-way coordination
- Surveying
- Transportation inspection
- Video pipe inspection
- CEI services
- Grant compliance

CULTURAL RESOURCES

- Archaeology management
- Architectural surveys
- Historic context development
- Historic landscape studies
- Historic property documentation (HABS/HAER)
- Historic Structures Reports
- Mitigation documents
- National Register Nominations
- Preservation plans
- Section 106 compliance

DAMS & HYDROPOWER

- Feasibility and project economics
- Regulatory
- Dam safety
- Hydro plant design
- Dam design
- Specialized consulting
- Dam removal
- Geotechnical

ENVIRONMENT

- Environmental Assessments (NEPA)
- Environmental Impact Reports (CEQA)
- Habitat assessment
- Planning
- Stream restoration
- Water quality sampling
- Wetlands mitigation design
- PFAS overview of investigations and regulatory compliance

FEDERAL PROGRAMS

- Master planning and project charrettes
- Utility privatization
- Cultural resources assessment and management of facilities
- Sustainment, Restoration and Modernization (SRM) and Military Construction (MILCON) studies

MUNICIPAL

- Land use planning
- Stormwater management
- Streets and bridges
- Traffic studies
- Utility coordination
- Wastewater treatment and collection systems
- Water system engineering

TELECOMMUNICATIONS

- Telecom services
- Wide Area Networks
- Telecommunications tower A/E services
- Tower Phase I ESA and FCC NEPA
- Permitting

TRANSPORTATION

- Bridges
- Construction engineering
- Environmental documentation
- Highway garages
- Historic preservation
- Program management
- Rest areas
- Street lighting
- Streets and highways
- Surveying
- Traffic engineering
- Transportation planning
- Weigh stations

URBAN PLANNING

- Downtown redevelopment
- Grant and loan applications
- Master plans
- Parks and recreation plans
- Residential, commercial, industrial and business developments
- Strategic plans
- Wetland assessments
- Zoning ordinances

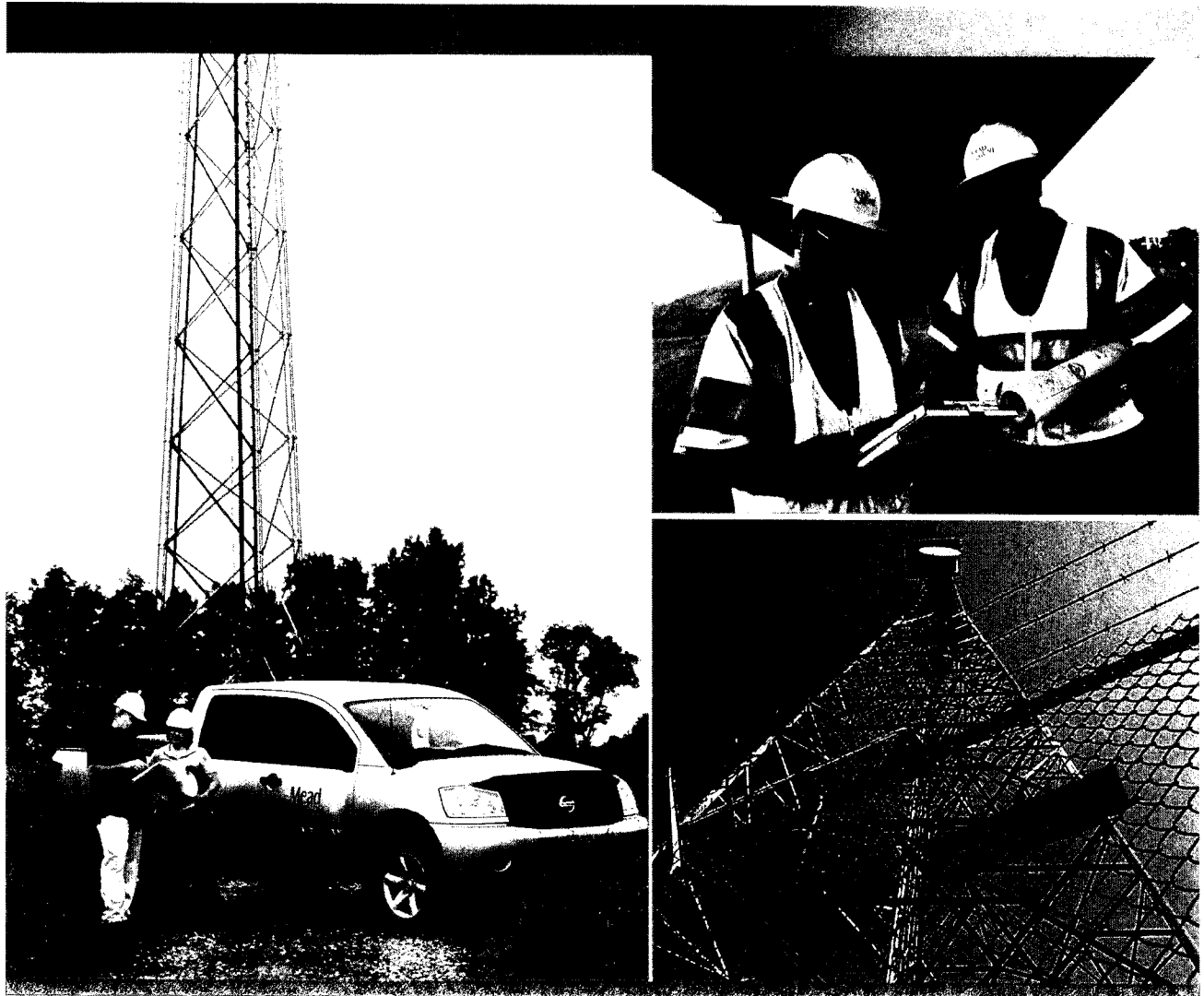
WATER RESOURCES

- Water infrastructure
- Flood risk reduction
- Hydrology and hydraulic analyses
- Regulatory compliance
- Geotechnical
- Ports and harbors

WATER & WASTEWATER

- Design-build for treatment systems
- Management and contract operations
- Training for facility operations and maintenance
- General consulting for operations and maintenance
- Comprehensive design services for water supply, treatment, distribution, storage and pumping
- Advanced wastewater treatment design

WIRELESS TELECOMMUNICATIONS



KEEPING THE LINES OF COMMUNICATION OPEN

At Mead & Hunt, our turn-key wireless services take your project from site design through start of construction. Our telecommunications professionals are experienced in new builds and upgrades. We'll help you navigate the permitting process and meet your project schedule.

With services including zoning, building permitting and all applicable state and federal approvals, Mead & Hunt staff has over 65 years experience in the wireless industry covering West Virginia, Pennsylvania, Maryland, Ohio, Virginia, North Carolina, South Carolina, Tennessee and Kentucky. This experienced staff is familiar with the "Fast Track Process" typical with wireless projects and can meet client's expectation for deliverables and timelines for new builds or upgrading existing facilities.

**Mead
& Hunt**



Mead & Hunt's wireless telecommunication services include:

- 1A certifications
- 2C certifications
- Site feasibility surveys
- Lease surveys
- Zoning drawings
- Photo simulations
- Construction drawings
- Co-location drawings
- Tower mapping
- Structural analysis
- Construction staking
- As-built surveys
- Geotechnical core borings
- Concrete testing
- Construction monitoring
- NEPA checklist
- Phase I/II ESAs
- THPO approval
- SHPO approval
- HLC negotiations/mitigation
- EA preparation
- Archaeology oversight
- Historic architecture oversight
- Storm water permitting (NOI & NPDES)
- Air permitting (diesel/gas generators)
- USACE permitting
- Co-location, packages and rooftop
- Wetland permitting
- Endangered species surveys
- National Forest permitting
- Erosion & sediment control

Curtis Paxton – A&E Services

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304-553-8103
curtis.paxton@meadhunt.com

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ENVIRONMENTAL



PROACTIVE PROTECTION FOR WHAT MATTERS MOST

As the demands on client personnel increase, Mead & Hunt is here to enhance your team by jointly developing creative solutions to meet your environmental goals. We have a thorough working knowledge of state and federal environmental permitting processes and regulations. Mead & Hunt works with our clients to meet their environmental challenges by providing scientists and engineers who are trained to address complex problems using innovative solutions. Our regulatory experience includes FCC, DOT, RCRA, CERCLA, CWA, CAA, Solid Waste, Brownfield, OSHA, and SARA Title III along with their respective state and local requirements. Our staff can provide regulatory interpretation and application, agency negotiations, due diligence in support of acquisitions/divestitures, and regulatory support.

SERVICES

- PFAS oversight for site investigations, action plans, regulatory levels, remediation alternatives
- Environmental Site Assessments (Phase I, II)
- Environmental Remediation (Phase III)
- Environmental Assessments/Impact Statements
- Brownsfield Redevelopment
- Telecommunications Tower Compliance
- NEPA Compliance/Documentation
- Storm Water (Multi-sector & construction Permitting, SWPPP, GPP)
- COE and State Permitting
- Groundwater monitoring and remediation
- Air Permitting (Tier II, Form R, Title V, Reg. 13, generators)
- Environmental permitting and report preparation
- Solid Waste Landfill Permitting (air and water)
- Wetland and Stream Investigations Oversight
- Asbestos & Lead Paint oversight and Management
- Archaeology and Historical Architecture Oversight

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**Mead
& Hunt**

meadhunt.com

CURTIS G. PAXTON
TELECOMMUNICATIONS DEPARTMENT MANAGER/SURVEYOR

Curtis Paxton leads a group of surveyors, engineers, scientists, and CADD personnel dedicated to Telecommunication clients. He also managed more than 3,000 telecommunications tower projects in West Virginia, Kentucky, Ohio, Pennsylvania, Maryland and Virginia. Curtis has served as survey manager and survey party crew chief on various surveys including boundary, ALTA/ACSM land title surveys, condemnation surveys, WVDOH design projects, GPS aerial control, topographical, construction and building layouts, wireless communications projects, sewer and waterline extensions, construction layout and topographic site surveys. Curtis has over 20 years of experience related to the surveying and AutoCAD field.

SURVEY/RIGHT-OF-WAY (WITH PROJECTS)

Curtis has served as survey manager and survey party crew chief on various projects throughout West Virginia for more than 24 years. His projects have included boundary, ALTA/ACSM land title surveys, condemnation surveys, WVDOH design projects, GPS aerial control, topographical, construction and building layouts, wireless communications projects, sewer and waterline extensions, construction layout and topographic site surveys. As an active participant in field collection and mapping, Curtis is skilled in using AutoCAD and MicroStation software to process data and prepare plats and base mapping. He uses the latest surveying methods, including Real Time Kinematic GPS and Robotic Total Stations. He routinely performs topographic, utility and right-of-way surveys as well as survey calculations. Curtis has served as survey party crew chief, project manager and survey manager on a variety of bridge design projects such as the Hartland Bridge in Clay County; the Leon Bridge in Mason County; and the Gerald R. Freeman Bridge in Braxton County.

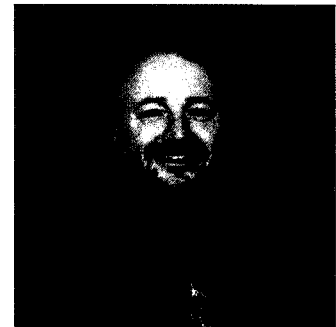
RELATED PROJECTS

State of West Virginia Executive Office BTOP Broadband Grant #2672
A&E Services
West Virginia

Curtis managed the A&E work for the State of West Virginia Broadband grant from the NTIA. The grant amount is \$126 million to provide 12 new telecommunication towers to the Homeland Security Network (microwave) and 1,000 miles of fiber to add broadband service to 1,064 anchor tenants (schools, hospitals, libraries, etc.). The work involved the 1A/2C letters, site survey, site design with grading and permitting, construction drawings, geotechnical work oversight, as-built survey and drawings, DOH and other permitting, and assistance to the State's Project Manager. The work began in March 2010 and was completed in 2014.

Telecommunications Tower Siting
Various National and Regional Carriers
West Virginia, Virginia, Ohio, Kentucky, Maryland, Pennsylvania

Curtis managed more than 3,000 telecommunications tower siting projects. Tasks 1A/2C letters, site survey, site design with grading and permitting, construction drawings, geotechnical work oversight, as-built survey and drawings, DOH and other permitting,



Areas of Expertise

- Cellular tower site construction
- Cellular tower collocation surveys
- Roadway and bridge design surveys
- Site design surveys
- Transmission line surveys

Education

- High School Diploma, Spencer High School, 1991

Registration

- n/a

Memberships

- West Virginia Society of Professional Surveyors
- United States Army National Guard - Operation Iraqi Freedom

Past Employment

- Prine Land Surveying Aug 95-Aug 99
- TERRADON Corp., Aug 99-Dec -08

No. of Years With Mead & Hunt

- Hired 01/01/2011
- RPM 12/29/2008 (2.5 years)

No. of Years With Other Firms

- Fourteen

CURTIS G. PAXTON (CONTINUED)

Cellular Tower Site Construction and Collocation Surveys West Virginia

Curtis, as a project manager with 24 years of experience related to the site layout and construction drawing for various cell tower locations, managed projects such as:

- Verizon Wireless
- Bechtel Corporation
- Shentel (nTelos Wireless)
- Highland Cellular
- APEX (Highland Tower)
- SBA Communications
- Cellular One
- Crown Castle International
- Everclear Communications
- Pegasus Tower
- Divine Tower International
- Nextel Partners
- Spectra Site
- American Tower
- WV Wireless
- Clear Shot Wireless
- Strategic Communication Services
- Cingular
- AT&T Wireless
- Alexander Utility Engineering
- Sprint
- WV State and County 911 Towers
- American Cellular
- SAI Communications
- Black & Vetch
- Black Dot Wireless
- T- Mobile
- Paradigm Wireless
- Mountain State Wireless
- Andrew System Inc.
- US Cellular
- Wireless Resources
- Charter Association

Transmission Line Surveys

Curtis served as project manager for the site layout and easement plats for the Rocksprings Coal Company. The project extended approximately 3.7 miles.

Abandoned Mine Land Reclamation Design Surveys West Virginia Department of Environmental Protection (WVDEP) West Virginia

CURTIS G. PAXTON (CONTINUED)

Curtis, as a project manager on a variety of mine reclamation design projects for the WVDEP. Representative projects include:

- Hughes Creek (Burke-Quinn) Portals
- Trace Branch Refuse Pile
- MacArthur Subsidence Phase 2
- Little Whitestick Creek Refuse Pile
- Little Daycamp Branch Refuse
- Montecarlo Complex
- Pierpont Refuse Pile
- Marsh Run Portals
- Broad Run Portals
- Bickmore Area Complex
- Amigo Portals
- Conley Branch (Whitt) Landslide
- Oldfield Branch (Hall) Drainage
- Vickers Branch (Butcher) Drainage
- Red Warrior Gob & Slide
- Switzer (Ellis) Drainage
- Cow Creek (Browning) Portals
- Bickmore Refuse #2
- Meadow Fork Open Portals
- East Lynn (Clark) Portals
- Ridgeview (Dunlap) Portals
- Glen Alum Complex
- Crany Mine Dump
- Oldhouse Branch Refuse Pile
- Landgraff Refuse Pile
- Triple A Coals
- Harvey Energy
- Royal Scot Minerals Robson (Cales) Drainage

Design Surveys

West Virginia Division of Highways (WVDOH)

West Virginia

Curtis served as survey party crew chief, project manager and survey manger on a variety of roadway and bridge design projects for the WVDOH. Representative projects include:

- East Huntington Bridge Survey, Cabell County, West Virginia
- WV Route 9 in Martinsburg, Berkley County, West Virginia
- Grade Road in Martinsburg, Berkley County, West Virginia
- Flowing Springs Road in Martinsburg, Berkley County, West Virginia
- Corridor G 6 lane upgrade in Charleston, Kanawha County, West Virginia
- Coalfields Expressway Design-Build, Mingo County, West Virginia
- Coalfields Expressway PPP, Mingo County, West Virginia
- Mill Creek Road, Fayette and Raleigh Counties, West Virginia

CURTIS G. PAXTON (CONTINUED)

- Glen Jean Lane, Fayette County, West Virginia

Bridge Surveys

West Virginia Division of Highways (WVDOH)

West Virginia

As survey party crew chief, project manager, and survey manger on a variety of bridge design projects for the West Virginia Division of Highways, Curtis worked on projects such as:

- Leon Bridge, Mason County, West Virginia
- Bartley Branch Bridge, McDowell County, West Virginia
- Hartland Bridge, Clay County, West Virginia, West Virginia
- Wellsburg Bridge Preliminary Plans, Brooke County, West Virginia
- Glade Creek Bridge Settlement Survey, Raleigh County, West Virginia
- John Blue Bridge, Hampshire County, West Virginia
- Gerald R. Freeman Bridge, Braxton County, West Virginia
- Bonham Bridge, Kanawha County, West Virginia
- Philippi Covered Bridge, Lewis County, West Virginia
- Edwight Truss Bridge, Raleigh County, West Virginia

Site Design Surveys

West Virginia

Curtis served as survey party crew chief and survey manager on a variety of site development and design projects for a variety of clients including:

- Thomas Memorial Hospital, South Charleston, West Virginia
- Greenbrier County Hospital, Lewisburg, West Virginia
- Gilbert Middle and High Schools, Mingo County, West Virginia
- Tri-State Greyhound Park, Kanawha County, West Virginia
- Doddridge County High School, Doddridge County, West Virginia
- Princeton Elementary School, Mercer County, West Virginia
- Summit Bechtel Family National Scout Reserve, Glen Jean, West Virginia
- Stonestreet Land Development, Cross Lanes, West Virginia
- Charleston Complex Access Utility Upgrades, Charleston, West Virginia
- The Ridge Leadership Tree Survey, Glen Jean, West Virginia
- Huntington Levee Survey, Huntington, West Virginia
- Fayette County Parking Tracts Survey, Glen Jean, West Virginia
- Gerace Deaerator Civil Project, Charleston, West Virginia■

TERESA SCHULLER, LRS SR. ENVIRONMENTAL PROJECT MANAGER

Teresa Schuller brings 37 years of experience in environmental research as well as state and consulting experience. As an analytical chemist, her research included organic and inorganic compounds' fate and degradation in soil, surface water, sediment and ground water. Teresa served as project management of multi-faceted domestic and international mergers and acquisition projects. She managed manuals preparation (pollution, prevention and control (PPC); spill, prevention, control and countermeasure (SPCC); spill response, ground water protection plan, etc.). Teresa conducted environmental and Occupational Safety and Health Administration training. She also managed more than 2,400 telecommunications tower siting projects in West Virginia, Kentucky, Ohio, Pennsylvania, Maryland and Virginia. Siting included Phase I Environmental Assessments (EA) and National Environmental Protection Agency (NEPA) compliance. Teresa prepared Regulation 13 air applications for various industries and Title V applications for landfill as well as tier II and III air submission for industries. She managed and prepared U.S. Army Corps of Engineers (USACE) permits for a variety of projects and assisted concrete and timber industries with storm water permitting and discharge monitoring report compliance. She was project manager for various general civil engineering projects and construction management projects. In addition, Teresa was responsible for permitting and construction management of housing authority redevelopment projects and an energy sector-compressor station. She possesses 14 years of experience in applicable risk assessment work conducting and managing over 100 various types of risk assessments for industry and Potentially Responsible Parties (PRP) committees. Teresa managed, prepared and defended Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource and Conservation Recovery Act (RCRA) risk assessments.

RELATED PROJECTS

State of West Virginia Executive Office BTOP Broadband Grant #2672 NEPA, EA, FONSI West Virginia

Teresa managed the environmental work for the State of West Virginia Broadband grant from the NTIA. The grant amount is \$126 million to provide 12 new telecommunication towers to the Homeland Security Network (microwave) and 1,000 miles of fiber to add broadband service to 1,064 anchor tenants (schools, hospitals, libraries, etc.). The work involved the preparation of an EA for the project with specialized negotiations with USFWS, WVDNR, National Forest Agency, SHPO, THPOs (Native American tribes), COE, and WVDEP to obtain clearance letters. The work began in March 2010 with the FONSI issued in February 2011. Teresa will also be responsible for approving fiber construction; tower construction; inspections of towers for E&SC measures; inspections of USFWS and WVDNR RTE species on fiber builds; modifications of the EA for project changes; and coordination with the State of West Virginia's project manager from 2011-2013. Maintenance of files and documents for federal audits are required.

Telecommunications Tower Siting Various National and Regional Carriers West Virginia, Virginia, Ohio, Kentucky, Maryland, Pennsylvania



Areas of Expertise

- Telecommunication towers
- NEPA and Phase I ESAs
- COE and state permitting
- Phase I and II ESAs
- Storm water permitting
- Air permitting
- Risk assessment
- Environmental research
- Analytical chemistry
- Project management

Education

- MS, Chemistry, West Chester University, 1983
- BS, Chemistry, Eastern Illinois University, 1979

Registration

- Licensed Remediation Specialist, West Virginia (LRS 174)

Memberships

- Western PA/WV AWMA
- VA Wireless Association
- PA Wireless Association

Credentials

- Continued education in specialized training and management courses
- ISO 9000 Quality Training
- OSHA 40 hour certification (HAZWOPER).
- OSHA HAZWOPER Instructor
- ODOT Waterways Permits Training Course 2016
- Project management training courses, including PSMJ
- ODOT's Managing the Environmental and Project Development Process Course 2010

Presentations

- AIA meeting – Environmental and Developer Issues Training Course

TERESA SCHULLER, LRS (CONTINUED)

Teresa managed more than 2,500 telecommunications tower siting projects. Tasks included Phase I Environmental Assessments (EAs), National Environmental Policy Act (NEPA) Checklists, NEPA, State Historic Preservation Offices, Tribal Historic Preservation Officers, United States Fish and Wildlife Services and State Department of Natural Resources Clearance Environmental Assessments, and Federal Communications Commission's clearances. The EAs followed a modified US ACOE report structure.

EA/FONSI for Mt Storm Tower WVDHHR

Grant County, West Virginia

Teresa managed and prepared an EA for a proposed 480-foot guyed tower to address migratory bird issues. Coordination with the State Ornithologist was necessary to evaluate potential bird kills. Following federal and local 30-day notices, FCC granted a FONSI to allow construction of the tower provided a modified lighting system was utilized.

FEMA EA/FONSI for Four Towers WV Division of Homeland Security Various Counties, West Virginia

Teresa managed and prepared a FEMA EAs for four proposed towers to meet FEMA grant funding requirements. Following federal and local 30-day notices, FEMA granted FONSI to allow construction of the towers.

Parking tract Steptoe & Johnson, PLLC Fayette County, West Virginia

Teresa managed the parking tracts project for the Boy Scout project. The work involved survey crews, archaeology surveys, and wetland delineations. Identified critical areas or habitats were avoided during the upgrade of the existing roadways and construction of parking lots. Future work may require submission of the cultural resource report and wetland delineation to obtain permitting for other land uses.

Environmental site assessment (ESA) Charter Associates, Inc. West Virginia

Teresa conducted Phase I ESAs for the purchase of 250- and 280-acre tracts of land in southern West Virginia.

Environmental Site Assessment (ESA) Cranberry Hardwoods, Inc. Fayette County, West Virginia

Teresa conducted Phases I and II ESAs for an 11,000-acre parcel and an 11-acre sawmill property as part of the purchase for the Boy Scouts of America project. She provided management of the field team, laboratory, driller and asbestos subcontractors. Teresa also provided oversight for soil remediation activities at this property.

Environmental Site Assessment (ESA) Charleston – Kanawha County Public Housing and Cabell County Housing Authority Charleston and Huntington, West Virginia

Past Employment

- TERRADON Corp. 1999-2009
- ERM, Inc. 1986-1998
- E.I. DuPont 1983-1986
- Illinois State Natural History Survey 1979-1981

No. of Years With Mead & Hunt

- Hired 01/01/2011
- RPM 02/23/2009

No. of Years With Other Firms

- 31

TERESA SCHULLER, LRS (CONTINUED)

Teresa conducted a multi-site Department of Housing and Urban Development (HUD) Phase I ESA for Charleston Public Housing. The Phase I ESAs were completed in conformance with the scope and limitations of the Veteran Affairs - Environmental Compliance Method and American Society for Testing and Materials Standard E1527-05.

She conducted an environmental evaluation and Phase I site assessment of a former school for the proposed Douglass Center retirement housing renovation project. The project was funded in part by HUD and involved analytical sampling for lead paint and asbestos throughout the three-story building. The analytical data and remediation recommendations were presented to the client in a report.

Site Assessments

Fortune 50 companies, banks, developers International, National and State Levels

Teresa served as manager and senior auditor for more than 1,500 property transfer/due diligence site assessments. Clients included major telecommunications companies, banks, public companies and industry.

Mergers and Acquisitions

Fortune 50 Companies International and National Locations

Teresa managed and conducted more than 300 multi-faceted domestic and international mergers and acquisition projects with Environmental Health and Safety compliance audits on tight schedules and budgets.

Wetland Permitting

Various West Virginia

Teresa managed wetland permitting (COE, WVDEP and WVDNR) and mitigation aspects of various size projects for commercial and residential developers. She also provides oversight for wetland specialists performing the field work.

Air Permitting

Industrial clients West Virginia, Virginia

Teresa performed Tier II and manufacturing Form R preparations; Regulation 13 air permitting for mobile units and facilities and minor modifications to Title V permit for several industrial clients.

NPDES Storm Water Permitting

Confidential clients West Virginia

Teresa prepared storm water sampling, analysis and discharge monitoring reports (DMR) preparation for several concrete and timber companies.

Title V Air Permit

Copper Ridge Landfill West Virginia

Teresa prepared and negotiated Title V air permit and compliance assistance for a new 106-acre solid waste landfill in southern West Virginia. ■

EMILY BUMGARNER, PE HYDRAULIC ENGINEER

Emily Bumgarner has 15 years of civil engineering, hydrology and hydraulic-related experience. As a hydraulic engineer, Emily has performed various duties associated with the preparation of plans, specifications and estimates for all drainage related design for various state highway projects including work in West Virginia, Michigan, Arkansas and Indiana.

Emily has completed four levels of training utilizing Rosgen's Methods for Natural Stream Design & Stream Relocation Mitigation. Other specific drainage design experience includes hydrologic procedures, pavement/deck drainage, inlet spacing computations, channels, culverts, storm drains, erosion and sediment control ponds, storm water management, hydraulic river analysis utilizing HEC-RAS, preparation of Hydrology and Hydraulics (H&H) reports, evaluation of scour at bridges, riprap design and flood routing procedures using HYDROCad software.

DRAINAGE AND PERMITTING (WITH PROJECTS)

Emily brings 15 years of hydrology and hydraulic related engineering experience to this contract. As a drainage engineer, Emily has performed various duties associated with PS&E preparation for drainage-related design on various state highway and bridge projects. Emily has completed four levels of training using Rosgen's Methods for Natural Stream Design and Stream Relocation Mitigation. Other specific drainage design experience includes hydrologic procedures, pavement/deck drainage, inlet spacing computations, channels, culverts, storm drains, erosion and sediment control ponds, stormwater management, hydraulic river analysis using HEC-RAS, preparation of hydrology and hydraulic reports, evaluation of scour at bridges, riprap design and flood routing procedures using HydroCAD software. Emily served as the lead drainage engineer for a three-mile section of US 522 in Berkeley County. The design included the incorporation of 17 sediment basins in a watershed closely monitored by various agencies due to the importance of water levels to local farmers. Emily has also provided hydraulic design for other WVDOH projects, including the two-mile upgrade of I-94 and US 31 Interchange in Barrien County and 1.5 miles of the King Coal Highway design in Mercer County, to name a few.

RELATED PROJECTS

Bridge Relocation, Colliers Way Bridge, 2013 West Virginia Division of Highways (WVDOH) Brooke/Hancock County, West Virginia

Emily provided the hydraulic design for this project that consisted of a bridge relocation on West Virginia State Route 105 over United States Route 22. The new bridge was a 225-foot-long, two-span steel plate girder bridge. This project involved the addition of a center left turn lane on the bridge along with left and right turn lanes on the various entrance and exit ramps for US-22. The project also presented unique challenges of keeping the proposed footprint within existing WVDOH right of way limits. Mead & Hunt won a 2013 WVDOH Engineering Excellence Award for this project. The project had a total construction cost of \$4.7 million.



Areas of Expertise

- Civil engineering hydrology
- Drainage design
- Highway design

Education

- MBA, Business Administration, Marshall University, 2002
- BS, Civil Engineering, West Virginia Institute of Technology, 1997

Registration

- Licensed Professional Engineer – West Virginia (#015611, 2003), Ohio (#71690, 2006)

Memberships

-

Credentials

-

Presentations

-

Past Employment

-

No. of Years With Mead & Hunt

- Hired 01/01/2011
- RPM 03/01/2006

No. of Years With Other Firms

- Eight

EMILY BUMGARNER, PE (CONTINUED)

Drainage Design, I-94 & US 31 Interchange Michigan Department of Transportation (MDOT) Berrien County, Michigan

Emily served as one of the lead drainage designers responsible for many aspects of design and plan development for the preliminary and final design of a 2.0-mile section of Interstate I-94 upgrading from a four- to six-lane segment. This project also included the drainage design of a 1.0-mile section of divided arterial traffic (US 31) and all drainage design for the full cloverleaf interchange of these two roads. This project consisted of two HEC-RAS models for separate county drains and one HEC-RAS model for a native trout stream with a zero tolerance increase in flow. This project also involved the design of several storm water management ponds (sediment basins), major and minor drainage, erosion and sediment control, permitting, coordination with various regulatory agencies and many other aspects. This project was completed while Emily was employed with another firm.

Drainage Design, US 522 West Virginia Division of Highways (WVDOH) Berkley County, West Virginia

Emily was lead hydraulic engineer for the preliminary and final drainage design of a three-mile section of divided arterial through a rolling terrain. This design included the incorporation of 17 sediment basins in a watershed closely monitored by various agencies due to the importance of water levels to local farmers. Other drainage tasks included the design of two concrete box culverts each over 100 feet in length, major culvert design and analysis (108 inch and above), minor drainage design, National Pollutant Discharge Elimination System (NPDES) permitting requirements, storm sewer and ditch design. This project was completed while Emily was employed with another firm.

Hydraulic Crossings, I-69 Hydraulic Analysis, 10 Mile Creek & Other Streams Arkansas State Highway and Transportation Department White, Jackson and Independence Counties, Arkansas

Emily worked as a design team member for the preliminary and final analysis of seven different hydraulic crossings for a proposed section of Interstate I-69 utilizing HEC-RAS. This project consisted of modeling existing and proposed conditions for various bridges and culverts. This project was completed while Emily was employed with another firm.

Drainage Design, King Coal Highway West Virginia Division of Highways (WVDOH) Mercer County, West Virginia

Emily served as lead hydraulic engineer for the preliminary and final design of a 1.5-mile section of divided arterial through a mountainous terrain. Tasks included sediment basin design utilizing HYDROCad software, major and minor culvert design, ditch design, NPDES permitting packages and various other drainage related tasks. This project was completed while Emily was employed with another firm.

Bridge Replacement, Gilliam Arch Bridge West Virginia Division of Highways (WVDOH) McDowell County, West Virginia

Emily was a drainage design team member for the preliminary and final design for the roadway portion of the bridge replacement. Tasks on this project included, but were not

EMILY BUMGARNER, PE (CONTINUED)

limited to, an HEC-RAS model of the creek, abutment rip-rap design, culvert design and preparing all NPDES permitting packages. This project was completed while Emily was employed with another firm.

Roadway Design, Corridor D West Virginia Division of Highways (WVDOH) Wood County, West Virginia

Emily was a design team member for the preliminary and final design of a 1.0-mile section of divided arterial and interchange including right-of-way and construction plan development. This section extended a new alignment in an urban setting through downtown Parkersburg, West Virginia. Tasks included quantity calculations, drainage design and various other plan preparation tasks. This project was completed while Emily was employed with another firm.

Traffic Design West Virginia Division of Highways (WVDOH) Various Counties, West Virginia

Emily worked as a design team member for various "in-house" maintenance of traffic (MOT) projects around the state as well as a quality assurance/quality control reviewer of consultant MOT plans. She also designed various impact attenuators on Interstate I-70 in Wheeling, West Virginia, and surrounding areas. This project was completed while Emily was employed with another firm.

Environmental Engineering, Arch of West Virginia Arch Coal, Inc. Rum Creek, West Virginia

Emily was the engineer responsible for planning and managing reclamation and remediation projects. She conducted quarterly spill prevention, control and countermeasure plan inspections. She also performed daily inspections of acid-mine drainage areas. This project was completed while Emily was employed with another firm. ■

CARL BOWYER, PE, PS PROJECT MANAGER

Carl Bowyer contributes 42 years of civil engineering experience which ranges from roadway and site design to proposal preparation and project management. Previously Carl served as an administrative section head at the West Virginia Division of Highways (WVDOH). In this position he managed and supervised the initial design section and was in charge of the study and development of preliminary design reports, preparation of contract fees, negotiations and contract agreements for Engineering and Architectural services for both State and Federal Highway projects. He has proven his expertise in roadway and drainage design, storm water detention system design, site grading, storm and sanitary sewer design, waterline analysis and design and development of construction drawings for transportation projects.

TELECOMMUNICATIONS

Carl is the Senior Project Engineer overseeing and reviewing the development of plans for upgrading existing tower facilities to the latest technology providing 3G and LTE services. He is also in charge of the co-location of new carriers and the construction of new tower sites including the access roads, utility easements, survey plats and construction documents associated with these projects. Carl is the principal licensed Engineer/Surveyor In-charge overseeing the final deliverables to clients such as Verizon, AT&T, Ntelos, Sprint, US Cellular, and T-Mobile in West Virginia, Virginia, Pennsylvania, Kentucky, Ohio and Maryland.

QA/QC (WVDOH FOCUS)

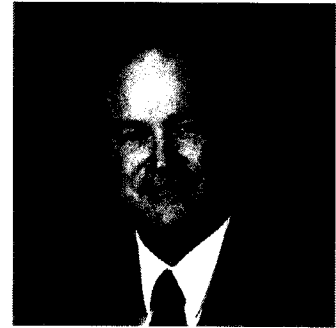
Carl contributes 42 years of civil engineering experience which ranges from roadway and site design to project management and quality assurance. Previously, Carl served as an administrative section head at the WVDOH. In this position, he managed and supervised the initial design section and oversaw the study and development of preliminary design reports, preparation of contract fees, negotiations and contract agreements for engineering and architectural services for both state and federal highway projects. He has proven expertise in roadway and drainage design, storm water detention system design, site grading, storm and sanitary sewer design, waterline analysis and design and development of construction drawings for transportation projects.

Carl's in-depth understanding of the WVDOH processes and procedures from both the client and consultant perspective provides him with a unique insight into your deliverable expectations. He utilizes a QC process that includes client-specific checklists for submittals as well as our own Mead & Hunt internal checklists and processes for plan design, cost estimation, checking and review. Carl will use this proven QC process to provide WVDOH with high-quality deliverables on schedule and within budget.

RELATED PROJECTS (WITH OTHER FIRMS)

Initial Design Section/Consultant Services Head West Virginia Department of Highways

This position was charged with preparing and maintaining related documentation leading to the successful negotiations and execution of agreements while assuring the



Areas of Expertise

- Roadway design
- Site design
- Project management
- Drainage design
- Stormwater management design
- Surveying

Education

- BS, Civil Engineering, West Virginia Institute of Technology, 1988
- AS, Drafting and Design, West Virginia Institute of Technology, 1976

Registration

- Licensed Professional Engineer – West Virginia (#11818), Maryland (#43096), Kentucky (#29163), Ohio (#PE77303), Pennsylvania (#PE080539), and Virginia (#0402051626)
- Licensed Professional Surveyor – West Virginia (#1058)

Memberships

- West Virginia Society of Professional Surveyors

Past Employment

- WVDOH

No. of Years with Mead & Hunt

- 05/01/2011

No. of Years with Other Firms

- 35

CARL BOWYER, PE, PS (CONTINUED)

adherence to State and Federal codes in accordance with the guidelines for Qualification-Based Selections.

Key Responsibilities included managing the daily operation of the Initial Design Section involving a staff of eleven (Five Professional Engineers, Two Transportation Technologists, a Technologist Enrollee, an Office Assistant and Secretary), preparing advertisements, conducting shortlist meetings, scheduling and conducting interviews, making recommendation for the selection of engineering and architectural services, reviewing engineer's estimates, negotiate fees, prepare agreements, and maintaining all documentation and maintaining databases for tracking the status of agreements, consultant qualifications and confidential information, consultant evaluations and preparing reports.

Agreement Unit Leader for Consultant Services West Virginia Department of Highways

Carl supervised and coordinated the work of highway engineers and technicians in the preparation of the scope of work, engineering estimates, proposal review, and negotiation of fees for entering into contract agreements for engineering and architectural services. Key Responsibilities included researching and collecting information in the preparation and development of scopes of work, preparing scopes of work notes and bold scopes of work meetings and preparing Engineer's Estimates and negotiating fees documenting the final results. Most notable achievement while holding this position was the successful negotiation of a \$10.3 million design fee for the design of the Blennerhassett Bridge spanning the Ohio River. In addition to this project, successful negotiations were held for the six-lane widening project on I-64 including eight dual structures and the design of the longest Concrete Segmental Span in the United States across the Kanawha River resulting in a design fee of \$13.7 million.

Project Manager for Consultant Design West Virginia Department of Highways

This position required the management, review, and oversight in the development and preparation of roadway, right-of-way, and bridge plans, and related contract documentation prepared for the construction of State and Federal projects in accordance with the WVDOT policies, procedures, and specifications for roads and bridges, by consulting firms. Key Responsibilities included oversight development and review for roadway, right-of-way and structure plans and specification; collectively putting together all documents for the delivery of Plans, Specifications and Estimate for letting and awarding for construction, preparing and holding progress meetings, maintaining project records, participating in public meetings, holding preliminary field and final office reviews for the purposes of maintaining and delivering the project on time and on budget. The most significant accomplishment was coordinating and managing the fast track development of the plans and specifications of the Harpers Ferry Bridge over the South Branch of the Potomac River designed by Modjeski & Masters bringing the plans and specifications together within nine months.

Site Plan Development for the Construction and Permitting for Cellular Telecommunication Towers and Colocation projects.

Carl is the Sr. Project Engineer managing, overseeing and reviewing the development of plans for up grading existing tower facilities to the latest technology providing LTE and 4G services, the co-location of new carriers, and the construction of new tower

CARL BOWYER, PE, PS (CONTINUED)

sites including the access road and utility easements and survey plats and construction documents associated with these projects. He is the principal licensed Engineer /Surveyor In-charge overseeing the final deliverables to the Clients since joining Mead & Hunt in 2011 serving the major telecommunication providers such as Verizon, AT&T, Shentel, US Cellular, and T-Mobile in WV, VA, PA, KY, OH and MD, completing 400 to 500 projects for construction per year. ■

TIMOTHY J. STARK

PRESIDENT
UNITED SITE DEVELOPMENT LLC

OBJECTIVE

To continue to provide the highest level of Site Acquisition services to our telecommunications clients, and to continue to grow the company year over year by offering Site Acquisition Services for macro sites, small cell, DAS, In-Building, and 4G and 5G modification sites.

SKILLS & ABILITIES

Proven ability to continually perform at a high level on client specific projects in the telecommunications field. Also documented site count of over 100+ sites worked every year for the last 19 years and continuing.

TIMOTHY J. STARK

258 Village Drive

Canonsburg, PA 15317

T 724-914-5069

E tstark@unitedsitedevelopment.com

www.unitedsitedevelopment.com

EXPERIENCE

UNITED SITE DEVELOPMENT LLC

CANONSBURG, PA

2014 TO CURRENT

-Timothy Stark handles the day to day operations for the company, and also acts as the project director and main client interface.

-managed over 100 telecom sites per year since the year 2000.

-manages the leasing, zoning, permitting, A&E, and environmental reporting process.

-along with traditional macro and mod site development, started DAS services offered to the industry

INDEPENDENT CONTRACTOR – TELECOMMUNICATIONS

CANONSBURG, PA

2004 TO 2014

-performed site acquisition services in over 18 states and 200 government jurisdictions

-performed both site acquisition services as well as construction management services

-conducted 100 plus fiber utility site visits and managed the fiber installation to cell site process

CROWN CASTLE AND SBA COMMUNICATIONS

2000 TO 2004

-learned the telecom industry from both the tower owner perspective and the client at the time (multiple national wireless carriers)

-worked on two projects that identified over \$5 mil of newly recognized tower owner revenue

-performed turn-key site acquisition on carrier new site builds, and modification sites for the 2G and 3G network enhancement projects.

EDUCATION

CALIFORNIA UNIVERSITY OF PENNSYLVANIA

BACHELOR'S DEGREE – BUSINESS

California, PA

-Belonged to the Business Marketing Club

-Played four years on the college rugby club

TIMOTHY J. STARK
PRESIDENT
UNITED SITE DEVELOPMENT LLC

GROUPS AND AFFILIATIONS

- Washington County Chamber of Commerce
- Young Professionals in Energy
- Pennsylvania Wireless Association
- Ohio Wireless Association
- Southpointe Chamber of Commerce
- PEC Safeland
- Avetta/PICS Certified Vendor

PROJECTS NOTABLE

- Completed over 200 LTE-modification sites for Verizon Wireless (2017-2018)

- Performed Site Acquisition for 20 Verizon Wireless special Chapter 30 initiative raw land build sites in Pennsylvania (2015)

- Completed a new site build (tower site) with the Arch Diocese Catholic Church in Ohio

TIMOTHY J. STARK

PRESIDENT

UNITED SITE DEVELOPMENT LLC

REFERENCES

Robert C. Evans
Verizon Wireless
Sr. Manager - Regulatory/Real Estate
18 Abele Road
Bridgeville, PA 15017
Cell: 412-215-3125

Justin Gvoth
Verizon Wireless
Engr III - RE/Regulatory Specialist
18 Abele Road
Bridgeville, PA 15017
Cell: 412-389-2021

Christopher Harris
Shentel Wireless
Real Estate – Manger
20 McJunkin Road
Unit B
Nitro, WV 25143
Cell: 304-415-1385

Curtis Paxton
Mead & Hunt Inc.
Telecom Department Manager
400 Tracy Way, Suite 400
Charleston, WV 24311
Cell: 304-553-8103

Joseph A. Cortese
Sittig Cortese LLC
Law Firm for outside legal Verizon Wireless
Suite 1500 Frick Building
437 Grant Street
Pittsburgh, PA 15219
Office: 412-402-4000

KATIE J. STARK

PROJECT MANAGER
UNITED SITE DEVELOPMENT LLC

OBJECTIVE

To continue to provide the highest level of Site Acquisition services to our telecommunications clients, and to continue to hone my skills as a project manager.

SKILLS & ABILITIES

Proven ability to manage over 100 site acquisition projects at one time, and to meet or exceed the clients' expectations for delivery schedule.

KATIE J. STARK

258 Village Drive

Canonsburg, PA 15317

T 412-217-1001

E kstark@unitedsitedevelopment.com

www.unitedsitedevelopment.com

EXPERIENCE

UNITED SITE DEVELOPMENT LLC CANONSBURG, PA

2014 TO CURRENT

-Katie Stark handles the zoning and permitting for all sites assigned to United Site Development LLC.

-performed site acquisition on the Verizon Wireless and Shentel Wireless projects in PA, OH, WV, MD, and KY.

-along with traditional macro and mod site development, performed services on DAS sites in Pittsburgh PA market.

INDEPENDENT CONTRACTOR – TELECOMMUNICATIONS CANONSBURG, PA

2011 TO 2014

-performed turn-key site acquisition services in 5 states and over 100 government jurisdictions

-was the lease landlord liaison for leasing efforts between the client and landlord representative

-performed site audits as well as lease audits for client

-worked with general contractors to obtain governmental jurisdiction permits for building and electrical permits

EDUCATION

CALIFORNIA UNIVERSITY OF PENNSYLVANIA

California, PA

GROUPS AND AFFILIATIONS

-Washington County Chamber of Commerce

-Young Professionals in Energy

-Pennsylvania Wireless Association

-Ohio Wireless Association

-Southpointe Chamber of Commerce

-PEC Safeland

-Avetta/PICS Certified Vendor

KATIE J. STARK

PROJECT MANAGER

UNITED SITE DEVELOPMENT LLC

PROJECTS NOTABLE

-Completed over 200 LTE-modification sites for Verizon Wireless (2017-2018)

-Performed Site Acquisition for 20 Verizon Wireless special Chapter 30 initiative raw land build sites in Pennsylvania

(2015)

-Completed a new site build (tower site) with the Arch Diocese Catholic Church in Ohio

REFERENCES

Robert C. Evans
Verizon Wireless
Sr. Manager - Regulatory/Real Estate
18 Abele Road
Bridgeville, PA 15017
Cell: 412-215-3125

Justin Gvoth
Verizon Wireless
Engr III - RE/Regulatory Specialist
18 Abele Road
Bridgeville, PA 15017
Cell: 412-389-2021

Christopher Harris
Shentel Wireless
Real Estate – Manger
20 McJunkin Road
Unit B
Nitro, WV 25143
Cell: 304-415-1385

Curtis Paxton
Mead & Hunt Inc.
Telecom Department Manager
400 Tracy Way, Suite 400
Charleston, WV 24311
Cell: 304-553-8103

Joseph A. Cortese
Sittig Cortese LLC
Law Firm for outside legal Verizon Wireless
Suite 1500 Frick Building
437 Grant Street
Pittsburgh, PA 15219
Office: 412-402-4000

Our Projects



Cell Tower Projects

Performed turn-key Project Management and Site Acquisition Services on thousands of cell tower projects.
Nationwide



Compressor Station

Performed Zoning, Permitting, and Design Work for an Oil & Gas compressor station's antenna system.
Washington County, PA



5G Cell Project

Performed Site Acquisition Services on a large scale 5G Small Cell project for a National Wireless Carrier.
Pittsburgh, PA



Wireless Site Acquisition

Performed Wireless Site Acquisition Services, Leasing, Zoning, Permitting, and Utility Coordination with the Washington County Redevelopment Authority.
Canonsburg, PA



Rooftop Wireless Site Dev

Rooftop Wireless Site Development Services within the Southpointe Business Park.
Washington County, PA



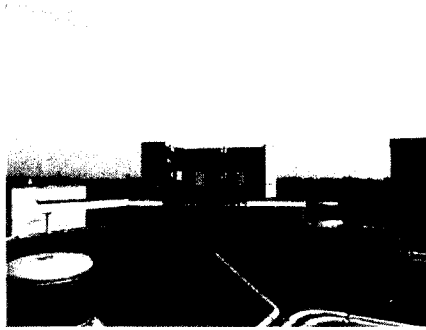
Fiber Utility Upgrade

Program Management of 100+ jobs of Fiber Utility Upgrades Projects.
West Virginia and Maryland



Leasing Services

Rooftop Leasing for
Wireless Antenna Placement.
Allegheny County, PA



Site Acquisition & Design

Site Acquisition and Design
for a stealth rooftop wireless site.
Pittsburgh, PA



Site Audits

Performed hundreds of site audits
on existing cell tower sites.
PA, OH, WV, MD, KY, VA, NC, AL, FL, GA



Access Roads

Leasing, Design, Permitting, and Program
Management for a 100' wide utility
and access road right-of-way.
Eastern WV



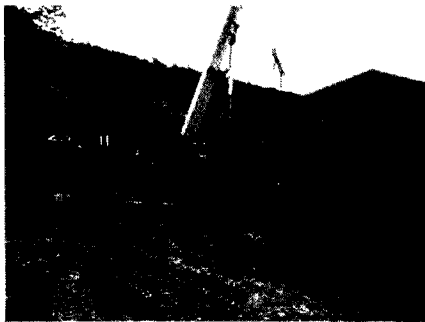
Right-of-Way Leasing

Private 2 mile right-of-way
Leasing and Permitting
Hampshire County, WV



Pad Site Clearing

Program Management and County Permitting
for pad site clearing.
Eastern WV



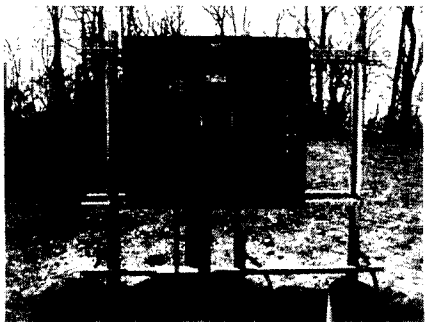
Prefab Building

Prefabricated equipment building Permitting
and Scheduling.
Eastern WV



Natural Resources Permitting

Performed West Virginia Department of Natural
Resources Permitting.
West Virginia, Statewide.



Utility Installation

Utility Installation Program Management at
hundreds of Cell Sites.
Nationwide



Private Access Roads

Performed Leasing and Design Coordination for private access roads and pad sites.

PA, OH, WV, MD, KY, VA



Wireless Site

Turn-Key Wireless Site Acquisition and Program Management.

What we do

Telecommunication Site Development: USD handles site acquisition, leasing, permitting, and overall project management of large scale projects. From start to finish of our clients' projects, we successfully manage every facet of site development.

Utility: Utilities are a crucial part to all projects. USD members offer overall Program Management for utility planning and utility upgrade projects. We will work hand in hand with clients, local utility providers, engineering companies, and the contractor to have all utilities professionally designed and installed to the site.

Oil & Gas: The Oil and Gas industry flows through communication. USD offers oil field and pipeline wireless solutions. USD is perfectly situated to provide services in the active oil & gas market throughout the region. USD is PEC Safeland certified.

- Site Acquisition

 - Leasing

 - Right-of-way Acquisition Services

 - Zoning

 - Jurisdictional and Environmental Permitting

Corporate Affiliations

- ✓ Pennsylvania Wireless Association
- ✓ Ohio Wireless Association
- ✓ Washington County Chamber of Commerce
- ✓ Southpointe Chamber of Commerce
- ✓ Marcellus Shale Chamber of Commerce
- ✓ Marcellus Shale Coalition
- ✓ PEC Safeland Certification
- ✓ PEC Basic Orientation
- ✓ Virginia Wireless Association
- ✓ Penn DOT E-Permitting
- ✓ Energy Leaders Network
- ✓ Young Professionals in Energy
- ✓ Avetta/PICS vendor approved

William “BJ” Whitman, PLS

Vice President of Operations – East Region

Years of Experience: 29

Professional Summary

Mr. Whitman is the Vice President of East Operations. He is a Professional Land Surveyor registered in six states and has nearly 30 years of experience. His diverse background includes DOT design projects, municipal sewer and water design surveys, ALTA/ACSM land title surveys, gas well locations and well pad design surveys, pipeline pre-construction and as-built locations, commercial construction layout, topographic site surveys, cellular tower lease surveys and construction drawings. Mr Whitman joined Encompass in October 2012 as the Northeast Regional Director and has organically grown a group that now supports the entire East Coast and Upper Midwest.

Professional Licenses

- ✦ West Virginia (2005)
- ✦ Kentucky (3566)
- ✦ Pennsylvania (SU61964)
- ✦ Virginia (3012)
- ✦ Tennessee (2923)
- ✦ New York (51000)

Professional Affiliations

- ✦ Pennsylvania Society of Land Surveyors
- ✦ National Society of Professional Surveyors
- ✦ West Virginia Society of Land Surveyors

Relevant Professional Experience

Mr Whitman has over 20 years of experience related to the wireless industry. He has been involved throughout the lifecycle of a tower project – having completed site surveys in the field as well as overseeing the production of lease surveys and construction drawings. His experience includes Raw Land builds, Co-location surveys and rooftop mounts in both rural and urban settings. He has been a part of traditional build plans, large-scale build outs, in addition to isolated site networks to provide services to communities in remote areas.

Representative Clients Include:

- ✦ SBA Towers
- ✦ Crown Castle
- ✦ American Tower
- ✦ US Cellular
- ✦ Nextel / Sprint
- ✦ AT&T
- ✦ Verizon



SERVICES

Services

- Route Reconnaissance/Selection
- Preliminary Design Survey
- Gathering System Layout
- Existing Asset Survey
- ALTA/ACSM Survey
- High Definition Scanning
- Construction Staking
- Remediation Survey

Mapping/GIS

- LiDAR/Aerial Mapping
- Base Map Generation
- GIS Data Integration
- Property Exhibits/Certified Plats
- Well Package Development
- Alignment Sheet Generation
- HDD Design Drawings
- Permit Crossing Drawings

Right of Way

- Title Research
- Land/ROW Records Management
- Land Right Negotiation/Acquisition
- Permit Filing/Management
- Land Database Management

West Region

- Denver, CO
- Portland, OR

Midcontinent Region

- Houston, TX
- Midland, TX
- Tulsa, OK
- Oklahoma City, OK
- Duluth, MN

East Region

- Pittsburgh, PA
- Augusta, ME
- Asheville, NC
- Charleston, WV

Client References

- Kinder Morgan
- XTO
- Enbridge Energy
- Williams Midstream
- Conoco Phillips
- Extraction Oil & Gas

- ONEOK
- Piedmont Natural Gas
- Noble Energy
- Enterprise Products
- Dominion Resources
- Centerpoint Energy

- Plains All American
- Phillips 66
- EQT Resources
- 3 Bear Midstream
- Crestwood Midstream
- Cureton Midstream

Unique Strengths & Differentiators

Specialized Technology

- Bluesky Development (Automated Mapping Tool)
- UAV Drone Services (Remote Data Collection Method)
- DataHalo (Automated Data Management Tool)
- LiDAR/Aerial Mapping (Remote Sensing Technology)

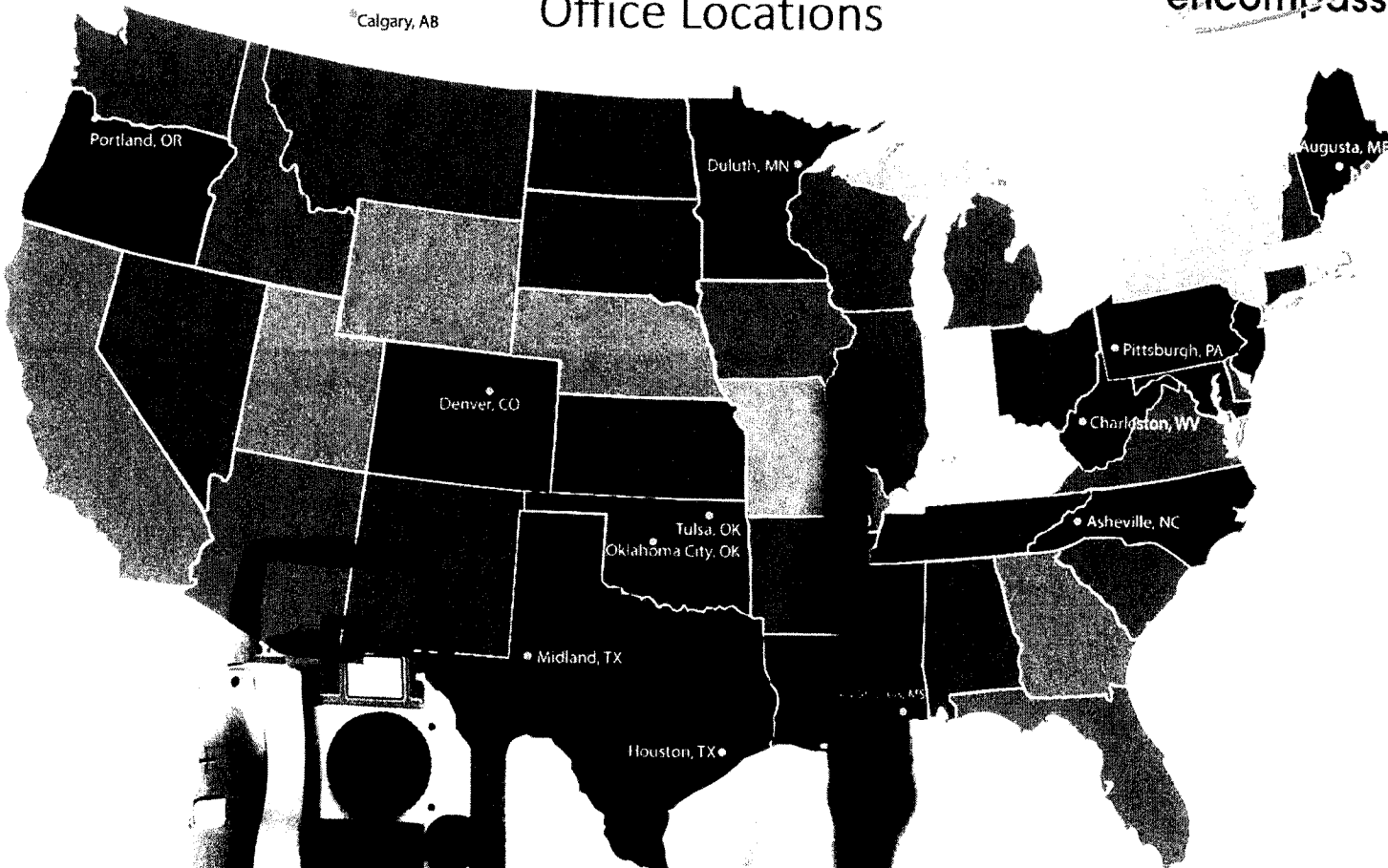
Commercial Value

Volume based rate structure plans and early payment discount options.

Depth of Resources

Licensed throughout the United States with specialized resource depth in both the field and office production positions.

Office Locations



State's requiring a firm's Certificate of Authorization number to be displayed on all materials that offer professional land surveying services:

ID: 3670 NC: P-1049 ND: 1625C TX:10194561
WY: S-1847 WV: 17-5838 OK: 7791 TX:10194589



Tetra Tech in North America

Introduction to Tetra Tech

Based in Pasadena, CA, Tetra Tech is a full-service consulting and engineering firm with a substantial global presence. We help our clients conceptualize and execute innovative solutions to their most difficult problems.

From front-end science and planning to design, construction management, and operations, Tetra Tech's global service network is facilitated by our Initiatives program. In addition to coordinating resources for specific markets, the Initiative program provides best-in-class experts with worldwide project experience. They deliver a high level of integrated services for the full project life-cycle in six service areas: water, environment, infrastructure, resource management, energy, and international development.

ENR magazine ranks Tetra Tech a national and international leader in several markets.

Tetra Tech's Global Reach

Tetra Tech has offices and operational infrastructure throughout the United States, Canada, and abroad. With 20,000 associates in more than 450 offices in more than 120 countries on seven continents, Tetra Tech's technical knowledge and hands-on site work is broad and deep. Our staff is supported by a uniform administrative and management system that project teams can access immediately to ensure work is completed effectively.

Tetra Tech has expanded its geographic presence significantly in recent years through strategic acquisitions and internal growth, especially in Canada, Latin America, and Australia. We also have considerable operations in Asia, Europe, and the Middle East.

Tetra Tech's Organization

Tetra Tech is organized into two major business groups that align with our core markets and enhance the development of high-end consulting and technical solutions to meet our growing client demand:

Government Services Group (GSG) provides consulting and engineering services worldwide for a broad range of U.S. government clients (federal, state, and local) and all activities with development agencies. Services include water and waste management, environmental restoration, international development, sustainable infrastructure design, and a broad range of civil infrastructure design for facilities, transportation, and regional and local development.



Commercial/International Services Group (CIG) provides consulting and engineering services worldwide for a broad range of commercial and international clients. Services include management consulting, environmental remediation, geotechnical investigations, and design engineering.

Tetra Tech History

Tetra Tech was founded as a civil engineering firm by four graduates of the California Institute of Technology and has based itself in Pasadena, California since 1966. Its select group of technical experts provided engineering services for waterways, harbors, and coastal areas. During these first decades, Tetra Tech completed projects that had global significance, from a groundbreaking tsunami wave study for the Atomic Energy Commission to master planning and designing coastal protection measures for Egypt's Nile River Delta.

During the 1980s, Tetra Tech met the expanding need for environmental remediation, which involved groundwater modeling, landfill closing, and restoring contaminated military and manufacturing facilities and sites. The firm completed highly visible projects on behalf of the Department of Defense, the Environmental Protection Agency, and other federal agencies, all of which launched the company to its place among the leading environmental and engineering firms in the United States.

In December 1991, Tetra Tech became a publicly traded enterprise. Since its initial public offering, the company has grown substantially, expanding its markets, services, and clientele through internal growth and international acquisitions.

Today, Tetra Tech is a global leader in providing engineering and technical services. The company is acknowledged for its cutting-edge expertise in sophisticated environmental analysis, modeling, and design and for delivering this expertise effectively across an entire project life cycle.

Tetra Tech established itself in Canada in 2009 and is the leading consulting and engineering firm in the country with 3,000 staff. Its resources across Canada and the globe for collaboration on complex projects worldwide provide our clients in Canada and elsewhere a shared experience unmatched in the industry.

Tetra Tech, Inc.
One Oxford Valley, Suite 200
Langhorne, PA 19047
(215) 702-4000

Project Engineer, 2017**USAID/BioTherm, Koden and Pa Solar Sites, Burkina Faso Africa**

BioTherm/Canopy Consortium is proposing to develop two 15-20 megawatts-peak (MWp) solar photovoltaic energy facilities on land that is currently in agricultural use at Koden and Pa in Burkina Faso. Each proposed area consists of approximately 100+ acres of agricultural land. Mr. Byle directed site survey, geotechnical investigation and hydrologic assessments for each site including erosion and sedimentation plans for each site.

Project Engineer, 2016–2018**EQT, Mountain Valley Pipeline, VA and WV**

The Mountain Valley Pipeline (MVP) project is a natural gas pipeline system that spans approximately 303 miles from northwestern West Virginia to southern Virginia. Mr. Byle provided expert consultation and oversight for assessment of karst and landslide hazards and development of mitigation plans included to obtain FERC and state regulatory approvals. Mr. Byle also directed civil, structural and geotechnical design for terminal facilities and pump stations. This involved slope stabilization, design of anchored soldier pile walls, concrete block gravity walls, gabion walls, sinkhole mitigation measures and the entire pipeline route through Virginia and West Virginia. Mr. Byle also oversaw stormwater analysis, sediment and erosion control design for a significant portion of the alignment in Virginia.

Expert Consultant, 2010–Present**Solebury School vs. PADEP and New Hope Crushed Stone**

Provided litigation support as an expert consultant to assess engineering solutions to a continuing sinkhole problem resulting from dewatering of an adjacent quarry. The project involved an appeal of a depth correction to a mining permit for the adjacent New Hope Crushed Stone quarry. Mr. Byle provided analysis of the data, expert testimony and technical support through 10 days of testimony before the Environmental Hearing Board related to the assessment of impacts of quarry dewatering on the development of sinkholes. In coordination with an expert geologist, the case was presented to convince the Board that the quarry dewatering was in fact the cause of the ongoing problem and that the continuation of mining to greater depth would be damaging to the Solebury School. Prepared expert report and graphic exhibits that were instrumental in the Board rescinding the depth correction. Provided testimony in Supersedeas, and appeal hearings.

Project Engineer, 2017**Lockheed Martin, Lockheed Middle River Complex Soils Retention, MD**

Mr. Byle directed assessment of existing bulkheads, geotechnical investigation and survey, design of new cantilevered sheet pile bulkhead, preparation of plans and specifications, and provided construction phase services including construction oversight, construction completion report and record drawings. A significant issue with the design was dealing with highly corrosive conditions that required special corrosion protection measures to assure a suitable life for the structures.

Project Engineer, 2015**Sun Edison, Landfill Solar Facility, NY**

Assessment of the impact of solar facility construction on a closed landfill. Included review of landfill closure and capping documents and assessment of stresses on cover system due to EV panel support foundations. Additional evaluation included civil and drainage impacts of solar facilities on the existing landfill.



Expert Consultant, 2014–2015

Clinton CSO Storage Facility, Syracuse, NY

Mr. Byle provided expert consultation related to construction claims litigation associated with jet grouting performance and differing site conditions claim. His work entailed review of documentation, interviewing construction and design staff and preparation of recommendations for resolving the dispute. Issues revolved around the costs and delays incurred by the grouting contractor due to specific difficulties related to glacio-fluvial soils and impacts to dewatering and groundwater infiltration. Mr. Byle's consultation led directly to equitable settlement of the litigation.

Grouting Specialist, 2014–2015

Barrage Des Quinze Dam, Angliers, Quebec, Canada

During repairs to the Barrage Des Quinze counterfort dam on the Ottawa River in northern Quebec Province, high velocity leakage was encountered that required remedial grouting. Conventional cement grouting had failed and Mr. Byle was involved to develop an approach to seal the leakage. Developed an approach consisting of sodium silicate accelerated Portland cement grout and Limited Mobility Grout. He designed the plan for the grouting, which included installation of anchors to stabilize the dam, sealing of contact voids between the concrete and underlying rock, and installing a grouted cutoff within the rock under the dam. He oversaw the grouting operations to achieve cutoff of the under seepage.

Project Geotechnical Engineer, 2015

Lockheed Martin, Lockheed Middle River Complex Sediment Site, MD

Mr. Byle directed study for evaluation of stabilization methods for disposal of contaminated dredge material. Conducted bench-top study of additives including Lime, Portland cement, and Calciment. Met with disposal site management to assess waste facility conditions and permit requirements for materials. Inspected labs and reviewed facility test procedures. Prepared recommendations for managing and stabilizing the dredged material.

Geotechnical Engineer, 2014–2017

Fox River Sediment Remediation, Green Bay, Wisconsin

Mr. Byle lead engineering design review for shoreline and bulkhead stability and design of structural mitigation where required. Evaluation of more than 8,000 lineal feet of shoreline for assessment of the impacts of dredging to remove contaminated sediments on the stability of slopes and adjacent bulkheads. Directed investigations including sediment sampling and testing, and geophysical testing to determine the depth of existing bulkhead walls. Prepared analyses and reports, preliminary designs, and met with PRP group and Agency/Oversight Team to present results and negotiate mitigation measures.

Project Geotechnical Engineer, 2012

Cameco Port Hope Conversion Facility Vision-In-Motion, Port Hope, Ontario, Canada

This project involves the removal of radiologically contaminated soils from within an active uranium processing facility located on the shore of Lake Ontario. Mr. Byle conducted an evaluation of existing geotechnical information to complete a data-gap assessment, recommended and completed a geotechnical investigation involving fill and rock quality assessment, hydrologic evaluation, and preparation of recommendations for the feasibility level design of excavation support and dewatering systems. The assessments included developing and managing the investigation program, including packer testing and pump testing to assess the hydraulic conductivity for dewatering and groutability of the upper limestone bedrock. Mr. Byle also developed SEEP/W models to develop a dewatering plan and to develop minimum cutoff requirements for embedment of shoring.

**Geotechnical Lead, 2014****Enbridge Chicago and Superior Region Karst Evaluation, MI, OH, WI, IL, IN, NY, MN, ND**

Provided geotechnical engineering oversight for evaluation of potential karst impacts to 1,900 miles of pipeline right-of-way within the Chicago and Superior Regions of the Enbridge pipeline system. The work included GIS mapping of carbonate and known karst regions within and near the pipeline rights-of-way, review of aerial photos within the mapped carbonate and karst areas of the pipelines, and field reconnaissance to assess conditions to identify suspected karst features along the right-of-way. Karst risks were assessed on a sliding scale for use in prioritizing hazard areas and in developing schedule for periodic inspection.

Technical Specialist, 2014**Confidential Solar Energy Developer**

Conducted feasibility assessment for development of a 2MWac solar facility utilizing 72-cell 300-W photovoltaic (PV) modules to be located on and closed solid waste landfill. The work included determination of regulatory and permitting issues, technical design issues related to equipment foundations, transmission and collector lines, and preliminary sizing and layout of the facility.

Project Manager, 2014**U.S. Army Corps of Engineers, Philadelphia District, Pearce Creek Confined Disposal Facility, Cecil County, MD**

Coordinated, directed, and reviewed geotechnical investigation of dredged material disposal facility. The work involved drilling geotechnical borings, in situ testing using vane shear device, undisturbed soil sampling and laboratory testing of samples to determine compressibility and strength of dredge material to evaluate stability of the facility for adding an additional lift of dredge material. Mr. Byle directed and reviewed analyses of settlements due to proposed facility expansion.

Project Geotechnical Engineer, 2014**Waste Management, Duwamish River Superfund Site, WA**

Prepared the engineering design for the Waste Management owned sediment processing Mixed Media Facility in Seattle, Washington with a capacity of over 3000 cubic yards per day. Completed evaluation of the stability of existing facilities and rail infrastructure to move the sediment from barges located at the wharf and into the rail cars for transportation for off-site disposal in a regulated landfill. The unit operations include the use of shaker screens, dewatering screens, radial hydrocyclones, thickeners, and centrifuges. Provided design management for spill containment and offloading equipment support on the existing wharf and rail support slabs.

Project Manager, 2012–2016**Puget Sound Energy, Lower Baker Dam, Concrete, WA**

The Lower Baker Dam is subject to leakage through karst features in the abutments of this concrete gravity-arch hydroelectric dam built in the 1920's. Mr. Byle led the team of experts in preparing a high resolution geologic model, structural model, and seepage model. As part of this effort, Mr. Byle directed a complex multi-faceted geotechnical investigation that included directional oriented core borings to depths in excess of 500 feet with borehole geophysics, digitally monitored dye tracing, subbottom profiling of the forebay, geochemistry and structural evaluation of the dam/rock interfaces. Mr. Byle provided consultation for the development of an exploratory program to develop measures to stop leakage. He provided technical oversight for the preliminary investigation that included underwater survey and flow measurement, laser imaging, towed array sonar and Blueview imaging sonar of the toe of the dam and plunge pool. Byle developed a work plan and managed development of 3-dimensional geologic modeling and hydrogeologic modeling of discrete flow paths in conjunction with complex geotechnical investigation investigations that included more than 2000 lineal feet of oriented rock coring,



geophysical borehole logging, dye testing, marine geophysics, and interpretation. Analytical work included assessment of rock block stability, karst and erosion potential, dam stability and performance analysis of the existing dam and proposed improvements. Mr. Byle also prepared reports memoranda and presentations to the Board of Consultants and Federal Energy Regulatory Commission (FERC) related to the stability of the dam structural modeling.

Consultant, 2012

Hess Corporation, Newark Energy Center Directional Boring, Newark, NJ

Directional Boring Consultant for management of drilling mud. Consulted on the procedures to contain potentially contaminated drilling mud for 42-inch directional boring beneath a contaminated brownfield site. Developed lined pit details for collection and containment of mud and cuttings for assessment, treatment and disposal.

Project Geotechnical Engineer, 2012

BICC Contaminated Soil Dredging, Yonkers, NY

Mr. Byle directed investigation and evaluation of stability of slopes and structures during removal of contaminated sediments by dredging under an existing building. The work included evaluation of sediments geotechnical parameters and geotechnical analysis of FRP sheet piling bulkheads adjacent to the removal. He designed a staged dredging process and monitoring program to assure stability of existing wall during sediment removal.

Project Engineer, 2011

U.S. Army Corps of Engineers, WBV-074 Western Tie-in Closure Structure, New Orleans, LA

The task on this project involved the design of two Control House buildings to be located atop the sector gate thrust blocks. The design included design of a concrete structure to house gate operating equipment. The building was designed to have cast-in-place concrete walls and a roof slab that was lifted into place. All elements of the buildings were designed for resistance to hurricane wind loading.

Geotechnical Engineering Consultant, 2011

U.S. Army corps of Engineers, Weide Army Airfield, Aberdeen Proving Grounds, Aberdeen, MD

Provided expert support to assess the nature of changed conditions related to the drainage and dewatering of the project site. Provided document review, and site observations and located leaking water mains contributing to the seepage conditions experienced at the project site. Consulted on subgrade stabilization measures including cement and lime stabilization of existing wet subgrade soils.

Geotechnical Engineering Consultant, 2011

U.S. Army Corps of Engineers, Dover Air Force Base Radar Approach Control (RAPCON) Building, Dover, DE

Conducted evaluations related to the floor slab support and impacts of changes to the adjacent tower foundation on the design and construction of the RAPCON building for Request for Equitable Adjustment (REA). The work involved technical assessment of slab support, the influence of ground improvement by aggregate piers on adjacent construction, and prospective performance of construction joint details and meeting with the contract officer and USACE technical support staff.

Project Engineer, 2011

Republic Wind, LLC, Republic Wind Farm, Geotechnical Desktop Study, Seneca and Sandusky Counties, OH

The project involved assessing geological and geotechnical conditions within the project site for potential implications to the design and construction of a wind energy facility comprising 39 2.0 MW wind turbines and ancillary facilities. The report included a review of soils and rock conditions, including the

presence of karst limestone. The relative risk of sinkholes to the project, and recommendations for investigations to better assess that risk, were presented in the report.

Project Engineer, 2011–2015**Naval Air Station South Weymouth Rubble Disposal Area Landfill Gas Mitigation Trench (Design Action Contract N62472-99-D-0032 CTO-048), South Weymouth, MA**

Prepared design for a landfill gas mitigation trench to prevent landfill gas from migrating off-site from the already closed Rubble Disposal Area. The work involved developing details for alternative trench profiles including single pass trenching, vertical synthetic barrier, and slurry cutoff wall together with a venting system. The design included a set of drawings including trench plan and profile together with specifications and details for construction of the system.

Project Geotechnical Engineer, 2011**U.S. Navy, Dredging at Gould Island Naval Station, Newport, RI**

Developed engineering parameters from existing data and provided geotechnical analysis for slope stability for dredging of contaminated sediments. Provided recommendations for design of dredging limits and perimeter slopes and proximity to bulkheads and retaining walls.

Engineering Consultant, 2011**Enbridge, Inc., Talmadge Creek Sediment Basins, Marshall, MI**

The project involves the cleanup of oil spilled into Talmadge Creek as result of a pipeline rupture. This task was focused on developing a plan for capturing oil laden sediment that may be suspended during recovery efforts. This required visiting the site, meeting with project staff, assessing suitability of available sites and preparation of a sedimentation structure plan. Mr. Byle developed a plan which made use of modular structures that could be installed adjacent to or within the creek that could be easily maintained and removed when the work was complete.

Project Engineer, 2008–2012**National Grid, Smith Street Site, Troy, NY**

The Smith Street Site is a former manufactured gas plant (MGP) containing residual contamination. The site is located on the banks of the Hudson River immediately adjacent to a U.S. Army Corps of Engineers Lock and Dam. One side of the site consists of a steel sheet pile wall, approximately 40 feet high and 250 feet long that was constructed circa 1910. Mr. Byle planned and directed the geotechnical investigation including geotechnical borings and rock cores conducted on the land and in the river adjacent to the existing bulkhead wall to assess conditions in order to evaluate the stability of the wall. In addition, he included geophysical methods (ground penetrating radar (GPR), and terrain conductivity) to assess the location and extent of buried tieback anchors supporting the wall. Mr. Byle conducted parallel seismic testing to assess the depth of the existing sheeting and directed test pits to expose dead man anchors. He conducted alternatives analyses to assess the most cost-effective approach to stabilize and/or replace the existing wall. As Project Engineer, was responsible for integration of multiple disciplines including geotechnical, civil, and structural design to meet environmental objectives and resolve complex issues for stabilization and continuous support of the existing bulkhead during completion of construction of the new bulkhead wall, containment slurry walls, and cap. He was responsible for design and analysis of gravity walls constructed by jet grouting to enable removal of portions of the existing wall while retaining contaminated soils.

Senior Consultant, 2009–2010**Gamesa Energy USA, LLC, Sandy Ridge Wind Farm, Tyrone, PA**

Byle provided expert review and support for NPDES permitting for the 50-megawatt (MW) Sandy Ridge Wind Farm in Blair and Center Counties, Pennsylvania. The 90-acre project area is located in south

central Pennsylvania along the Allegheny Front within the Townships of Snyder in Blair County and Taylor in Centre County north of the Borough of Tyrone. The project is located within the watersheds designated as exceptional value streams by the State of Pennsylvania. The development would involve the installation of 25 wind turbines, the construction and/or widening of 5 miles of access roads, and the construction of associated support facilities. The work involved the assessment of impacts of construction of wind turbines, access roads, collector lines and substation related to the presence of rock on site with a potential to generate Acid Rock Drainage (ARD), as well as, technical review of the impacts of the project on ground water and surface water resources, presentation of mitigation measures at a public hearing, meetings with regulatory agencies and design review for the stormwater and erosion control measures being prepared by Gamesa's design consultant. Byle prepared the ARD mitigation plan for the project and assisted the design team in plan revisions to reduce or eliminate excavation that would produce spoils with ARD potential. The plan included rapid field assessment procedures as well as protocols for handling, and disposing of potential ARD generating materials.

Expert Consultant,**Greensfelder, Hemker and Gale, P.C., Lonestar Quarry, Cape Girardeau, MO**

Litigation support as an expert consultant to assess the impacts of previous grouting operations on the flow of ground water in karst and the impact of quarrying on the formation of a sinkhole under railroad tracks adjacent to the quarry. The project involved the evaluation of subsurface conditions, drilling techniques and grouting operations to determine their impact on the condition of the rock and their effect on deep flow within a karst limestone formation and mitigations for dewatering of adjacent quarry. Prepared expert report and graphic exhibits for mediation that lead to settlement of the case.

Engineering Consultant, 2010**U.S. Army Corps of Engineers, LPV 144, New Orleans, LA**

LPV 144 involves the replacement of the sector gate at Bayou Dupree. Special consultation included the analysis and design for temporary retaining systems, dewatering requirements, settlement evaluations, and mass concrete placement design. Mr. Byle coordinated the evaluation of special concrete mix designs and testing for mass placement. He also provided review and consultation related to the development of a cooling system plan to mitigate heat generated from mass placement, when it became apparent that suitable materials to meet project requirements were not available. Mr. Byle also coordinated the design of a mechanical building and assessed alternative design of the fender system for the gate structure.

Project Geotechnical Engineer, 2009**Crowley Marine, Petty's Island Port Facility, Pennsauken, NJ**

Provided geotechnical evaluation of proposed dredging. Assessed Stability of slopes and impact to existing bulkheads in support of maintenance dredge permitting services for Crowley at their Petty Island facility in for NJDEP and USACE approval.

Project Engineer, 2009**U.S. Army Corps of Engineers, LPV 101, New Orleans, LA**

LPV 101 involves improvements to floodwalls from 17th Street to Topaz Street in Orleans Parish. The work required the design of temporary retaining systems to enable construction of improvements over the outfall of the 1,000- cfs capacity Pump Station 12 discharge. The design required multiple technologies and approaches to enable dewatering and protection of the pump station outfall structure for installation of new flood wall extensions over the outfall culverts and adjacent to the outfall structure. The temporary retaining systems were designed to resist flood levels and to include outlet gets should the pump station be activated during construction. The design also preparation of a dewatering plan to safely lower the water level in the canal 12 feet surrounding the pump station using large-capacity pumps.

**Special Geotechnical Consultant, 2006–2009****U.S. Army, Rocky Mountain Arsenal, Denver, CO**

The Rocky Mountain Arsenal (RMA) site was a 27-square-mile (17,000 acre) CERCLA Superfund site, the former location of a chemical and incendiary weapons and pesticide manufacturing and demilitarization facility. Remediation activities included landfill construction, operation, and closure; building demolition; slurry wall installation; and remediation of contaminated soils, sanitary landfills, chemical and sanitary sewers, lake sediments, and waste piles. Mr. Byle provided special consulting services with respect to capping and closure of contaminated areas using ET cover solutions and over 75,000 square feet of salt resistant cement-bentonite slurry walls. He also provided technical support for design and construction for two hazardous waste landfills 2.9 M cubic yards capacity.

Lead Geotechnical Engineer, 2007–2008**U.S. Army Corps of Engineers, Metaltec Site Treatment Facility Geotechnical Investigation, Franklin, NJ**

The Metaltec site required the construction of a water treatment building to manage water removed from extraction wells for remediation of dissolved phase contamination. The proposed treatment building, initially planned for a native soil area, was relocated to a remediated area. Evaluated conditions, recommended soil improvement and prepared performance specifications. Provided technical oversight and field performance monitoring of compaction grouting. The work involved interpretation of geotechnical conditions, alternatives analysis, preparation of performance specifications and construction oversight and monitoring for compaction grouting performed to improve loose fill materials to provide support for the treatment building.

Lead Geotechnical Engineer, March–December 2008**PacifiCorp Energy, Glenrock and Rolling Hills Wind Farms, Glenrock, WY**

The Glenrock and Rolling Hills Wind Farms comprise 132 1.5-MW wind turbines situated in a reclaimed strip mine area. Mine spoils up to 107 feet deep were revealed in the geotechnical exploration. Duties included directing the investigations and design of foundations for the project. Provided oversight and review for geotechnical investigations, foundation design and construction of foundations and earthwork for the project. Additional efforts included evaluation of electrical and thermal resistivity of the soils and design of trench backfill program for the buried collector systems. Byle also provided peer review for civil and structural design for the project.

Lead Geotechnical Engineer, June–December 2008**PacifiCorp Energy, Glenrock Phase III Wind Farm, Glenrock, WY**

The Glenrock Phase III Wind Farm comprises 26 1.5-MW wind turbines situated in a reclaimed strip mine area. Seventeen of the 26 locations are in deep mine spoils where deep foundations are required. Byle directed the investigations and design of foundations for the project including spread footing bearing on native soils and rock, as well as, micro-piles at six locations and H-piles for eleven sites where up to 125 feet of mine spoils were encountered. Provided oversight and review for geotechnical investigations, foundation design, buried conductor backfill requirements, site layout and construction of foundations and earthwork for the project. Provided evaluation of electrical and thermal resistivity and design of mitigation for buried collector systems. Byle also provided peer review for civil and structural design for the project.

Lead Engineer, 2007**Naval Weapons Station Earle, Pier Access Gangway, Leonardo, NJ**

In support of removal of submerged unexploded ordnance adjacent two marine piers, it was necessary to design and install a gangway between the two piers designated Trestle 1 and Trestle 2. The work involved structural design of the gangway as a light-weight aluminum structure and coordination with a manufacturer to produce it as a drop in place structure to minimize field efforts and optimize the project



schedule. The gangway spanned approximately 60 feet between the two trestles and was used as an entrance and egress point for personnel to Trestle 2.

Project Geotechnical Engineer, 2006**Jay Cashman, Inc., Bourne Chemical Co. site Dredge Processing Facility, Elizabeth, NJ**

This project involved alternatives analysis and preliminary design of a bulkhead along former Bourne Chemical Co Site located at 632 South Front Street, Elizabeth, NJ for Jay Cashman, Inc. for the management and processing of dredge material. The work involved the evaluation of an existing bulkhead constructed in 1917 along the Arthur kill shoreline for a length of about 465 ft and design of new bulkhead to accommodate new dredging and support of the processing facility, which entailed design of an anchored bulkhead (sheet pile) with dredge limits, preparation of 60% pier design package including drawings, and design of relieving platform (reinforced Concrete slab supported on concrete piles) to support crawler Crane.

Task Manager, 2005–2006**U.S. Army Corps of Engineers, Philadelphia District, Wilmington Harbor North Confined Disposal Facility, Wilmington, DE**

Coordinated and reviewed geotechnical investigation of dredged material disposal facility. The work involved drilling geotechnical borings, in situ testing using vane shear device, undisturbed soil sampling and laboratory testing of samples to determine compressibility and strength of dredge material to evaluate stability of the facility for adding an additional lift of dredge material.

Project Geotechnical Engineer, 2005–2006**U.S. Army Corps of Engineers, New England District, David's Island Demolition, New Rochelle, NY**

Technical management and review of geotechnical investigation and design of a cargo pier and crew dock to support a multi-year demolition project on David's Island, a former Army installation on an island in western Long Island Sound. The pier will be capable of loading and unloading heavy construction equipment weighing up to 175,000 lbs. Directed monitoring for building demolition that included design, installation and monitoring of a string line system to verify stability of a stone masonry wall during demolition of a build above the wall.

Project Engineer, 2005–2006**U.S. Navy SW Division Remedial Action Contract, Metal Slag Area Wetland, San Francisco, CA**

Managed engineering design for wetland restoration for remedial action to remove metal slag and RAD waste. Coordinated coastal, civil, and structural engineering efforts with ecology and environmental science. The restoration consists of approximately 2 acres of tidal wetlands constructed over the remediated area. The design included tidal hydraulics, rip rap revetment design, design of a box culvert to permit tidal flows without excessive lag, and a pedestrian walkway to be used as a nature trail after completion of the site remediation. The wetlands targeted a specific tidal zone to limit colonization by invasive species and complied with applicable environmental regulations.

Consultant, June 2005**Delaware River Port Authority/ WESTON Solutions, Philadelphia Naval Shipyard, Philadelphia, PA**

Consultant responsible for evaluating the settlement of existing fill and soft sediments under the loading of a new dredged hydraulic fill. Following closure in the 1990s, the Philadelphia Naval Base was turned over to the City of Philadelphia. The Philadelphia Industrial Development Corporation (PIDC) is developing plans to redevelop the 700 plus acres into the Philadelphia Naval Business Center (PNBC). Dredged materials from the proposed navigational deepening of the Delaware River Main Channel may be suitable for raising grades at the East End of the PNBC above flood levels, allowing comprehensive site development. Tetra Tech, working with WESTON Solutions, evaluated the economic impact to the

Delaware River Main Channel Deepening Project of placing 3 to 4 million cubic yards of dredged material at the PNBC rather than in confined disposal facilities (CDFs). Settlement of the underlying soft sediments will result in final site grades one to three feet above the 500-year flood. If 2 to 4 foot higher grades are acceptable for the site redevelopment, capacity could be increased to over 4 million cubic yards. Mr. Byle's responsibilities included assessing the magnitude and rate of settlement within the proposed dredge materials, hydraulic fill, and underlying soft soils to a depth of 50 feet, and preparing text for the feasibility report explaining the need for settlement allowances in the final design. Feasibility Assessment for the Beneficial Reuse of Dredged Materials at the Philadelphia Naval Business Center.

Previous Experience

Geotechnical Consultant

US Army Corps of Engineers, Mississinewa Dam, Peru, IN

The project included the completion of grouted cutoff for diaphragm wall as a seepage barrier for an earthen dam with a karst limestone foundation. Settlement of the Mississinewa Dam was linked to karst conditions, including cavities and other solution features in its limestone foundation. In order to prevent migration of the embankment materials, a cutoff wall was planned, however, during initial installation it was discovered that loss of slurry into the underlying karst would not permit construction. Mr. Byle provided consultation on the investigation and mitigation of the cutoff wall construction problems. The solution was to install a grout curtain to seal the features so that the cutoff wall could be installed.

Project Manager

U.S. Army Corps of Engineers, High-Speed Test Track, Holloman Air Force Base, NM

Project

Discipline Manager for the design of grouting to re-level the seven-mile-long, high-speed test track that had settled. The design involved preparing specifications for the grout materials and methods of monitoring to raise the pre-cast concrete track bed to within 0.1 inch of the original design elevation.

Task Manager

City of Bethlehem, Penn Forest Dam, Bethlehem, PA

Task Manager responsible for evaluating seismic design parameters and offering consultation on curtain grouting for a large roller-compacted concrete (RCC) dam. Assisted with construction oversight and computerized monitoring of grouting using balanced stable grouts and the Intelligrout grout monitoring and reporting system.

Geotechnical Discipline Manager

Amtrak, Dock Street Yard Drainage Evaluation, Harrisburg, PA

Geotechnical Discipline Manager for a subsurface investigation and the design of a stormwater infiltration system for a rail yard. Conducted an evaluation of subsurface groundwater and soils conditions using test pits, borings, and infiltration testing. Design augmentation required partial replacement of the native soils with a sand bed and incorporated manufactured infiltration systems to accommodate subsurface temporary storage of stormwater for delayed infiltration. Design included development of a dewatering plan for construction of the facility as well as civil erosion and sedimentation plans.

Discipline Manager

Norfolk Southern Corporation, Clinton Street Bridge, Buffalo, NY

Geotechnical Engineering for a bridge replacement using existing abutments. The investigation included core borings and probes to delimit the shape, extent, and condition of the existing stone masonry bridge abutments. Geotechnical analyses indicated potential instability. Prepared recommendations to



reconfigure the bridge seat to permit reuse of the existing abutments with minimal modification to the existing structure.

Project Manager**Vesper Boat Club, Foundation and Underpinning Investigation and Design, Philadelphia, PA**

Manager responsible for conducting a geotechnical investigation to evaluate the settlement and remediation of a historic boathouse on Boathouse Row on the Schuylkill River in Philadelphia. The soils consisted of normally to slightly under consolidated river silts and clays. Designed and specified a system of compaction grout columns to support the existing building. Compaction grouting allowed continuous use of the building during construction.

Task Manager**New Jersey Transit, Foundation Construction for Wayne Township Transportation Facility, Passaic County, NJ**

Task Manager responsible for installing driven steel piles on a contaminated site. Verified compliance with structural requirements while working under the health and safety plan.

Geotechnical Manager**New Jersey Transportation (NJDOT), Route 5 Improvements, Palisades, NJ**

Responsible for geotechnical investigation and foundation recommendations for 1,000 lf of retaining walls, bridge and embankment for highway reconstruction. The project included scheduling and coordination of access for 63 borings in steep terrain surrounding a high-volume roadway. Project Manager Fertakos and Company, Settler's Ridge Stormwater Basin Repairs, Warren County, NJ Project Manager responsible for expert consultation regarding repair of sinkholes in stormwater basin. The work entailed evaluation of conditions, review of boring and geophysical data, and design of mitigation for repair and lining of the basin, including grouting of karst features. Mr. Byle negotiated an agreement with municipality's engineer to achieve an affordable permanent repair.

Senior Reviewer**New Jersey DOT, North Avenue Corridor Improvements, Elizabeth, NJ**

Senior Reviewer responsible for oversight of geotechnical exploration and quality assurance for the geotechnical engineering. The NACI project involved \$100M in transportation infrastructure improvement to North Avenue and associated roadways in the area of Newark International Airport. The project involved design of new bridges and roadways, and modification of bridges and ramps accessing the New Jersey Turnpike. The project involved evaluation and analysis of settlements of soft and organic soils under the loading imposed by new embankments as well as the design of new retaining walls up to 40 feet high. Mr. Byle reviewed the work of subconsultants and coordinated the data gathering and analysis.

Geotechnical Engineering Consultant**Gowanus Canal Pump Station and Flushing Tunnel, Brooklyn, NY**

Byle provided expert consultation and design for improvements to the existing flushing tunnel and pump station originally constructed in 1911. The work involved development of geophysical investigation to locate existing pilings and design of a stabilization system including jet grouting to provide a permanent stable platform for the pump station improvements. The function of the pump station and flushing tunnel is to circulate water to the upper reaches of the Gowanus Canal from New York Harbor near Governor's Island to minimize stagnation and improve water quality.

Geotechnical Engineer**Department of Utilities, Spring Hollow Dam, Roanoke County, VA**

Project Manager responsible for preparing grouting specifications for grouting in limestone to mitigate seepage through the rock formation from the reservoir behind the proposed dam into an adjacent valley. The grouting program included three different types of grout and grout placement methods including a neat-cement grout, a limited-mobility mortar grout, and a coarse aggregate concrete grout. The specification outlined procedures and sequence of injections to achieve containment in highly variable karstic limestone.

Project Engineer**Houston Ship Channel, Galveston, TX**

Project Engineer responsible for conducting an evaluation of geotechnical conditions and a dredging feasibility study for widening and deepening the Houston Ship Channel from Galveston Bay to Sim's Bayou, approximately 50 miles. The study included soil characterization based on available boring data from 22 previous studies, dredged-slope stability evaluations, evaluation of impacts of dredging on existing structures, siting evaluation and conceptual design of dredged material disposal islands in Galveston Bay, and evaluation of long-term settlement and stability of hydraulic fill materials.

New Jersey Transit, Foundation Construction for Wayne Township Transportation Facility, Passaic County, NJ

Task Manager responsible for installing driven steel piles on a contaminated site. Verified compliance with structural requirements while working under the health and safety plan.

Geotechnical Discipline Manager**U.S. Army Corps of Engineers, Dewatering and Soil Management, West Picatinny Arsenal, Dover, NJ**

Geotechnical Discipline Manager responsible for developing methods to manage temporary dewatering and re-infiltration of contaminated groundwater for a sewer replacement project at a military weapons facility. Tasks included computing predicted groundwater flows, designing a temporary groundwater retention system, and designing trench backfill to control trench inflow.

Manager**Ford's Landing, Alexandria, VA**

Manager responsible for geotechnical investigation and design for a luxury townhouse development on the Potomac River near Washington, DC. Evaluated 70-year-old timber pilings beneath an existing historic waterfront structure and compressibility of old dredge fill beneath the new structures. Also conducted design studies for a canal structure and retaining walls. Coordinated the design of pre-compression surcharge and wick drain system, low-level relieving platform, inverted cantilever canal walls, new pile foundations, and permanent dewatering system for an underground garage, pavements, and other infrastructure.

Publications & Presentations**PRESENTATIONS AND COURSES TAUGHT:**

Byle, M.J. "Approaches to Grouting in Karst", ASCE Webinar presented January 28, 2016 and October 27, 2016.

Byle, M.J., Bowman, P., and Déry-Chamberland, D. "Innovative Grouting Techniques for Installation of a Seepage Barrier at Barrage des Quinze Dam (Quebec, Canada)" Proceedings of Deep Foundations Institute 41st Annual Conference on Deep Foundations; International Conference on Deep Foundations, Seepage Control and Remediation. October 12-15, 2016.

Byle, M.J. "Geotechnical Investigations in Karst" ASCE Webinar presented March 11, 2016.

Byle, M.J. "Limited Mobility Grouting Practices in North America" Presentation at TUCSS Workshop on Grouting and Deep Mixing, Singapore '14, June 5, 2014 and at AGS Grouting Workshop, Hong Kong, June 7, 2014.

Byle, M.J. "Verification of Geotechnical Grouting—Strategies and Planning" Presentation at TUCSS Workshop on Grouting and Deep Mixing, Singapore '14, June 5, 2014 and at AGS Grouting Workshop, Hong Kong, June 7, 2014.

Byle, M.J. et al, "Aerial Characterization of Karst for Wind Development" SAGEEP 2014, Boston, MA

Byle, M.J. and Griffin, C, "Grouting for Geotechnical Support and Groundwater Control in Karst". Full-day Short Course presented at Grouting and Ground Treatment 2012, New Orleans, Louisiana, February 14, 2012.

Byle, M.J. "Design/Build of Deep Foundations for Wind Energy", Deep Foundations Institute, SuperPile '09, Burlingame, CA, June 5, 2009.

Byle, M.J., "Deep Foundations for Wind Energy Foundations", Deep Foundations Institute, CSCE Annual Geotechnical Seminar, Berlin CT, September 25, 2009.

Byle, M.J., "Geologic Hazards in Wind Farm Planning and Siting" American Wind Energy Association, Poster Presentation at WINDPOWER 2007, Los Angeles, CA, March 3, 2007.

Consultant Advisor, Villanova University Senior Civil Engineering Design Project, Spring 2006.

Byle, M.J., "The Relationship between Civil Engineering and Environmental Resources in Wind Farm Design", Presentation at WINDPOWER 2006/AWEA Pittsburgh, PA June 7, 2006.

Byle, M.J., "Seismic Design Requirements of the IBC." Short Course, Atlantic Builders Conference, 2005, Atlantic City, NJ, April 6, 2005.

Byle, M.J., et al. "Grouting for Transportation." Short Course, GeoTrans Conference, 2004, Los Angeles CA, June 27, 2004.

Byle, Michael, "Introduction to Grouting in Karst." Short Course, Ninth Multidisciplinary Conference on Sinkholes and the Engineering and Environmental Impacts of Karst. Huntsville AL September 6, 2003.

Byle, Michael. "Limited Mobility Grouting." Graduate Seminar at Northwestern University, Evanston IL, June 2, 2003.

Byle, Michael, and James Warner. "Introduction to Limited Mobility Grouting." Short Course presented at Grouting and Ground Treatment 2003, February 9, 2003, Fairmont Hotel, New Orleans, LA.

Byle, Michael. "Stormwater Infiltration Practices in Karst." Presentation at the Pennsylvania Association of Environmental Professionals 2001 Conference: Working Smarter, Emerging Technologies and Innovative Practices for the Environmental Profession, May 10, 2001.

Byle, M.J. "Grouting and Infrastructure Rehabilitation." Seminar at Johns Hopkins University, March 2, 1999.

Byle, M.J. "Grouting and Ground Modification." Presentation at Drexel University for the Department of Civil and Environmental Engineering Lecture Series, Philadelphia, January 12, 1993.

Byle, M.J. "Geotechnology and Infrastructure." Engineering 2000. American University, Washington, DC, 1990. Also presented at ASCE National Capitol Area Regional Conference of Student Chapters, February 1991.

Byle, M.J. "Introduction to Soils and Foundation Engineering and Advanced Foundations Engineering." Co-Lecturer for Graduate Courses, Johns Hopkins University, Baltimore, 1987 and 1988.

Byle, M.J. "Elements of Compaction Grouting." Lecture presented at Federal Highway Administration (FHWA) Foundations Engineering Seminar, Denver, May 1987.

Byle, M.J. "Grouting and Karst" Lecture presented as part of Geotechnical Engineering Course with Dr. Andrea Welker annually at Villanova University, 2002, 2003.

PUBLICATIONS:

Byle, M.J. "Engineering Assessment of Karst Sinkhole Causation and Prediction in Litigation". Multidisciplinary Conference on Sinkholes and the Engineering and Environmental Impacts of Karst, Shepherdstown, WV 2018

Byle, M.J., Rakam Lama Tamang, Stephen Ernst. "Assessment of Existing Bulkhead Walls for Dredging Impacts". Proceedings of Deep Foundations Institute 42nd Annual Conference, New Orleans, LA, 2017

Byle, M.J. "Drilling and Grouting Challenges in Broadly Graded Soils", Grouting 2017: Grouting, Drilling, and Verification ASCE Geotechnical Special Publication 288.

Byle, Michael, Terry Nicol, Thomas Loecherbach, PhD; and Jared MacLachlan "Aerial Characterization of Karst for Wind Development", Proceeding, Geo-Congress, Atlanta Georgia, February 23-26, 2014

Warner, J, and Byle, M.J. "Limited Mobility Grouting—Past Present and Future" Keynote Lecture, Proceedings of Grouting and Deep Mixing 2012, ASCE 2012.

Namba, M, Prado, C.M. A., Byle, M.J., Hachich W., Falconi F., and Negro, A.Jr. "Treatment of Covered Karst Using LMG and JG: Natura Case Revisited from the Perspective of an Application of the Observational Method" Proceedings of Grouting and Deep Mixing 2012, ASCE 2012.

ASCE Standard ASCE/GI 53-10 Compaction Grouting Consensus Guide, Contributing author and consensus committee member, 2010

Patton, P, S. Day and M. Byle, "Compatibility Evaluation of Groundwater Cutoff Wall Using Salt-Resistant Bentonite and BFS/Cement for Deep-Mix Barrier Wall," Proceedings GeoDenver 2007.

Byle, Michael and Rex Mackey "Grouting Karst To Support Driven Pile Foundation For A Truss Rail Bridge." Proceedings of GeoTrans 2004, Los Angeles CA, ASCE Press.

Byle, Michael J. "Design of Grouting in Soil." Practical Handbook of Grouting; Soil, Rock and Structures. By James Warner, P.E. John Wiley & Sons, Hoboken NJ, 2004. Chapter 23, pp 497-510.

Byle, Michael. "Design Considerations for Inclusions by Limited Mobility Displacement Grouting." Grouting and Ground Treatment: Proceedings of the Third International Conference. L. Johnsen, D. Bruce, and M. Byle, Eds., Geotechnical Special Publication No. 120, ASCE, Reston VA, Vol. 2, pp 1071-1081.

Byle, Michael J. "Hydrofracture in Rock Grouting." Presentation Abstracts Hydraulic Fracturing Workshop, July 2001. Workshop held in conjunction with the 38th U.S. Rock Mechanics Symposium, Washington, DC, July 7, 2001.

Byle, Michael. "Grouting for Karst Mitigation." Proceedings of Central Pennsylvania/Pennsylvania Department of Transportation Conference, May 2001.

Byle, Michael. "Infiltration in Karst." Proceedings of 2001 Southeastern Pennsylvania Stormwater Management Symposium, October 2001.

Benedict, C., T. Haider, and M. Byle. "Compaction Grout Columns for Track Support." Proceedings of the Geo-Institute 2001, A Geo-Odyssey: Foundations and Ground Improvement, Blacksburg, VA, June 2001, ASCE, Reston, VA, 2001.

Berry, M.A., M.J. Byle, and T.F. Haider. "Wastewater Trickling Filter Sinkhole Remediation with Limited Mobility Displacement Grouting." Proceedings of the GeoInstitute 2001, A Geo-Odyssey: Foundations and Ground Improvement, Blacksburg, VA, June 2001, ASCE, Reston, VA, 2001.

Byle, M.J. "An Approach to the Design of LMD Grouting." Advances in Grouting and Ground Modification, GSP No. 104, ASCE, Reston, VA, 2000. Proceedings of the GeoInstitute Baker-Gould Commemorative Sessions at GeoDenver, Denver, CO, August 2000.

Byle, M.J., and T.F. Haider. "The Foundations of High-Speed Rail: Foundation Rehabilitation for High-Speed Rail Improvements." Proceedings of High-Speed Ground Transportation Association Conference 2000, Philadelphia, PA, HSGTA, Washington, DC, May 2000.

Byle, M.J. "Geotechnical Investigations for Grouting in Soil." Performance Confirmation of Constructed Geotechnical Facilities, GSP No. 94, pp. 427-440. Presented at Geo-Institute Specialty Conference on Performance Confirmation of Constructed Geotechnical Facilities held at the University of Massachusetts, Amherst, MA, April 2000.

Haider, T.F., and M.J. Byle. "Verification of Jet Grouting for Structure Rehabilitation." Performance Confirmation of Constructed Geotechnical Facilities, GSP No. 94, ASCE, Reston, VA, 2000, pp. 441-455. Presented at Geo-Institute Specialty Conference on Performance Confirmation of Constructed Geotechnical Facilities held at the University of Massachusetts, Amherst, MA, April 2000.

Byle, M.J., and T.F. Haider. "Abutment Stabilization with Jet Grouting." Grouts and Grouting: A Potpourri of Projects, GSP No. 80, ASCE, Reston, VA, 1998, pp. 16-30. Presented at ASCE Annual Convention, Boston, MA, October 1998. Also presented at Virginia Polytechnic Institute and State University Continuing Education Seminar, November 1998.

Byle, M.J., M.L. McCullough, R. Alexander, N.C. Vasuki, and J.A. Langer. "Instrumentation of Dredge-Spoils for Landfill Construction." ASTM STP. Field Instrumentation for Soil and Rock. ASTM STP 1358, Atlanta, GA, June 1998.

Byle, M.J. Discussion: "No More Judgment in Geotechnical Engineering: The Professional Legacy of ASTM?" Geotechnical News, Vol. 16, No. 1, March 1998.

Byle, M.J. "Limited-Mobility Displacement Grouting When "Compaction Grout" Is Not Compaction Grout." Grouting; Compaction, Remediation, and Testing. GSP No. 66 Proceedings on grouting from GeoLogan 97 - First National Conference of the GeoInstitute, Logan, Utah, July 18, 1997. C Cipulanandan, Ed., pp 32-42.

Byle, M.J., and A.M. Germain. "Building a Landfill in Mud." Civil Engineering, ASCE, July 1996.

Byle, M.J., and R. H. Borden (eds.). "Verification of Geotechnical Grouting." ASCE Geotechnical Special Publication No. 57, 1995.

Byle, M.J., and G.C. Davit. "Heave Prediction for Northern Virginia Cretaceous Clays." 7th International Conference on Expansive Soils, Dallas, August 1992.

Byle, M.J. "Limited Compaction Grouting for Retaining Wall Repairs." ASCE Specialty Conference on Ground Improvement and Geotextiles, New Orleans, February 1992.

Byle, M.J., P. M. Blakita, and E.W. Winter. "Seismic Testing Methods for Evaluation of Deep Foundation Improvement by Compaction Grouting." Robert C. Bachus, Editor. Philadelphia.

Appendix 5

Pricing Proposal
(separate sealed envelope)

- 4.1 **Agreement/Contract.** Upon acceptance and award of a Bidder's proposal, the contract between the Bidder and the County shall be drafted from (a) the RFP and addenda, (b) the selected proposal (response to the RFP by the Bidder) and any attachments thereto, and (c) all written communications between the County and the Bidder concerning the transactions. The contract shall constitute the entire and only agreement and shall supersede all prior negotiations, commitments, understandings, or agreements, whether oral or written.
- 4.2 **Execution of Contract.** The successful Bidder must execute a written contract with the County. If the successful Bidder fails or refuses to execute the formal contract within ten (10) days of the date of contract award, award of the contract shall be voided, and all obligations of the County in connection herewith shall be canceled.
- 4.3 **Contents of Contract.** The entire contents of this RFP shall become a part of the contract.
- 4.4 **Term of Contract.** The contract, which results from the award of this RFP, shall commence upon award and shall terminate on February 28, 2021.
- 4.5 **Option to Extend Contract Period.** The contract may be extended up to three (3) months at the bid pricing, provided mutual agreement by both parties in written form. This extension will be utilized only to prevent a lapse of contract coverage and only for the time necessary to issue and award a new Invitation to Bid, but not to exceed three (3) months.
- 4.6 **Option to Renew Contract.** This contract may be renewed for either a one, two, or three year term at the bid pricing by mutual agreement of both parties in written form.
- 4.7 **Pricing.** Bidders warrant the proposal price(s), terms and conditions stated in his/her proposal shall be firm for a period of 60 days from the date of the proposal opening. Once an award is made and a contract is in place, prices shall remain firm and fixed for the entire contract period. If the proposal includes price increases over the term of the contract, such increases must be clearly indicated in the Proposal Price Schedule. All proposal prices must include freight.
- 4.8 **Subcontracting.** The Contractor shall not subcontract any of its obligations under this contract without the County's prior written consent. In the event the County does consent in writing to a subcontracting arrangement, the Contractor shall be the prime contractor and shall remain fully responsible for performance of all obligations which it is required to perform under this contract.
- 4.9 **Payment.** The County will make payment within thirty (30) days of receipt invoice for properly received goods and services after inspection and acceptance of the material and/or work by the County. Advance billings are not allowed. Where partial delivery is made, invoice for such part shall be made upon delivery, and payment made within thirty (30) days under conditions as above.

If the Bidder's method of billing and payment is different than what is stated above, the Bidder must indicate the preferred method. The County will consider paying on a periodic basis as substantial portions of the work as performed, but not more than one time per month.

The County offers vendors the option to enroll in electronic payment via automated clearing house (ACH) to the vendor's provided bank account of record.

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal Hughesville Water Authority Tower site and Hesker Hill Tower site

State of Pennsylvania

County of Lycoming

I state that I am Vice President (Title) of Mead & Hunt, Inc. (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. Mead & Hunt, Inc. (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

Nothing follows

I state that Mead & Hunt, Inc. (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: Curtis Paxton

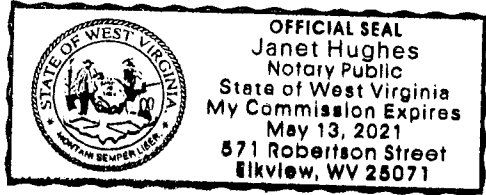
Signature: *Curtis Paxton*

Title Vice President

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 20th DAY
OF AUGUST, 20 20

Janet Hughes
Notary Public

My Commission Expires: 5-13-2021



Appendix 4

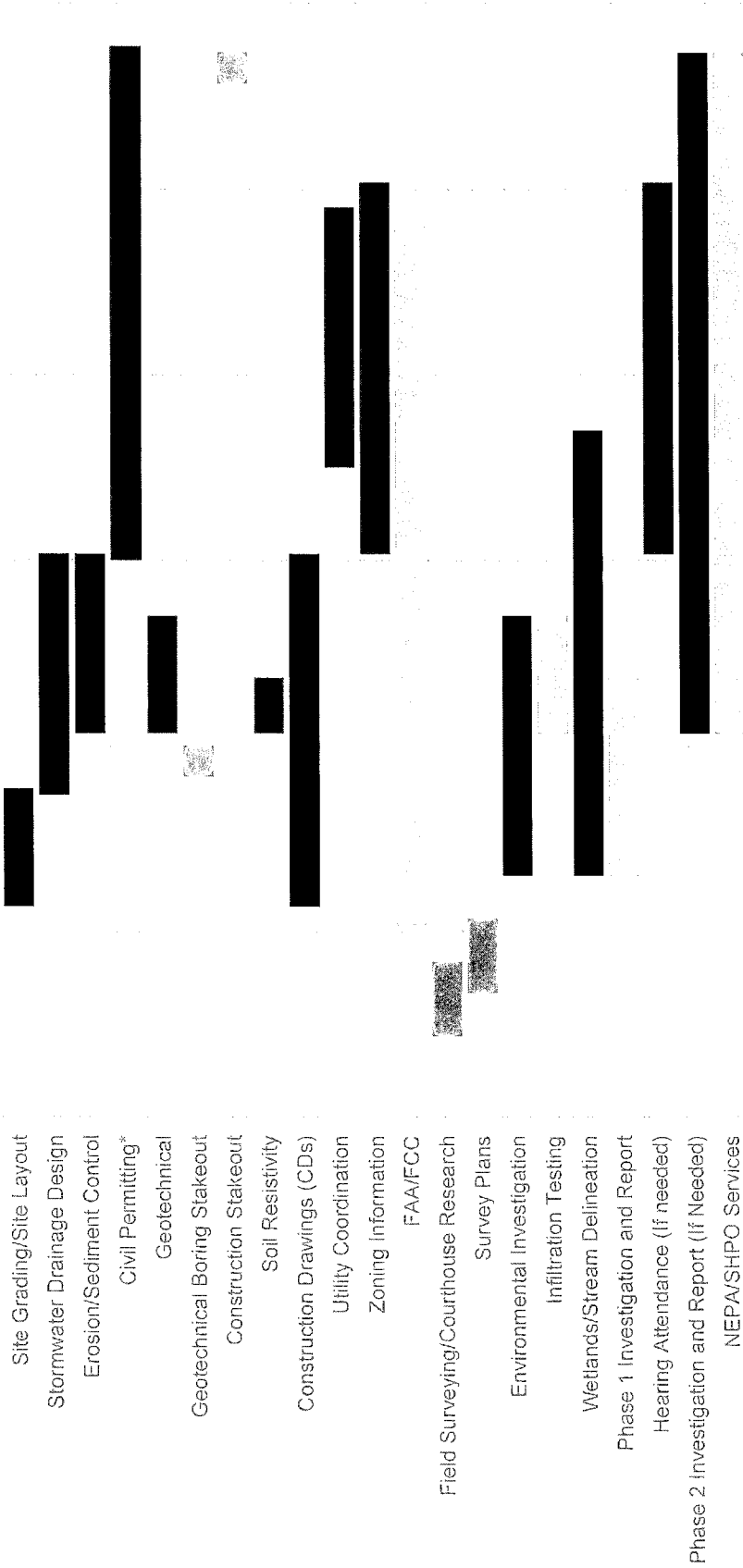
Engineering and Surveying Services Specifications

- Project Timeline for Hughesville
- Project Timeline for Hesker Hill
- References
- Organization Chart
- West Virginia 911 experience table
- Non-911 PA-OH-MD tower experience table
- Key Resumes
- Tower Qualifications

PROJECT TIMELINE FOR HUGHESVILLE TOWER

Sep 1, 2020 Oct 1, 2020 Oct 31, 2020 Nov 30, 2020 Dec 30, 2020 Jan 29, 2021 Feb 28, 2021

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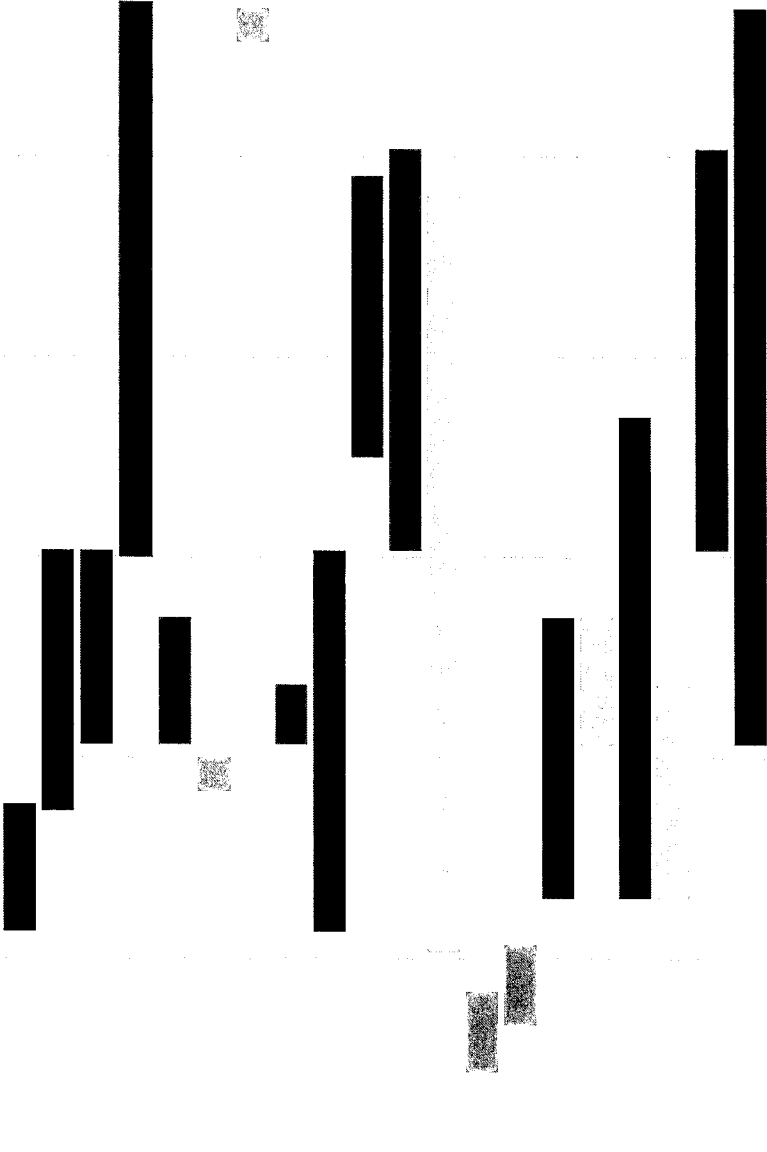
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PROJECT TIMELINE FOR HESKER HILL TOWER

Sep 1, 2020 Oct 1, 2020 Oct 31, 2020 Nov 30, 2020 Dec 30, 2020 Jan 29, 2021 Feb 28, 2021

1

- Site Grading/Site Layout
- Stormwater Drainage Design
- Erosion/Sediment Control
- Civil Permitting*
- Geotechnical
- Geotechnical Boring Stakeout
- Construction Stakeout
- Soil Resistivity
- Construction Drawings (CDs)
- Utility Coordination
- Zoning Information
- FAA/FCC
- Field Surveying/Courthouse Research
- Survey Plans
- Environmental Investigation
- Infiltration Testing
- Wetlands/Stream Delineation
- Phase 1 Investigation and Report
- Hearing Attendance (If needed)
- Phase 2 Investigation and Report (If Needed)
- NEPA/SHPO Services



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Mead & Hunt References

- Justin Gvoth, Verizon Wireless PA 412-496-6219
- Cindy Hart, Randolph County 911 304-636-0483
- Rick Woodyard, Wood County 911 304-420-0911
- John Dotson, Doddridge-Ritchie Co. 911 301-659-3770
- Chris Harris, Shentel 304-353-8917
- David McClure, Apex Towers, 304-256-6426
- Marion Dougherty, Premier Construction, 304-517-1261
- Mike Todorovich, 304-549-302
- Joe Gonzalez, 304-745-4842

Mead & Hunt, Inc. Team Organization Chart

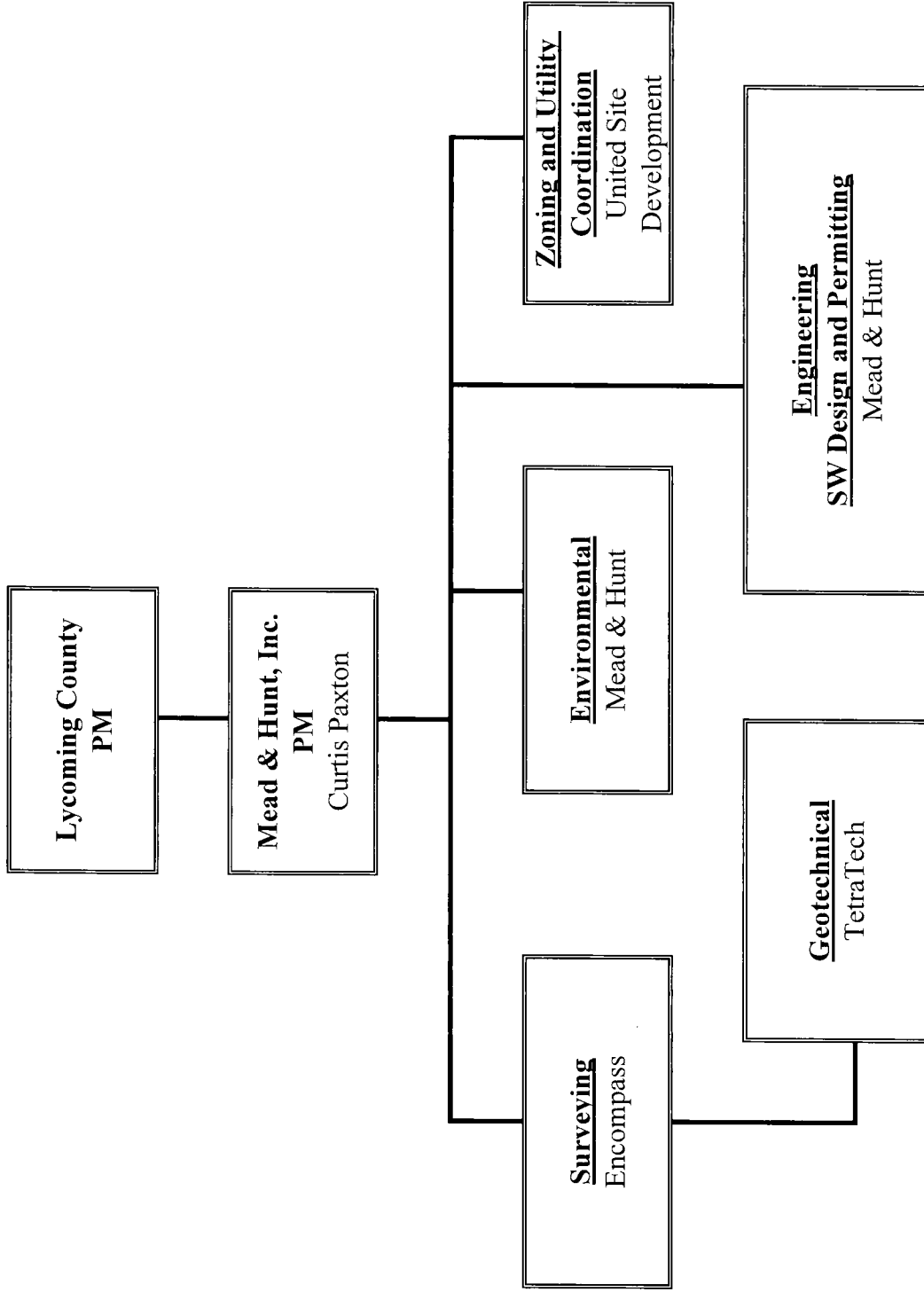


TABLE 1 - Mead & Hunt, Inc.
Previous State/County-Owned Towers - A&E and Environmental Services

County	Tower Name
Wood	Montgomery Hill
	Limestone Hill
Hardy	Wardensville
	Capon Springs
	Hardy Co 911
	Charlies Knob
Jackson	Sandyville
	Kenna
	Hargreave
	Flatwoods
Lincoln	Midkiff
	Harts
	Salt Rock
	Yawkey 1 and 2
Mineral	Fort Ashby
	Patterson Creek
Nicholas	Lone Tree
	Richwood
	Cottle Knob
Randolph	Point Mountain
	S. Rich Mountain/Beverly
	Bickle Knob
	Ware Ridge
Morgan	Berkeley Springs
	Purslane
Upshur	Cleveland Mountain
Webster	Hodam Mountain
Grant	911
	Mt. Storm
Fayette	911
	Glen Jean
	Thurmond
Lewis	911
	Weston
Preston	911
	Caddell Mountain
Ohio	Wheeling Courthouse
	Ohio Co. 911
	West Liberty 911
Wood	Belleville 911

County	Tower Name
Taylor	911
Mingo	Williamson
	Horsepen Mountain
Calhoun	Five Forks
Pendleton	Long Ridge
	Pendleton 911
	Cave Mountain
	Hunting Grounds
	North Mountain
	Catherines Knob
Pocahontas	Sharps Knob
	Snowshoe
	Gauley Mountain
Brooke	Weirton
Greenbrier	Greenbrier
Roane	Spencer
Mount Weather	
Kanawha	Yeager Guard
	Memorial Tunnel
	Paint Creek
	Capitol Complex
Wirt	Limestone 2
Berkeley	North Fork Mountain
McDowell	Welch
	Iaeger
	Carretta
Mercer	Elgood
	Windmill Gap
Marshall	Cameron
Tucker	Parsons
	911
Cabell	Barkers Ridge
Gilmer	Glenville
Harrison	Courthouse
	PK Tower
Raleigh	Lick Knob
Monongalia	Morgantown
Putnam	Confidence 911
Doddridge	Punkin Road 911
Wyoming	Twin Falls

**TABLE 2 - Non-911 Tower sites completed by Mead & Hunt
(PA-MD-OH MARKETS)**

Name
Hiller
Crafton South
Pleasant City
Sunnymeade
Grantsville West
Squaw Valley
Cuddy
Vega
Lattaville
Givens
Ball Knob
Harbor
Waterson
Dale
Myoma
Lake View Country Club
Emerickville
West Branch
Headland Road
Smith Corners
Pardus
Fountain
Mundys Corner
Monroe PA
Home Camp
Curtain Gap
Lycippus
Mount Joy
Deer Creek
Conway
Alice
Muse - Verizon 01
Fairhope
Savage - Verizon
Tyler Heights
Poplar Fork
Howards Fork
Hamilton TWP
Beaver Valley
Pleasant Union
Bear Lake
Estate Drive
Buffalo Creek
Clemtown Enviro
Mitcheltree Hollow Enviro
E & SC Plan
Rossmoyne Enviro
Mill Run Enviro
West Finley TWP
Simpson Store
Good Intent
East Finley
Beham
Ritter Park
Krouts Creek
Verizon Deep Creek
Somerset South
Sylvis
Mitcheltree Hollow

Name
Drifting
Crystal Springs (Motzer Property)
Mill Run
Elk Rock
Strawn (Tasker)
Williamson
Wayne
Union Run
Two Mile Creek
Twelve Pole Creek
Greenup
Crown Hill
Arcadia
Lockvale
Rossmoyne
Indiana Mall
Wellendorf Station
Clermont
Rixford
Rew
Bullis Mills
Meadowbrook
McHenry
Garrett Highway
Keyser Ridge
Grantsville
Evans Hill
Swissvale
Kaese Mill
Mud Lick Run
Grantsville East
Friendsville East
Grantsville West
Strawn
New German Road
Winding Ridge
Friendsville
Blooming Rose
Yellowhammer
Redclyffe
Kellettville
Fagundus
Beaver PA
Shafton
Jumonville
Hopwood
Ashville
Rockwood
Markleton
Hardensville
Compton
Salisbury
Beaverdale
Shanksville
Callimont
Delbarton
White Hill
Jordan
Cookman

Name
03030 Tenth Legion
03031 Lacey Springs
04222 York Downtown
05145 Penn Laird
05281 Altoona
07199 Gettysburg DT
10561 New Park
11678 Fort Indiantown Gap
13799 E. Chambersburg
13809 Mosby Road
13819 Cedar Haven WT
14575 Cousler Park
14576 Outdoor Country Club
14579 Annville
15142 Curtin Street
15361 Wister Street
15363 S. Dewberry Street
15379 United Methodist
15470 Dentsply
15470B Dentsply
16001 DT Mechanicsburg
16002 1 West Penn Street
16003 Wingate Drive
16004 Londonderry Road
16008 Robinwood
16399 Central Lebanon
16509 Scenery Drive
16525 Sheffler Drive
16526 Eastern Mennonite University
16528 Westfields
16531 Lebanon East
16541 Baker Heights
16566 New Kingstown
16567 West Fleet St.
16572 Oberlin
16573 N. Progress
16575 Lower Allen
16577 Windsor
16579 Skyline
16581 Lakeside
16582 Kutztown
16583 Sand Hill
16585 Fredericksburg WT
16586A Jonestown
16589 Hershey West
16593 Berkeley

CORPORATE PROFILE



**Mead
& Hunt**

EXPERIENCE EXCEPTIONAL

Mead & Hunt works nationally to deliver locally. Our highly skilled team of engineers, architects and planners partner with you to deliver innovative design solutions that help you achieve your goals. Our success is measured by your success. We are here to help you bring your vision to life.

WE ARE A NATIONAL, FULL-SERVICE ENGINEERING AND ARCHITECTURE FIRM.

"Mead & Hunt can successfully deliver projects of any size level or complexity. They are strong project managers and excellent communicators; they provide whatever resources are necessary to meet schedules and budgets."

— Derek Martin, AAE, (former)
Airport Director, Klamath Falls Airport



Teresa Schuller –
Environmental Services
400 Tracy Way, Suite 200
Charleston, West Virginia
681-313-4617
teresa.schuller@meadhunt.com

There's nothing like stability in an industry that boasts an ever-changing landscape. And it's often literally changing: earth, water, populations and regulations. Mead & Hunt's decades-long client relationships and roster of storied industry leaders proves the point. We care about people, we invest in relationships and we bring the best of who we are to bear on every client engagement.

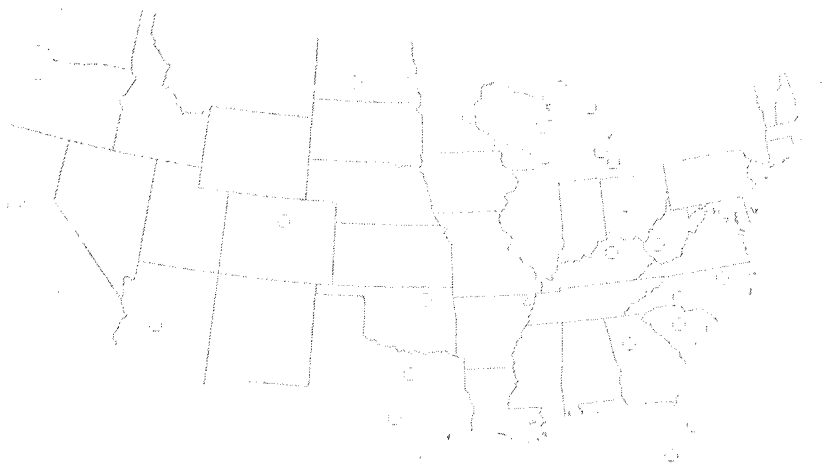
MARKETS WE SERVE

- Aviation
- Dams & Hydropower
- Developers
- Education
- Federal & State
- Food & Industrial
- Military
- Municipalities
- Renewable Energy
- Telecommunications
- Transportation
- Water Resources

SERVICES WE PROVIDE

- Air Service
- Architecture
- Construction Services
- Cultural Resources
- Engineering
- Environmental
- Information Technology
- Planning
- Program Management
- Sustainable Design
- Surveying

OFFICE LOCATIONS



meadhunt.com

WE ARE A NATIONAL, FULL-SERVICE ENGINEERING AND ARCHITECTURE FIRM.

BUILDING ENGINEERING

- Architecture
- Commissioning
- Communications
- Electrical
- Energy analysis
- Fire protection
- Heating, ventilating and air conditioning
- Instrumentation and controls
- Interior design
- Lighting
- Plumbing
- Security
- Structural engineering
- Technology

AVIATION

- Airfield engineering
- Airport planning
- Environmental services
- Air service consulting
- Program management
- Financial and business services
- Electrical engineering
- NAVAIDs and instrumentation
- Security systems
- Architecture – terminals, hangars, control towers and facilities
- Construction management

COMMUNICATIONS

- Agency coordination
- Public information meetings
- Public and media relations
- Website development
- 3-D imaging

CONSTRUCTION SERVICES

- Building commissioning
- Commercial and residential construction inspection
- LEED® certification
- Right-of-way coordination
- Surveying
- Transportation inspection
- Video pipe inspection
- CEI services
- Grant compliance

CULTURAL RESOURCES

- Archaeology management
- Architectural surveys
- Historic context development
- Historic landscape studies
- Historic property documentation (HABS/HAER)
- Historic Structures Reports
- Mitigation documents
- National Register Nominations
- Preservation plans
- Section 106 compliance

DAMS & HYDROPOWER

- Feasibility and project economics
- Regulatory
- Dam safety
- Hydro plant design
- Dam design
- Specialized consulting
- Dam removal
- Geotechnical

ENVIRONMENT

- Environmental Assessments (NEPA)
- Environmental Impact Reports (CEQA)
- Habitat assessment
- Planning
- Stream restoration
- Water quality sampling
- Wetlands mitigation design
- PFAS overview of investigations and regulatory compliance

FEDERAL PROGRAMS

- Master planning and project charrettes
- Utility privatization
- Cultural resources assessment and management of facilities
- Sustainment, Restoration and Modernization (SRM) and Military Construction (MILCON) studies

MUNICIPAL

- Land use planning
- Stormwater management
- Streets and bridges
- Traffic studies
- Utility coordination
- Wastewater treatment and collection systems
- Water system engineering

TELECOMMUNICATIONS

- Telecom services
- Wide Area Networks
- Telecommunications tower A/E services
- Tower Phase I ESA and FCC NEPA
- Permitting

TRANSPORTATION

- Bridges
- Construction engineering
- Environmental documentation
- Highway garages
- Historic preservation
- Program management
- Rest areas
- Street lighting
- Streets and highways
- Surveying
- Traffic engineering
- Transportation planning
- Weigh stations

URBAN PLANNING

- Downtown redevelopment
- Grant and loan applications
- Master plans
- Parks and recreation plans
- Residential, commercial, industrial and business developments
- Strategic plans
- Wetland assessments
- Zoning ordinances

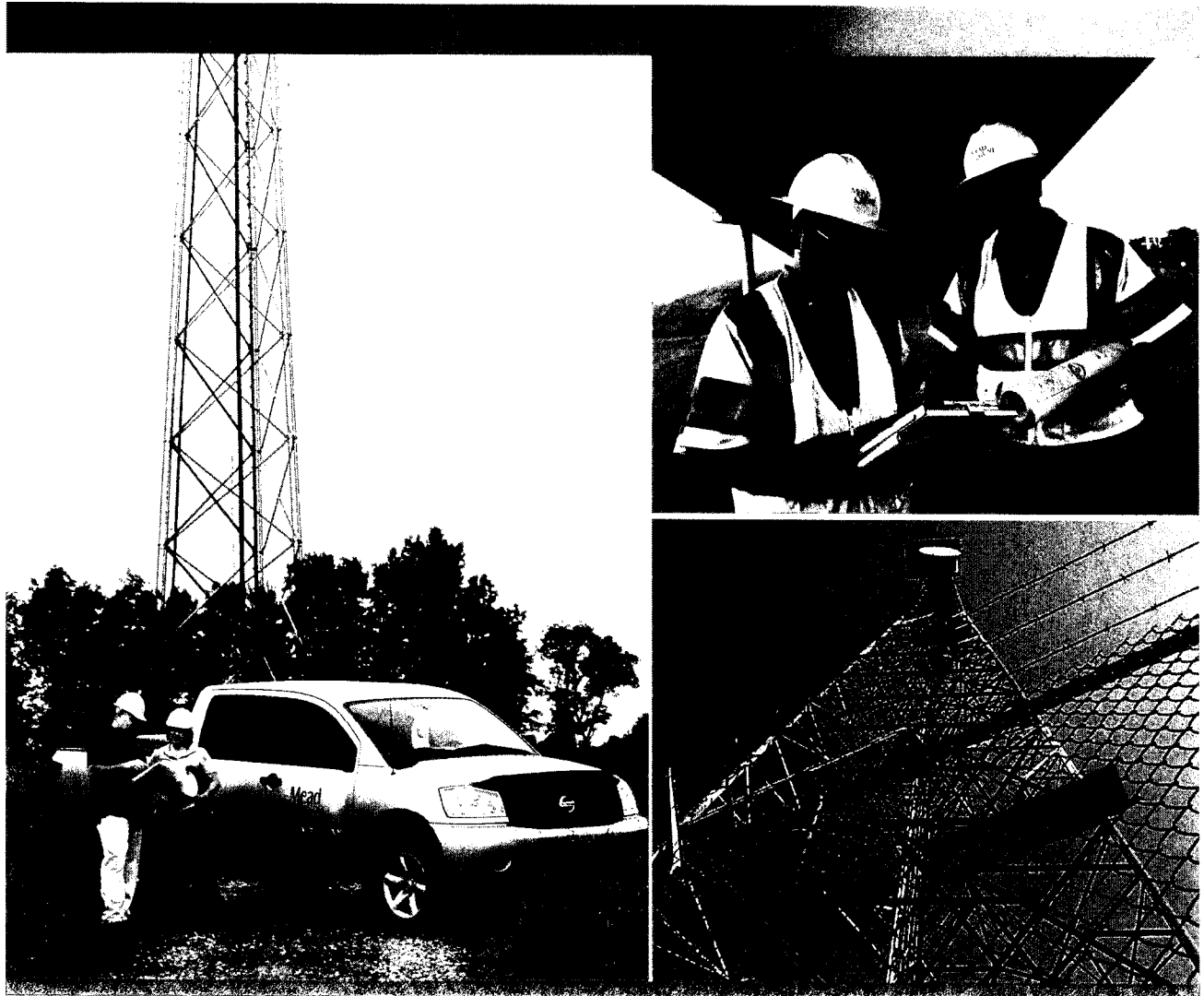
WATER RESOURCES

- Water infrastructure
- Flood risk reduction
- Hydrology and hydraulic analyses
- Regulatory compliance
- Geotechnical
- Ports and harbors

WATER & WASTEWATER

- Design-build for treatment systems
- Management and contract operations
- Training for facility operations and maintenance
- General consulting for operations and maintenance
- Comprehensive design services for water supply, treatment, distribution, storage and pumping
- Advanced wastewater treatment design

WIRELESS TELECOMMUNICATIONS



KEEPING THE LINES OF COMMUNICATION OPEN

At Mead & Hunt, our turn-key wireless services take your project from site design through start of construction. Our telecommunications professionals are experienced in new builds and upgrades. We'll help you navigate the permitting process and meet your project schedule.

With services including zoning, building permitting and all applicable state and federal approvals, Mead & Hunt staff has over 65 years experience in the wireless industry covering West Virginia, Pennsylvania, Maryland, Ohio, Virginia, North Carolina, South Carolina, Tennessee and Kentucky. This experienced staff is familiar with the "Fast Track Process" typical with wireless projects and can meet client's expectation for deliverables and timelines for new builds or upgrading existing facilities.

**Mead
& Hunt**



Mead & Hunt's wireless telecommunication services include:

- 1A certifications
- 2C certifications
- Site feasibility surveys
- Lease surveys
- Zoning drawings
- Photo simulations
- Construction drawings
- Co-location drawings
- Tower mapping
- Structural analysis
- Construction staking
- As-built surveys
- Geotechnical core borings
- Concrete testing
- Construction monitoring
- NEPA checklist
- Phase I/II ESAs
- THPO approval
- SHPO approval
- HLC negotiations/mitigation
- EA preparation
- Archaeology oversight
- Historic architecture oversight
- Storm water permitting (NOI & NPDES)
- Air permitting (diesel/gas generators)
- USACE permitting
- Co-location, packages and rooftop
- Wetland permitting
- Endangered species surveys
- National Forest permitting
- Erosion & sediment control

Curtis Paxton – A&E Services

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ENVIRONMENTAL



PROACTIVE PROTECTION FOR WHAT MATTERS MOST

As the demands on client personnel increase, Mead & Hunt is here to enhance your team by jointly developing creative solutions to meet your environmental goals. We have a thorough working knowledge of state and federal environmental permitting processes and regulations. Mead & Hunt works with our clients to meet their environmental challenges by providing scientists and engineers who are trained to address complex problems using innovative solutions. Our regulatory experience includes FCC, DOT, RCRA, CERCLA, CWA, CAA, Solid Waste, Brownfield, OSHA, and SARA Title III along with their respective state and local requirements. Our staff can provide regulatory interpretation and application, agency negotiations, due diligence in support of acquisitions/divestitures, and regulatory support.

SERVICES

- PFAS oversight for site investigations, action plans, regulatory levels, remediation alternatives
- Environmental Site Assessments (Phase I, II)
- Environmental Remediation (Phase III)
- Environmental Assessments/Impact Statements
- Brownsfield Redevelopment
- Telecommunications Tower Compliance
- NEPA Compliance/Documentation
- Storm Water (Multi-sector & construction Permitting, SWPPP, GPP)
- COE and State Permitting
- Groundwater monitoring and remediation
- Air Permitting (Tier II, Form R, Title V, Reg. 13, generators)
- Environmental permitting and report preparation
- Solid Waste Landfill Permitting (air and water)
- Wetland and Stream Investigations Oversight
- Asbestos & Lead Paint oversight and Management
- Archaeology and Historical Architecture Oversight

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**Mead
& Hunt**

meadhunt.com

CURTIS G. PAXTON
TELECOMMUNICATIONS DEPARTMENT MANAGER/SURVEYOR

Curtis Paxton leads a group of surveyors, engineers, scientists, and CADD personnel dedicated to Telecommunication clients. He also managed more than 3,000 telecommunication tower projects in West Virginia, Kentucky, Ohio, Pennsylvania, Maryland and Virginia. Curtis has served as survey manager and survey party crew chief on various surveys including boundary, ALTA/ACSM land title surveys, condemnation surveys, WVDOH design projects, GPS aerial control, topographical, construction and building layouts, wireless communications projects, sewer and waterline extensions, construction layout and topographic site surveys. Curtis has over 20 years of experience related to the surveying and AutoCAD field.

SURVEY/RIGHT-OF-WAY (WITH PROJECTS)

Curtis has served as survey manager and survey party crew chief on various projects throughout West Virginia for more than 24 years. His projects have included boundary, ALTA/ACSM land title surveys, condemnation surveys, WVDOH design projects, GPS aerial control, topographical, construction and building layouts, wireless communications projects, sewer and waterline extensions, construction layout and topographic site surveys. As an active participant in field collection and mapping, Curtis is skilled in using AutoCAD and MicroStation software to process data and prepare plats and base mapping. He uses the latest surveying methods, including Real Time Kinematic GPS and Robotic Total Stations. He routinely performs topographic, utility and right-of-way surveys as well as survey calculations. Curtis has served as survey party crew chief, project manager and survey manager on a variety of bridge design projects such as the Hartland Bridge in Clay County; the Leon Bridge in Mason County; and the Gerald R. Freeman Bridge in Braxton County.

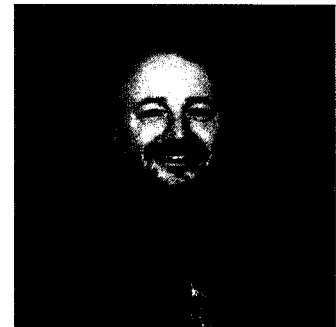
RELATED PROJECTS

State of West Virginia Executive Office BTOP Broadband Grant #2672
A&E Services
West Virginia

Curtis managed the A&E work for the State of West Virginia Broadband grant from the NTIA. The grant amount is \$126 million to provide 12 new telecommunication towers to the Homeland Security Network (microwave) and 1,000 miles of fiber to add broadband service to 1,064 anchor tenants (schools, hospitals, libraries, etc.). The work involved the 1A/2C letters, site survey, site design with grading and permitting, construction drawings, geotechnical work oversight, as-built survey and drawings, DOH and other permitting, and assistance to the State's Project Manager. The work began in March 2010 and was completed in 2014.

Telecommunications Tower Siting
Various National and Regional Carriers
West Virginia, Virginia, Ohio, Kentucky, Maryland, Pennsylvania

Curtis managed more than 3,000 telecommunication tower siting projects. Tasks 1A/2C letters, site survey, site design with grading and permitting, construction drawings, geotechnical work oversight, as-built survey and drawings, DOH and other permitting,



Areas of Expertise

- Cellular tower site construction
- Cellular tower collocation surveys
- Roadway and bridge design surveys
- Site design surveys
- Transmission line surveys

Education

- High School Diploma, Spencer High School, 1991

Registration

- n/a

Memberships

- West Virginia Society of Professional Surveyors
- United States Army National Guard - Operation Iraqi Freedom

Past Employment

- Prine Land Surveying Aug 95-Aug 99
- TERRADON Corp., Aug 99-Dec -08

No. of Years With Mead & Hunt

- Hired 01/01/2011
- RPM 12/29/2008 (2.5 years)

No. of Years With Other Firms

- Fourteen

CURTIS G. PAXTON (CONTINUED)

Cellular Tower Site Construction and Collocation Surveys West Virginia

Curtis, as a project manager with 24 years of experience related to the site layout and construction drawing for various cell tower locations, managed projects such as:

- Verizon Wireless
- Bechtel Corporation
- Shentel (nTelos Wireless)
- Highland Cellular
- APEX (Highland Tower)
- SBA Communications
- Cellular One
- Crown Castle International
- Everclear Communications
- Pegasus Tower
- Divine Tower International
- Nextel Partners
- Spectra Site
- American Tower
- WV Wireless
- Clear Shot Wireless
- Strategic Communication Services
- Cingular
- AT&T Wireless
- Alexander Utility Engineering
- Sprint
- WV State and County 911 Towers
- American Cellular
- SAI Communications
- Black & Vetch
- Black Dot Wireless
- T- Mobile
- Paradigm Wireless
- Mountain State Wireless
- Andrew System Inc.
- US Cellular
- Wireless Resources
- Charter Association

Transmission Line Surveys

Curtis served as project manager for the site layout and easement plats for the Rocksprings Coal Company. The project extended approximately 3.7 miles.

Abandoned Mine Land Reclamation Design Surveys West Virginia Department of Environmental Protection (WVDEP) West Virginia

CURTIS G. PAXTON (CONTINUED)

Curtis, as a project manager on a variety of mine reclamation design projects for the WVDEP. Representative projects include:

- Hughes Creek (Burke-Quinn) Portals
- Trace Branch Refuse Pile
- MacArthur Subsidence Phase 2
- Little Whitestick Creek Refuse Pile
- Little Daycamp Branch Refuse
- Montecarlo Complex
- Pierpont Refuse Pile
- Marsh Run Portals
- Broad Run Portals
- Bickmore Area Complex
- Amigo Portals
- Conley Branch (Whitt) Landslide
- Oldfield Branch (Hall) Drainage
- Vickers Branch (Butcher) Drainage
- Red Warrior Gob & Slide
- Switzer (Ellis) Drainage
- Cow Creek (Browning) Portals
- Bickmore Refuse #2
- Meadow Fork Open Portals
- East Lynn (Clark) Portals
- Ridgeview (Dunlap) Portals
- Glen Alum Complex
- Crany Mine Dump
- Oldhouse Branch Refuse Pile
- Landgraff Refuse Pile
- Triple A Coals
- Harvey Energy
- Royal Scot Minerals Robson (Cales) Drainage

Design Surveys

West Virginia Division of Highways (WVDOH)

West Virginia

Curtis served as survey party crew chief, project manager and survey manger on a variety of roadway and bridge design projects for the WVDOH. Representative projects include:

- East Huntington Bridge Survey, Cabell County, West Virginia
- WV Route 9 in Martinsburg, Berkley County, West Virginia
- Grade Road in Martinsburg, Berkley County, West Virginia
- Flowing Springs Road in Martinsburg, Berkley County, West Virginia
- Corridor G 6 lane upgrade in Charleston, Kanawha County, West Virginia
- Coalfields Expressway Design-Build, Mingo County, West Virginia
- Coalfields Expressway PPP, Mingo County, West Virginia
- Mill Creek Road, Fayette and Raleigh Counties, West Virginia

CURTIS G. PAXTON (CONTINUED)

- Glen Jean Lane, Fayette County, West Virginia

Bridge Surveys

West Virginia Division of Highways (WVDOH)

West Virginia

As survey party crew chief, project manager, and survey manger on a variety of bridge design projects for the West Virginia Division of Highways, Curtis worked on projects such as:

- Leon Bridge, Mason County, West Virginia
- Bartley Branch Bridge, McDowell County, West Virginia
- Hartland Bridge, Clay County, West Virginia, West Virginia
- Wellsburg Bridge Preliminary Plans, Brooke County, West Virginia
- Glade Creek Bridge Settlement Survey, Raleigh County, West Virginia
- John Blue Bridge, Hampshire County, West Virginia
- Gerald R. Freeman Bridge, Braxton County, West Virginia
- Bonham Bridge, Kanawha County, West Virginia
- Philippi Covered Bridge, Lewis County, West Virginia
- Edwight Truss Bridge, Raleigh County, West Virginia

Site Design Surveys

West Virginia

Curtis served as survey party crew chief and survey manager on a variety of site development and design projects for a variety of clients including:

- Thomas Memorial Hospital, South Charleston, West Virginia
- Greenbrier County Hospital, Lewisburg, West Virginia
- Gilbert Middle and High Schools, Mingo County, West Virginia
- Tri-State Greyhound Park, Kanawha County, West Virginia
- Doddridge County High School, Doddridge County, West Virginia
- Princeton Elementary School, Mercer County, West Virginia
- Summit Bechtel Family National Scout Reserve, Glen Jean, West Virginia
- Stonestreet Land Development, Cross Lanes, West Virginia
- Charleston Complex Access Utility Upgrades, Charleston, West Virginia
- The Ridge Leadership Tree Survey, Glen Jean, West Virginia
- Huntington Levee Survey, Huntington, West Virginia
- Fayette County Parking Tracts Survey, Glen Jean, West Virginia
- Gerace Deaerator Civil Project, Charleston, West Virginia■

TERESA SCHULLER, LRS SR. ENVIRONMENTAL PROJECT MANAGER

Teresa Schuller brings 37 years of experience in environmental research as well as state and consulting experience. As an analytical chemist, her research included organic and inorganic compounds' fate and degradation in soil, surface water, sediment and ground water. Teresa served as project management of multi-faceted domestic and international mergers and acquisition projects. She managed manuals preparation (pollution, prevention and control (PPC); spill, prevention, control and countermeasure (SPCC); spill response, ground water protection plan, etc.). Teresa conducted environmental and Occupational Safety and Health Administration training. She also managed more than 2,400 telecommunications tower siting projects in West Virginia, Kentucky, Ohio, Pennsylvania, Maryland and Virginia. Siting included Phase I Environmental Assessments (EA) and National Environmental Protection Agency (NEPA) compliance. Teresa prepared Regulation 13 air applications for various industries and Title V applications for landfill as well as tier II and III air submission for industries. She managed and prepared U.S. Army Corps of Engineers (USACE) permits for a variety of projects and assisted concrete and timber industries with storm water permitting and discharge monitoring report compliance. She was project manager for various general civil engineering projects and construction management projects. In addition, Teresa was responsible for permitting and construction management of housing authority redevelopment projects and an energy sector-compressor station. She possesses 14 years of experience in applicable risk assessment work conducting and managing over 100 various types of risk assessments for industry and Potentially Responsible Parties (PRP) committees. Teresa managed, prepared and defended Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource and Conservation Recovery Act (RCRA) risk assessments.

RELATED PROJECTS

State of West Virginia Executive Office BTOP Broadband Grant #2672 NEPA, EA, FONSI West Virginia

Teresa managed the environmental work for the State of West Virginia Broadband grant from the NTIA. The grant amount is \$126 million to provide 12 new telecommunication towers to the Homeland Security Network (microwave) and 1,000 miles of fiber to add broadband service to 1,064 anchor tenants (schools, hospitals, libraries, etc.). The work involved the preparation of an EA for the project with specialized negotiations with USFWS, WVDNR, National Forest Agency, SHPO, THPOs (Native American tribes), COE, and WVDEP to obtain clearance letters. The work began in March 2010 with the FONSI issued in February 2011. Teresa will also be responsible for approving fiber construction; tower construction; inspections of towers for E&SC measures; inspections of USFWS and WVDNR RTE species on fiber builds; modifications of the EA for project changes; and coordination with the State of West Virginia's project manager from 2011-2013. Maintenance of files and documents for federal audits are required.

Telecommunications Tower Siting Various National and Regional Carriers West Virginia, Virginia, Ohio, Kentucky, Maryland, Pennsylvania



Areas of Expertise

- Telecommunication towers
- NEPA and Phase I ESAs
- COE and state permitting
- Phase I and II ESAs
- Storm water permitting
- Air permitting
- Risk assessment
- Environmental research
- Analytical chemistry
- Project management

Education

- MS, Chemistry, West Chester University, 1983
- BS, Chemistry, Eastern Illinois University, 1979

Registration

- Licensed Remediation Specialist, West Virginia (LRS 174)

Memberships

- Western PA/WV AWMA
- VA Wireless Association
- PA Wireless Association

Credentials

- Continued education in specialized training and management courses
- ISO 9000 Quality Training
- OSHA 40 hour certification (HAZWOPER).
- OSHA HAZWOPER Instructor
- ODOT Waterways Permits Training Course 2016
- Project management training courses, including PSMJ
- ODOTs Managing the Environmental and Project Development Process Course 2010

Presentations

- AIA meeting – Environmental and Developer Issues Training Course

TERESA SCHULLER, LRS (CONTINUED)

Teresa managed more than 2,500 telecommunications tower siting projects. Tasks included Phase I Environmental Assessments (EAs), National Environmental Policy Act (NEPA) Checklists, NEPA, State Historic Preservation Offices, Tribal Historic Preservation Officers, United States Fish and Wildlife Services and State Department of Natural Resources Clearance Environmental Assessments, and Federal Communications Commission's clearances. The EAs followed a modified US ACOE report structure.

EA/FONSI for Mt Storm Tower WVDHHR

Grant County, West Virginia

Teresa managed and prepared an EA for a proposed 480-foot guyed tower to address migratory bird issues. Coordination with the State Ornithologist was necessary to evaluate potential bird kills. Following federal and local 30-day notices, FCC granted a FONSI to allow construction of the tower provided a modified lighting system was utilized.

FEMA EA/FONSI for Four Towers WV Division of Homeland Security Various Counties, West Virginia

Teresa managed and prepared a FEMA EAs for four proposed towers to meet FEMA grant funding requirements. Following federal and local 30-day notices, FEMA granted FONSIs to allow construction of the towers.

Parking tract Steptoe & Johnson, PLLC Fayette County, West Virginia

Teresa managed the parking tracts project for the Boy Scout project. The work involved survey crews, archaeology surveys, and wetland delineations. Identified critical areas or habitats were avoided during the upgrade of the existing roadways and construction of parking lots. Future work may require submission of the cultural resource report and wetland delineation to obtain permitting for other land uses.

Environmental site assessment (ESA) Charter Associates, Inc. West Virginia

Teresa conducted Phase I ESAs for the purchase of 250- and 280-acre tracts of land in southern West Virginia.

Environmental Site Assessment (ESA) Cranberry Hardwoods, Inc. Fayette County, West Virginia

Teresa conducted Phases I and II ESAs for an 11,000-acre parcel and an 11-acre sawmill property as part of the purchase for the Boy Scouts of America project. She provided management of the field team, laboratory, driller and asbestos subcontractors. Teresa also provided oversight for soil remediation activities at this property.

Environmental Site Assessment (ESA) Charleston – Kanawha County Public Housing and Cabell County Housing Authority Charleston and Huntington, West Virginia

Past Employment

- TERRADON Corp. 1999-2009
- ERM, Inc. 1986-1998
- E.I. DuPont 1983-1986
- Illinois State Natural History Survey 1979-1981

No. of Years With Mead & Hunt

- Hired 01/01/2011
- RPM 02/23/2009

No. of Years With Other Firms

- 31

TERESA SCHULLER, LRS (CONTINUED)

Teresa conducted a multi-site Department of Housing and Urban Development (HUD) Phase I ESA for Charleston Public Housing. The Phase I ESAs were completed in conformance with the scope and limitations of the Veteran Affairs - Environmental Compliance Method and American Society for Testing and Materials Standard E1527-05.

She conducted an environmental evaluation and Phase I site assessment of a former school for the proposed Douglass Center retirement housing renovation project. The project was funded in part by HUD and involved analytical sampling for lead paint and asbestos throughout the three-story building. The analytical data and remediation recommendations were presented to the client in a report.

Site Assessments

Fortune 50 companies, banks, developers International, National and State Levels

Teresa served as manager and senior auditor for more than 1,500 property transfer/due diligence site assessments. Clients included major telecommunications companies, banks, public companies and industry.

Mergers and Acquisitions

Fortune 50 Companies International and National Locations

Teresa managed and conducted more than 300 multi-faceted domestic and international mergers and acquisition projects with Environmental Health and Safety compliance audits on tight schedules and budgets.

Wetland Permitting

Various West Virginia

Teresa managed wetland permitting (COE, WVDEP and WVDNR) and mitigation aspects of various size projects for commercial and residential developers. She also provides oversight for wetland specialists performing the field work.

Air Permitting

Industrial clients West Virginia, Virginia

Teresa performed Tier II and manufacturing Form R preparations; Regulation 13 air permitting for mobile units and facilities and minor modifications to Title V permit for several industrial clients.

NPDES Storm Water Permitting

Confidential clients West Virginia

Teresa prepared storm water sampling, analysis and discharge monitoring reports (DMR) preparation for several concrete and timber companies.

Title V Air Permit

Copper Ridge Landfill West Virginia

Teresa prepared and negotiated Title V air permit and compliance assistance for a new 106-acre solid waste landfill in southern West Virginia. ■

EMILY BUMGARNER, PE HYDRAULIC ENGINEER

Emily Bumgarner has 15 years of civil engineering, hydrology and hydraulic-related experience. As a hydraulic engineer, Emily has performed various duties associated with the preparation of plans, specifications and estimates for all drainage related design for various state highway projects including work in West Virginia, Michigan, Arkansas and Indiana.

Emily has completed four levels of training utilizing Rosgen's Methods for Natural Stream Design & Stream Relocation Mitigation. Other specific drainage design experience includes hydrologic procedures, pavement/deck drainage, inlet spacing computations, channels, culverts, storm drains, erosion and sediment control ponds, storm water management, hydraulic river analysis utilizing HEC-RAS, preparation of Hydrology and Hydraulics (H&H) reports, evaluation of scour at bridges, riprap design and flood routing procedures using HYDROCad software.

DRAINAGE AND PERMITTING (WITH PROJECTS)

Emily brings 15 years of hydrology and hydraulic related engineering experience to this contract. As a drainage engineer, Emily has performed various duties associated with PS&E preparation for drainage-related design on various state highway and bridge projects. Emily has completed four levels of training using Rosgen's Methods for Natural Stream Design and Stream Relocation Mitigation. Other specific drainage design experience includes hydrologic procedures, pavement/deck drainage, inlet spacing computations, channels, culverts, storm drains, erosion and sediment control ponds, stormwater management, hydraulic river analysis using HEC-RAS, preparation of hydrology and hydraulic reports, evaluation of scour at bridges, riprap design and flood routing procedures using HydroCAD software. Emily served as the lead drainage engineer for a three-mile section of US 522 in Berkeley County. The design included the incorporation of 17 sediment basins in a watershed closely monitored by various agencies due to the importance of water levels to local farmers. Emily has also provided hydraulic design for other WVDOH projects, including the two-mile upgrade of I-94 and US 31 Interchange in Barrien County and 1.5 miles of the King Coal Highway design in Mercer County, to name a few.

RELATED PROJECTS

Bridge Relocation, Colliers Way Bridge, 2013 West Virginia Division of Highways (WVDOH) Brooke/Hancock County, West Virginia

Emily provided the hydraulic design for this project that consisted of a bridge relocation on West Virginia State Route 105 over United States Route 22. The new bridge was a 225-foot-long, two-span steel plate girder bridge. This project involved the addition of a center left turn lane on the bridge along with left and right turn lanes on the various entrance and exit ramps for US-22. The project also presented unique challenges of keeping the proposed footprint within existing WVDOH right of way limits. Mead & Hunt won a 2013 WVDOH Engineering Excellence Award for this project. The project had a total construction cost of \$4.7 million.



Areas of Expertise

- Civil engineering hydrology
- Drainage design
- Highway design

Education

- MBA, Business Administration, Marshall University, 2002
- BS, Civil Engineering, West Virginia Institute of Technology, 1997

Registration

- Licensed Professional Engineer – West Virginia (#015611, 2003), Ohio (#71690, 2006)

Memberships

-

Credentials

-

Presentations

-

Past Employment

-

No. of Years With Mead & Hunt

- Hired 01/01/2011
- RPM 03/01/2006

No. of Years With Other Firms

- Eight

EMILY BUMGARNER, PE (CONTINUED)

Drainage Design, I-94 & US 31 Interchange Michigan Department of Transportation (MDOT) Berrien County, Michigan

Emily served as one of the lead drainage designers responsible for many aspects of design and plan development for the preliminary and final design of a 2.0-mile section of Interstate I-94 upgrading from a four- to six-lane segment. This project also included the drainage design of a 1.0-mile section of divided arterial traffic (US 31) and all drainage design for the full cloverleaf interchange of these two roads. This project consisted of two HEC-RAS models for separate county drains and one HEC-RAS model for a native trout stream with a zero tolerance increase in flow. This project also involved the design of several storm water management ponds (sediment basins), major and minor drainage, erosion and sediment control, permitting, coordination with various regulatory agencies and many other aspects. This project was completed while Emily was employed with another firm.

Drainage Design, US 522 West Virginia Division of Highways (WVDOH) Berkley County, West Virginia

Emily was lead hydraulic engineer for the preliminary and final drainage design of a three-mile section of divided arterial through a rolling terrain. This design included the incorporation of 17 sediment basins in a watershed closely monitored by various agencies due to the importance of water levels to local farmers. Other drainage tasks included the design of two concrete box culverts each over 100 feet in length, major culvert design and analysis (108 inch and above), minor drainage design, National Pollutant Discharge Elimination System (NPDES) permitting requirements, storm sewer and ditch design. This project was completed while Emily was employed with another firm.

Hydraulic Crossings, I-69 Hydraulic Analysis, 10 Mile Creek & Other Streams Arkansas State Highway and Transportation Department White, Jackson and Independence Counties, Arkansas

Emily worked as a design team member for the preliminary and final analysis of seven different hydraulic crossings for a proposed section of Interstate I-69 utilizing HEC-RAS. This project consisted of modeling existing and proposed conditions for various bridges and culverts. This project was completed while Emily was employed with another firm.

Drainage Design, King Coal Highway West Virginia Division of Highways (WVDOH) Mercer County, West Virginia

Emily served as lead hydraulic engineer for the preliminary and final design of a 1.5-mile section of divided arterial through a mountainous terrain. Tasks included sediment basin design utilizing HYDROCad software, major and minor culvert design, ditch design, NPDES permitting packages and various other drainage related tasks. This project was completed while Emily was employed with another firm.

Bridge Replacement, Gilliam Arch Bridge West Virginia Division of Highways (WVDOH) McDowell County, West Virginia

Emily was a drainage design team member for the preliminary and final design for the roadway portion of the bridge replacement. Tasks on this project included, but were not

EMILY BUMGARNER, PE (CONTINUED)

limited to, an HEC-RAS model of the creek, abutment rip-rap design, culvert design and preparing all NPDES permitting packages. This project was completed while Emily was employed with another firm.

Roadway Design, Corridor D West Virginia Division of Highways (WVDOH) Wood County, West Virginia

Emily was a design team member for the preliminary and final design of a 1.0-mile section of divided arterial and interchange including right-of-way and construction plan development. This section extended a new alignment in an urban setting through downtown Parkersburg, West Virginia. Tasks included quantity calculations, drainage design and various other plan preparation tasks. This project was completed while Emily was employed with another firm.

Traffic Design West Virginia Division of Highways (WVDOH) Various Counties, West Virginia

Emily worked as a design team member for various "in-house" maintenance of traffic (MOT) projects around the state as well as a quality assurance/quality control reviewer of consultant MOT plans. She also designed various impact attenuators on Interstate I-70 in Wheeling, West Virginia, and surrounding areas. This project was completed while Emily was employed with another firm.

Environmental Engineering, Arch of West Virginia Arch Coal, Inc. Rum Creek, West Virginia

Emily was the engineer responsible for planning and managing reclamation and remediation projects. She conducted quarterly spill prevention, control and countermeasure plan inspections. She also performed daily inspections of acid-mine drainage areas. This project was completed while Emily was employed with another firm. ■

CARL BOWYER, PE, PS PROJECT MANAGER

Carl Bowyer contributes 42 years of civil engineering experience which ranges from roadway and site design to proposal preparation and project management. Previously Carl served as an administrative section head at the West Virginia Division of Highways (WVDOH). In this position he managed and supervised the initial design section and was in charge of the study and development of preliminary design reports, preparation of contract fees, negotiations and contract agreements for Engineering and Architectural services for both State and Federal Highway projects. He has proven his expertise in roadway and drainage design, storm water detention system design, site grading, storm and sanitary sewer design, waterline analysis and design and development of construction drawings for transportation projects.

TELECOMMUNICATIONS

Carl is the Senior Project Engineer overseeing and reviewing the development of plans for upgrading existing tower facilities to the latest technology providing 3G and LTE services. He is also in charge of the co-location of new carriers and the construction of new tower sites including the access roads, utility easements, survey plats and construction documents associated with these projects. Carl is the principal licensed Engineer/Surveyor In-charge overseeing the final deliverables to clients such as Verizon, AT&T, Ntelos, Sprint, US Cellular, and T-Mobile in West Virginia, Virginia, Pennsylvania, Kentucky, Ohio and Maryland.

QA/QC (WVDOH FOCUS)

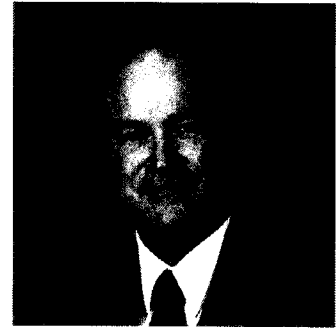
Carl contributes 42 years of civil engineering experience which ranges from roadway and site design to project management and quality assurance. Previously, Carl served as an administrative section head at the WVDOH. In this position, he managed and supervised the initial design section and oversaw the study and development of preliminary design reports, preparation of contract fees, negotiations and contract agreements for engineering and architectural services for both state and federal highway projects. He has proven expertise in roadway and drainage design, storm water detention system design, site grading, storm and sanitary sewer design, waterline analysis and design and development of construction drawings for transportation projects.

Carl's in-depth understanding of the WVDOH processes and procedures from both the client and consultant perspective provides him with a unique insight into your deliverable expectations. He utilizes a QC process that includes client-specific checklists for submittals as well as our own Mead & Hunt internal checklists and processes for plan design, cost estimation, checking and review. Carl will use this proven QC process to provide WVDOH with high-quality deliverables on schedule and within budget.

RELATED PROJECTS (WITH OTHER FIRMS)

Initial Design Section/Consultant Services Head West Virginia Department of Highways

This position was charged with preparing and maintaining related documentation leading to the successful negotiations and execution of agreements while assuring the



Areas of Expertise

- Roadway design
- Site design
- Project management
- Drainage design
- Stormwater management design
- Surveying

Education

- BS, Civil Engineering, West Virginia Institute of Technology, 1988
- AS, Drafting and Design, West Virginia Institute of Technology, 1976

Registration

- Licensed Professional Engineer – West Virginia (#11818), Maryland (#43096), Kentucky (#29163), Ohio (#PE77303), Pennsylvania (#PE080539), and Virginia (#0402051626)
- Licensed Professional Surveyor – West Virginia (#1058)

Memberships

- West Virginia Society of Professional Surveyors

Past Employment

- WVDOH

No. of Years with Mead & Hunt

- 05/01/2011

No. of Years with Other Firms

- 35

CARL BOWYER, PE, PS (CONTINUED)

adherence to State and Federal codes in accordance with the guidelines for Qualification-Based Selections.

Key Responsibilities included managing the daily operation of the Initial Design Section involving a staff of eleven (Five Professional Engineers, Two Transportation Technologists, a Technologist Enrollee, an Office Assistant and Secretary), preparing advertisements, conducting shortlist meetings, scheduling and conducting interviews, making recommendation for the selection of engineering and architectural services, reviewing engineer's estimates, negotiate fees, prepare agreements, and maintaining all documentation and maintaining databases for tracking the status of agreements, consultant qualifications and confidential information, consultant evaluations and preparing reports.

Agreement Unit Leader for Consultant Services West Virginia Department of Highways

Carl supervised and coordinated the work of highway engineers and technicians in the preparation of the scope of work, engineering estimates, proposal review, and negotiation of fees for entering into contract agreements for engineering and architectural services. Key Responsibilities included researching and collecting information in the preparation and development of scopes of work, preparing scopes of work notes and bold scopes of work meetings and preparing Engineer's Estimates and negotiating fees documenting the final results. Most notable achievement while holding this position was the successful negotiation of a \$10.3 million design fee for the design of the Blennerhassett Bridge spanning the Ohio River. In addition to this project, successful negotiations were held for the six-lane widening project on I-64 including eight dual structures and the design of the longest Concrete Segmental Span in the United States across the Kanawha River resulting in a design fee of \$13.7 million.

Project Manager for Consultant Design West Virginia Department of Highways

This position required the management, review, and oversight in the development and preparation of roadway, right-of-way, and bridge plans, and related contract documentation prepared for the construction of State and Federal projects in accordance with the WVDOT policies, procedures, and specifications for roads and bridges, by consulting firms. Key Responsibilities included oversight development and review for roadway, right-of-way and structure plans and specification; collectively putting together all documents for the delivery of Plans, Specifications and Estimate for letting and awarding for construction, preparing and holding progress meetings, maintaining project records, participating in public meetings, holding preliminary field and final office reviews for the purposes of maintaining and delivering the project on time and on budget. The most significant accomplishment was coordinating and managing the fast track development of the plans and specifications of the Harpers Ferry Bridge over the South Branch of the Potomac River designed by Modjeski & Masters bringing the plans and specifications together within nine months.

Site Plan Development for the Construction and Permitting for Cellular Telecommunication Towers and Colocation projects.

Carl is the Sr. Project Engineer managing, overseeing and reviewing the development of plans for up grading existing tower facilities to the latest technology providing LTE and 4G services, the co-location of new carriers, and the construction of new tower



August 21, 2020

Mya Toon, Chief Procurement Officer
Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

Dear Ms. Toon:

Subject: Proposal for Engineering and Surveying Services
for Hughesville Water Authority Tower Site and Hesker Hill Tower Site
CEC Project 304-286

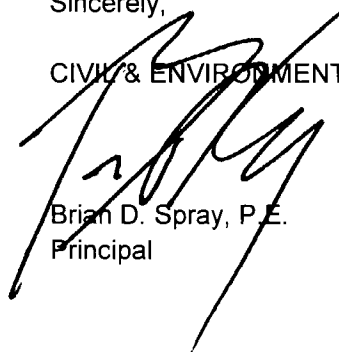
Civil & Environmental Consultants, Inc. (CEC) is pleased to present our proposal to provide engineering services to the County of Lycoming. CEC is a national civil and environmental engineering firm, currently employing more than 1,000 people in 25 offices across the United States. CEC's Langhorne office will lead all tasks for this project; our local professionals provide us with the capability to immediately undertake and complete any assignment with an organized, efficient and responsive project approach. We will draw from significant experience conducting civil engineering work throughout the United States, including prior work with the County. CEC has the experienced staff necessary to complete the civil site engineering, site design and permitting, land surveying, and environmental surveying for this project

Our attention to project management, focus on schedule and cost control, and frequent communication will drive the execution of projects under this contract. CEC's Principal, Brian D. Spray, P.E., has more than twenty-two years of experience in civil engineering and site development.

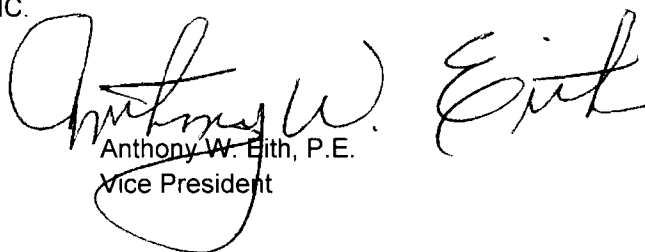
Thank you for the opportunity to present our qualifications. If I can provide further information in your decision-making process, please contact me at 215-806-7303.

Sincerely,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.



Brian D. Spray, P.E.
Principal



Anthony W. Eith, P.E.
Vice President

PRICE PROPOSAL

6.1 Cost Elements, Services not specifically mentioned in this RFP, but are necessary to provide functional capabilities described, shall be included as part of the cost elements. Bidders should utilize this table below to justify costs.

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	\$10,100
Stormwater Drainage Design	\$7,900
Erosion/Sediment Control	\$6,700
Civil Permitting	\$5,300
Geotechnical	\$10,090
Geotechnical Boring Stakeout	\$1,600
Construction Stakeout	\$4,600
Soil Resistivity	\$1,070
Preliminary and Final Construction Drawings	\$4,500
Utility Coordination	\$5,100
Zoning Information	\$2,600
FAA/FCC	\$750
Field Surveying/Courthouse Research	\$8,700
Survey Plans	\$1,160
Environmental Investigation	\$2,750
Infiltration Testing (If Needed)	\$3,110
Wetlands/Stream Delineation	\$4,750
Phase 1 Investigation and Report	\$2,700
Hearing Attendance (If Needed)	\$5,800
Phase 2 Investigation and Report (if Needed)	\$3,850
NEPA/SHPO Services	\$1,380
Deliveries, Copies, Etc.	\$7,650
SUBTOTAL FOR HUGHESVILLE	\$102,160

PRICE PROPOSAL

6.1 Cost Elements, Services not specifically mentioned in this RFP, but are necessary to provide functional capabilities described, shall be included as part of the cost elements. Bidders should utilize this table below to justify costs.

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	\$9,800
Stormwater Drainage Design	\$7,900
Erosion/Sediment Control	\$6,700
Civil Permitting	\$5,300
Geotechnical	\$10,090
Geotechnical Boring Stakeout	\$1,600
Construction Stakeout	\$4,600
Soil Resistivity	\$1,070
Preliminary and Final Construction Drawings	\$3,700
Utility Coordination	\$5,100
Zoning Information	\$2,600
FAA/FCC	\$750
Field Surveying/Courthouse Research	\$3,540
Survey Plans	\$1,160
Environmental Investigation	\$2,750
Infiltration Testing	\$2,710
Wetlands/Stream Delineation	\$4,750
Phase 1 Investigation and Report	\$2,700
Hearing Attendance (If Needed)	\$5,800
Phase 2 Investigation and Report (if Needed)	\$3,850
NEPA/SHPO Services	\$1,380
Deliveries, Copies, Etc.	\$6,480
SUBTOTAL FOR HESKER HILL	\$94,330
GRAND TOTAL FOR BOTH SITES	\$196,490

The undersigned, as Bidder, hereby declares that the total project costs as indicated above, includes all necessary work to complete this project in full according to the general specifications contained in the RFP. Products and services not specifically mentioned, but are necessary to provide the functional capabilities shall be listed and included as part of the cost elements.

The undersigned further understands and agrees that if the County accepts the bid, no additional funds will be allowed beyond the stated total project costs.

Company Name: Civil & Environmental Consultants, Inc

Address: 370 East Maple Avenue, Suite 304, Langhorne, PA 19047

Point of Contact: Brian Spray, PE Phone Number: 215-806-7303

Fax Number: 267-568-2205 Email address: bspray@cecinc.com

Name of person submitting proposal: Brian Spray, PE

Signature:  Date: 8/17/20

When submitting a bid, place the bid form sheet as the top page of the bid package and the bid price schedule as the second page of the bid package.

PROPOSAL FORM

Important note to Bidders:

It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to:

Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 19, 2020 **. This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: Civil & Environmental Consultants, Inc.

Company Address: 370 East Maple Avenue, Suite 304

Langhorne, PA 19047

Main Telephone: 264-568-2300 Main Fax: 267-568-2205

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Brian Spray, PE, Principal

Contact Telephone: 888-267-7891 x3426 Fax: 267-568-2205

Contact Email: bspray@cecinc.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Brian Spray, PE, Principal

Office Address: 370 East Maple Avenue, Suite 304

Langhorne, PA 19047

Telephone: 888-267-7891 x3426 Fax: 267-568-2205

Email: bspray@cecinc.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	<u>1</u>	Date	<u>July 31, 2020</u>
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____
Questions/Answers	<u>1, 2, 3, 4</u>	Date	<u>August 14, 2020</u>

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

Company Type (check one):

- Sole Proprietorship Partnership Corporation Joint Venture

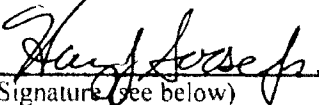
Bidder attests that:

1. He/she has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements;
2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor and material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

<u>Civil & Environmental Consultants, Inc.</u>		<u>25-1599565</u>		
Company Name		Federal ID#		
<u>333 Baldwin Road</u>		<u>Pittsburgh, PA 15205</u>		
Street Address	PO Box	City	State	Zip
<u>412-429-2323</u>		<u>412-429-2114</u>		
Telephone #		Fax #		

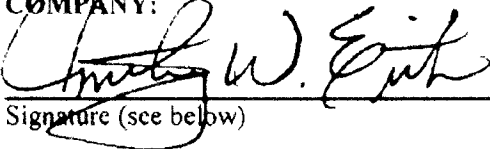
WITNESS:


Signature (see below)

Harry J. Soose, Jr.
Name (print)

Chief Financial Officer and Treasurer
Title (print)

COMPANY:


Signature (see below)

Anthony W. Eith, PE
Name (print)

Vice President
Title (print)



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PROPOSAL FOR ENGINEERING & SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE AND HESKER HILL TOWER SITE

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1.0 Technical Compliance

1.1 Project Understanding

1.1.1 Objective

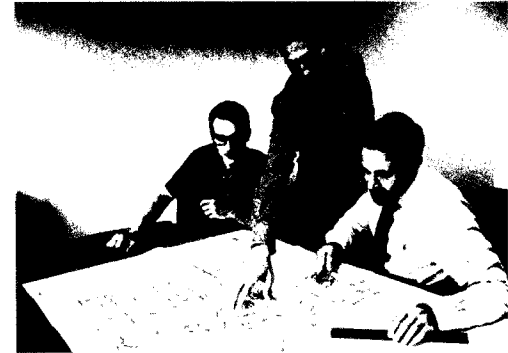
Lycoming County wishes to provide for an increase in the scope of safety measures for its residents, businesses and tourists by expanding radio frequency coverage. This expansion of radio frequency coverage will assist our first responders and public safety agencies as they attend to safety and emergency situations.

1.1.2 Scope

To meet the stated objective, Lycoming County wishes to develop two (2) radio tower sites, one in Hughesville and one in Jersey Shore. Additionally, Lycoming County has agreed to clear a plot of land for the Hughesville Water Authority's future use. The exact locations of the radio tower sites are identified in the RFP.

1.1.3 Expected Result

The Project Team's expectation is that on or before February 28, 2021 permits and approvals will be in place that will allow us to start construction on the two (2) radio tower sites.



1.2 Project Approach

1.2.1 Introduction

CEC will approach this Project by breaking it down into Design Phases. The Design Phases listed below will be indicated on our Project Schedule. This approach will allow the Project Team to track progress and where necessary make the appropriate adjustments to either scope or schedule.

Scope of services as outlined in the RFP is included in this Section as a means of communicating how CEC will complete the selected task.

CEC values the Quality Assurance process. Senior staff reviews designs and design documentation before documents are published for permitting/construction.

1.2.2 Design Phases

1.2.2.1 Project Mobilization

- Compile regulatory agency applications
- Kick off meeting with stakeholders
- Identify and review prevailing codes
- Confirm RFP basis of design
- Partially fill out permit applications
- Establish Project Team Quality Assurance protocols
- Publish project schedule
- Identify information required from stakeholders

Proposal for Engineering and Surveying Services
for Hughesville Water Authority Tower Site and Hesker Hill Tower Site

1.2.2.2 Site Investigation

- Perform field work for land survey
- Deed, easement, ROW, property and adjacent Owner research
- Complete Existing Conditions Map
- Perform field work for environmental survey
- Compile environmental field survey report
- Flag wetlands and field locate (if necessary)
- Complete Site Analysis Map
- Soil resistivity testing and report
- Soil borings and report
- Steep slope analysis
- Utility company coordination
- Prepare ESA I
- Prepare ESA II (if necessary)
- Teleconferences with Project Team

1.2.2.3 Permit Documents

- Drawings
- Cover Sheet
- Existing Conditions Map
- Site Analysis Map
- Site Removals Plan
- Site Plan
- Grading Plan
- Access Road Profile
- Stormwater Management Plan and Profiles
- Erosion & Sediment Control Plan and Details
- Site Details
- Planting Plan and Details
- Lease & Easement Boundary Map
- FAA Maps for FAA Form 7460
- Reports
- Stormwater Management Report
- Erosion & Sediment Control Plan Narrative
- Lease & Easement Descriptions
- Teleconferences with Project Team

1.2.2.4 Permit Acquisition Period

- Assist Owner in completing permit applications
- Compile permit submission packages, include Owner provided documents
- Deliver to Owner for submission to regulatory agencies
- Attend public hearings
- Respond to regulatory agencies review comments
- Resubmit packages to Owner for resubmission to regulatory agencies
- Prepare Opinion of Probable Construction Costs
- Assist Owner in obtaining approval signatures
- Assist Owner in recording documents at County Courthouse
- Teleconferences with Project Team

1.2.2.5 Construction Documents

- Update permit acquisition drawings to Preliminary Construction Drawings
- Update Preliminary Construction Drawings to Final Construction Drawings
- Prepare technical specifications
- Teleconferences with Project Team



1.2.2.6 Project Close Out

- Deliver Final Construction Drawings and technical specifications to Owner
- Field stake out lease boundary corners

1.3 Scope of Services

1.3.1 Site Grading/Site Layout

- Provide for layout of tower foundation, building, parking area, access road and accessories
- Set projected area of disturbance and provide for grading those areas
- Grade areas to conform to the natural terrain
- Determine optimum access road gradient for truck access to tower site
- Perform earthwork calculations
- Adjust new grades to work towards a balanced site
- HWA Site
 - + Include projected area of disturbance for water tank site

1.3.2 Stormwater Drainage Design

- Provide for stormwater management to control peak discharges and to meet volume and water quality requirements
- Design to conform to applicable codes
- Consider systems that limit amount of downslope grading/tree clearing
- HWA Site
 - +Runoff will discharge to two streams
 - +Streams are designated by PADEP as Cold Water Fisheries
 - +Streams are not listed by PADEP as having a Category 5 Impairment
- Hesker Site
 - +Runoff will discharge to four streams
 - +Streams are designated by PADEP as Warm Water Fisheries
 - +One stream is listed by PADEP as having a Category 5 Impairment

1.3.3 Erosion/Sediment Control

- Limit extent of grading to mitigate impact of earthmoving on downslope areas
- Place downslope controls to intercept sediment runoff to mitigate impacts downstream
- Documents to direct contractor to limit amount of time subgrade is exposed
- Provide controls in conformance with applicable codes

1.3.4 Civil Permitting

- Provide documents for submission to agencies having jurisdiction over land development
- Where applicable, submit documents to Owner for Owner's use when applying for permit
- Where applicable, electronically submit documents directly to regulatory agency
- Provide for responding to regulatory agency review comments
- Coordinate resubmission of permit review packages with Owner
- Provide for an opinion of probable construction costs in conformance with regulatory agency requirements
- Provide documents to Owner for Owner's use when recording approved land development documents at courthouse.

1.3.5 Geotechnical

- Provide for drilling three (3) borings at a total depth of 35 feet each at each site
- CEC expects to encounter rock and to core through the rock
- Provide limited laboratory testing of recovered soil samples and strength testing of recovered rock core samples
- Prepare Report and submit to Owner
 - +Summarize field investigation activities and compiled data
 - +Recommendations for tower foundation design; seismic site class, bearing capacity, lateral earth pressures, corrosion issues and site preparation

1.3.6 Geotechnical Boring Stakeout

- Visit site to confirm drilling rig access route
- Contact Owner to obtain available record documents
- Review documents and contact Owner to determine presence/absence of underground utilities within earth disturbance areas
- Coordinate location of borings with Owner
- Stakeout three (3) boring locations at each site

1.3.7 Construction Stakeout

- Provide construction stakeout
 - +Clearing limits
 - +Access roads
 - +Foundation locations
 - +Grading elevations, infrastructure items, erosion control measures
 - +Utility ROW corners
- CEC is providing for an allocation of two (2) days of stakeout work for each site (4 total). Stakeout will be done by a two-person survey crew

1.3.8 Soil Resistivity

- Perform electrical resistivity field testing in conformance with ASTM G-57
- Anticipate one (1) day in the field total for both sites
- Provide report of findings

1.3.9 Preliminary and Final Construction Drawings

- Provide for documentation of tower lighting, tower and fence grounding, back up generator and propane gas location for shelter
- Update permit submission documents to construction drawing document status
- Provide technical specifications
- Electronically submit documents to Owner

1.3.10 Utility Coordination

- Contact power and telecom utility companies to discuss routing of new services
- Provide utility companies with maps indicating possible right of way corridors
- Work with Owner and utility companies to determine best location for right of way corridors



1.3.11 Zoning Information

- HWA Site
 - +CEC believes this development is permitted as a Conditional Use
- Hesker Site
 - +CEC believes this development will require Special Exception relief from the Zoning Hearing Board
 - +Provide zoning submission drawings to Owner
 - +Provide assistance to Owner when Owner is preparing Zoning Application
 - +Provide for responding to ZHB review comments
 - +Coordinate resubmission of ZHB package with Owner

1.3.12 FAA/FCC

- Contact FAA/FCC regulators to discuss Projects
- Provide documents for submissions to FAA/FCC
- Coordinate with Owner when filling out permit/approval forms
- Provide for responding to FAA/FCC review comments
- Coordinate resubmission of permit/approvals packages with Owner

1.3.13 Field Surveying/Courthouse Research

- Obtain Title information from Owner
- Research courthouse documents
- Provide survey on parent tracts
 - +Existing easements
 - +Structures within 50 feet of project sites
 - +Identified utility infrastructure within 25 feet of project sites
- Provide topographic survey for project sites
 - +Within 100 feet of projected area of disturbance
 - +Along access easement centerline where terrain exceeds 6% slope
- Set permanent benchmark in the vicinity of each project site (includes water tank site)

1.3.14 Survey Plans

- Prepare Existing Conditions Maps for both sites
 - +Easement exhibits and descriptions for proposed easements
 - +Topography, utility infrastructure and benchmarks for project sites

1.3.15 Environmental Investigation

- Perform desktop evaluation of documents available in the public domain
- Complete PNDI environmental review
- Provide for one day of fieldwork for each site to determine presence/absence of aquatic resources (wetlands/watercourses) within or near the proposed area of earth disturbance
- Prepare letter report of findings
- CEC anticipates an absence determination for aquatic resources for both sites

1.3.16 Infiltration Testing

- Excavate for four (4) test pits at both sites
- Perform double-ring infiltrometer testing
- Obtain soil samples and analyze for classification testing
- Conform to PADEP requirements for infiltration testing
- Prepare letter report of findings
- CEC is allocating one (1) day of testing for each site

1.3.17 Wetlands/Stream Delineation (If Needed)

- Perform field work to mark out wetland/stream boundaries and take photographs
- Fill out USACE wetland determination date forms
- Field locate flagging with GPS technology in conformance with USACE requirements
- Prepare wetland/stream boundary map for each site
- Prepare report of findings
 - +Aquatic resource findings and classification
 - +Completed USACE wetland determination date forms
 - +Photographs with captions
 - +Maps
- CEC is providing an allocation for this task as follows:
 - +One (1) day of field work by ecologist for each site
 - +Twelve (12) hours of office work for each site

1.3.18 Phase 1 Investigation and Report

- Perform desktop evaluation of documents available in the public domain
- Visit sites to determine absence/presence of hazardous substances/petroleum products
- Conduct interviews to obtain additional information regarding present/past uses.
- Prepare Phase I ESA Report

1.3.19 Hearing Attendance (If Needed)

- CEC is providing an allocation for this task as follows:
 - +Environmental; one (1) public hearing
 - +Civil Permitting; four (4) public hearings

1.3.20 Phase 2 Investigation and Report (If Needed)

- Perform field work to obtain four (4) soil samples at each project site
- Locate soil samples using GPS technology
- Perform laboratory testing of collected samples in accordance with EPA requirements
- Prepare map that locates soil samples on project sites
- Prepare Phase II ESA Report
 - +Laboratory analytical results
 - +Soil boring logs
 - +Temporary well construction details
 - +Field screening observations
 - +Maps

1.3.21 NEPA/SHPO Services

- Perform Section 106 tasks related to tower construction
 - +Cultural Resources Literature Reviews
 - +FCC Form 620 New Tower Submission Packets (NTSP)
- Perform Tribal Consultation tasks related to tower construction
 - +FCC online Tower Construction Notification System
 - +Tribal Consultation letters to identified Native American tribes



1.4 Permits/Approvals

1.4.1 CEC is providing for participating in the following permitting/approval process

- HWA Site
 - +Wolf Township Land Development Approval (includes Conditional Use approval)
 - +Lycoming County Land Development Approval
 - +Lycoming County Soil Conservation District Certification
 - +NPDES General Permit
 - +FAA Form 7460 Permit (Permanent)
 - +FAA Form 7460 Permit (Construction)
 - +FCC Form 620 Approval
- Hesker Site
 - +Lycoming County Zoning Hearing Board relief for Special Exception
 - +Lycoming County Land Development Approval
 - +Lycoming County Soil Conservation District Certification
 - +NPDES Individual Permit
 - +FAA Form 7460 Permit (Permanent)
 - +FAA Form 7460 Permit (Construction)
 - +FCC Form 620 Approval

1.5 Deliverables

CEC will be providing for the delivery of drawings, reports and specifications in hard copy format where required by the Regulatory Agency. Where there is an option for delivering the documents in electronic format, CEC will chose to deliver the documents electronically.

1.6 Expectations

1.6.1 Civil Permitting

- PennDOT permits will not be required for either project
- Both sites will disturb more than one (1) acre of land
- HWA will require a NPDES General Permit
- Hesker will require a NPDES Individual Permit
- Owner will retain the services of a Land Use Attorney
- Owner will submit the municipal and county permit application packages
- Owner will record approved land development documents at the courthouse
- Owner will provide tower, office and MEP documentation
- The community will not be opposed to either project

1.6.2 Geotechnical

- Rock probes will not be done along proposed access driveway routes or utility corridors
- Clear access will be provided for both sites
- No special security clearances will be required to access sites
- Owner will provide foundation design for towers

1.6.3 Geotechnical Boring Stakeout

- Stakeout will be done once
- Clear access will be provided for both sites
- No special security clearances will be required to access sites

1.6.4 Construction Stakeout

- Stakeout will be done once
- Clear access will be provided for both sites
- No special security clearances will be required to access sites

1.6.5 Soil Resistivity

- Clear access will be provided for both sites
- No special security clearances will be required to access sites

1.6.6 Preliminary and Final Construction Drawings

- CEC will not be providing Bid Forms, Division 00 or Division 01 specifications, Notice to Bidders, etc.

1.6.7 Zoning Information

- HWA site will not require relief from Zoning Code requirements
- Owner will provide for a Land Use Attorney
- The community will not be opposed to either project

1.6.8 FAA/FCC

- CEC will not be providing for work associated with FAA Form 854

1.6.9 Field Surveying/Courthouse Research

- Owner will provide Title Information
- Utilities will not be located using underground utility location service
- Clear access will be provided for both sites
- No special security clearances will be required to access sites
- No overlaps or encumbrances will be discovered

1.6.10 Environmental Investigation

- PNDI search will not identify potential impacts
- An LOI for wetlands boundary will not be provided

1.6.11 Infiltration Testing

- Clear access will be provided for both sites
- No special security clearances will be required to access sites
- Test pits will be backfilled

1.6.12 Wetlands/Stream Delineation (If Needed)

- Exceptional value (EV) aquatic resources will not be identified

1.6.13 Phase 1 Investigation and Report

- Clear access will be provided for both sites
- No special security clearances will be required to access sites



1.6.14 Hearing Attendance (If Needed)

- CEC is providing an allocation for this task as follows:
 - +Environmental; one (1) public hearing
 - +Civil Permitting; four (4) public hearings

1.6.15 Phase 2 Investigation and Report (If Needed)

- Soil samples will be analyzed for target compound list pesticides and herbicides, arsenic, and lead

1.6.16 NEPA/SHPO Services

- Historic Properties will not be effected
- CEC will not be providing a full History Architecture Report with Historic Property Inventory
- CEC will not be providing a Phase I Archeology Report

2.0 Project/Operational Costs

2.1 Introduction

CEC is providing additional cost information as requested in the RFP. This additional cost information provides backup support for the costs shown in the Price Proposal.

2.2 Design Fee Matrix

The Design Fee Matrix is located in the Attachments Section. This matrix shows a breakdown of hours and cost by practice area for each task identified in the Price Proposal.

2.3 Expenses Matrix

The Expenses Matrix is located in the Attachments Section. This matrix shows a breakdown of expenses for the "Deliveries, Copies, Etc." cost line item identified in the Price Proposal.

2.4 Category Rate Table

The Category Rate Table is located in the Attachments Section. This table identifies hourly rates for personnel that may be providing services for scope items that are not included in the scope of services identified in the RFP.



3.0 Vendor References

3.1 Firm Profile

In 1989, four engineers and scientists came together with a singular vision: to be a people-first company, one that promotes a culture where clients and employees enjoy working together, and that is responsive to client needs with integrated services and high-quality work for projects both complex and routine.

More than 30 years later, Civil & Environmental Consultants, Inc. (CEC) has 1,000+ team members in offices nationwide. Headquartered in Pittsburgh, Pennsylvania, we are consistently ranked on *Engineering News-Record's* annual lists of the Top Design Firms and Top Environmental Firms in the nation.

A culture of accountability. We own it. At CEC, every member of our team has a personal stake in ensuring the success of our clients. Because their success is our success. As employee-owners of the firm, we are all personally accountable for building lasting relationships and delivering outstanding results. Because we don't just work at CEC. We own it.

Being easy to work with. We own it. At other firms, you may find one person you work well with. Here, our clients tell us they work well with all of us. It's because all of us are invested in your success. We're accessible, responsive, and operate with integrity.

Putting people first. We own it. At CEC, people come first. Always. Whether that's our clients, our employees, or our community. It's why we listen more and work harder to understand the unique needs of our clients. And it's why we prioritize the career development of every individual on our team. People are why we do this, and why we love what we do.

Teamwork. We own it. We are at our best when we work together. That means bringing together a diverse team of talented, passionate, multidisciplinary experts to work closely alongside clients to craft comprehensive solutions to complex problems. We believe that by working together, no problem is insurmountable.

Safety excellence. We own it. We believe all accidents are preventable and are committed to creating an accident- and incident-free workplace for employees and subcontractors through training, safe workplace practices, and processes for assessing project hazards. CEC strives for safety excellence throughout our entire organization and holds all individuals accountable for the safe performance of their work.

Multi-Disciplined

CEC is an expanding company that is home to:

- Civil Engineers
- Geotechnical Engineers
- Transportation Engineers
- Structural Engineers
- Environmental Scientists
- Environmental Engineers
- Chemical Engineers
- Geologists
- Hydrogeologists
- Hydrologists
- Ecologists
- Biologists
- Wetland Scientists
- Threatened & Endangered Species Experts
- Agronomists/Soil Scientists
- Emissions Testing Professionals
- Chemists
- Archaeologists
- Construction Managers and Inspectors
- Environmental Technicians
- Treatment Plant Operators
- Land Surveyors
- Landscape Architects
- GIS Analysts and Programmers





3.2 Project Team

3.2.1 Brian D. Spray, PE (Civil/Site Principal PHL Office)

- Owner's Primary Point of Contact
- Project Team Leader
- Land Development Permits/Approvals Facilitator
- Project Schedule Monitoring

3.2.2 Anthony W. Eith, PE (Vice President/Office Lead PHL Office)

- Owner's Secondary Point of Contact
- Senior Management/Quality Assurance; Environmental/Geotechnical Practice Areas

3.2.3 Walter J. Kaupp, PE (Civil/Site Principal PHL Office)

- Senior Management/Quality Assurance; Land Surveying/Civil Site Practice Areas
- Senior Management/Quality Assurance; Subconsultants
- Project Cost Monitoring
- Project Invoicing



3.2.4 Michael J. Urban, RLA (Project Manager II PHL Office)

- Design Documentation
- Junior Staff Leader

3.2.5 Todd M. Babcock, PLS (Vice President/Office Lead ATH Office)

- Land Surveying Team Leader

3.2.6 Bryon Fredenburg, PLS (Project Manager I ATH Office)

- Quality Assurance for Land Surveys and Legal Descriptions
- Junior Staff Leader

3.2.7 Blaine W. Orth, PE (Senior Project Manager PHL Office)

- Geotechnical Practice Implementation
- Scheduling and Reports

3.2.8 Steven R. Maxwell, PG (Senior Project Manager PHL Office)

- Quality Assurance for Environmental Reports

3.2.9 Patrick R. Cummings, PG (Project Manager III PHL Office)

- Environmental Investigation and Reports

3.2.10 Delta Geophysics Inc.

- Soil Resistivity Field Work and Report

3.2.11 RPA Engineering

- Power/Telecom Supply Design Documentation



MAJORSVILLE CELL TOWER PAD AND ACCESS ROAD

OWNER/CLIENT

American Tower Corporation

LOCATION

Majorsville, WV

CEC SERVICES

Surveying

Civil Engineering

Geotechnical Engineering

E&S Control Plan

OWNER OBJECTIVE

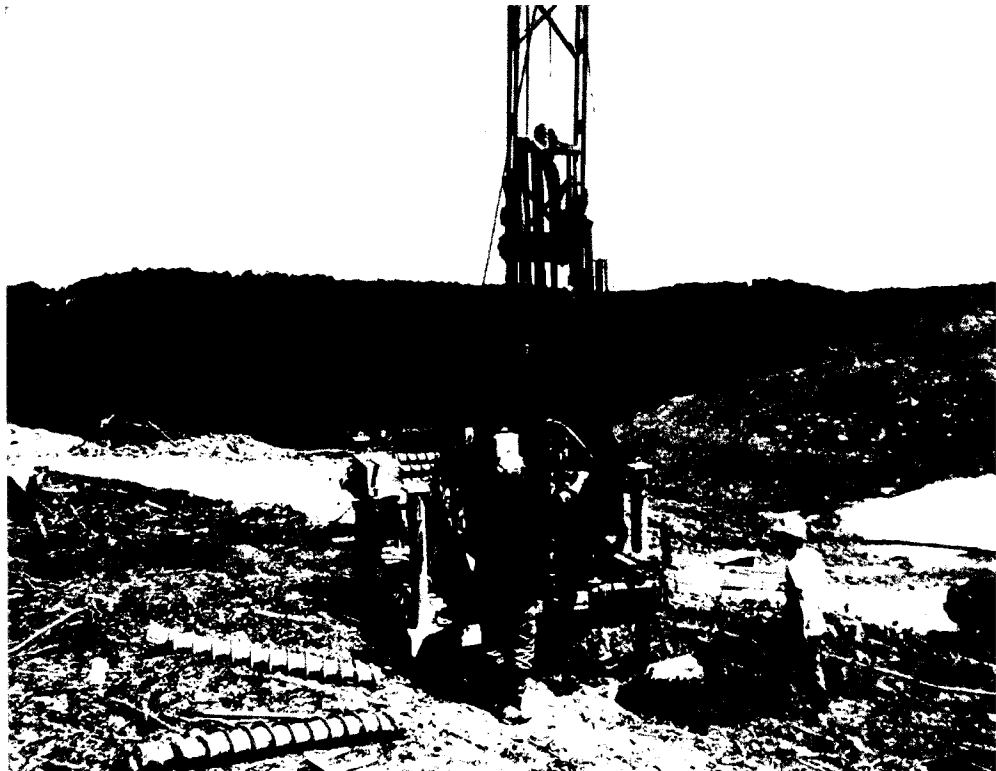
American Tower Corporation (ATC), a global provider of wireless communications infrastructure, planned to construct a cell tower adjacent to the MarkWest natural gas plants in Marshall County, West Virginia.

CEC APPROACH

CEC provided engineering services for the proposed cell tower and assisted with determining the location of the pad, while establishing access road alignment and proposed grading.

CEC performed a geotechnical investigation to evaluate the subsurface conditions and identified residual soils and shallow bedrock. CEC provided recommendations for the design of caissons to support the tower and for the design of a mat foundation.

CEC's civil engineering services included a site layout plan, grading plan, estimates of earthwork quantities, and an erosion and sedimentation control (E&S) plan. CEC surveyors prepared an ALTA/ACSM Title survey including deed research, field reconnaissance, corner staking, plan preparation, access easement, and utility easement. CEC surveyors also prepared a 1A certification in accordance with the Federal Aviation Administration (FAA) requirements.



LEONARDO HELICOPTERS NORTH AMERICAN CAMPUS

OWNER/CLIENT

Leonardo Helicopters

LOCATION

City of Philadelphia, PA

SERVICES

Erosion & Sedimentation Control/NPDES Permitting

Predevelopment Site Investigation

Site Grading/Earthwork Analysis

Stormwater Management/BMP Design

Utility Design

Phase I & II Assessments

ALTA NSPS Land Title Surveys

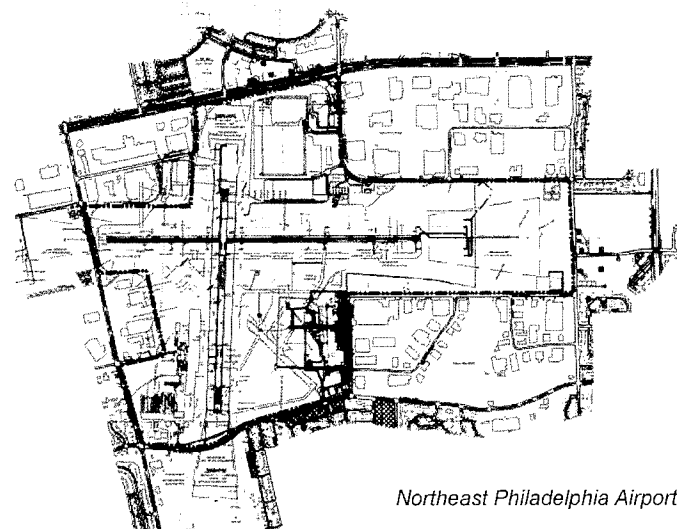
Topographic Surveys

OWNER OBJECTIVE

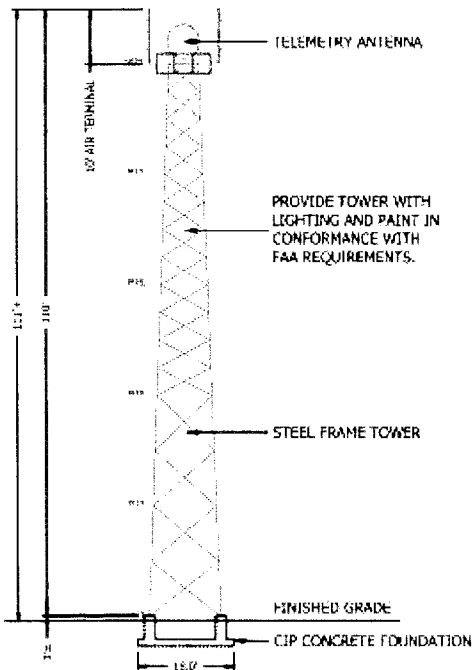
Leonardo Helicopters, headquartered in Italy, is a leader in aerospace, defense and security. Located at their North American Campus, Philadelphia Northeast Airport, Leonardo proposed a new 100' Telemetry Radio Tower and Platform to support the testing protocols associated with the production of the AW609 Tilt-Rotor aircraft. The tower location was proposed for an area of the airport with topographic and storm water management challenges.

APPROACH*

Prior to joining CEC, the Cairone & Kaupp, Inc. (CKI) team designed a platform and access drive for the tower. During the design phase, CKI coordinated all permitting required by the City of Philadelphia Division of Aviation (DOA), the Philadelphia Water Department and the Federal Aviation Administration. Construction administration services were provided during the implementation phase.



Northeast Philadelphia Airport



Elevation of Telemetry Radio Tower

*Work performed prior to joining CEC

ENVIRONMENTAL SITE ASSESSMENTS FOR CELLULAR COMMUNICATION SITES

OWNER/CLIENT

AT&T Mobility
General Dynamics

LOCATION

Various Location in IL, KY, MS, TN

CEC SERVICES

Phase I & II Assessments

OWNER OBJECTIVE

AT&T Mobility, formerly known as Cingular Wireless, is a wholly owned subsidiary of AT&T that provides wireless services to over 120 million subscribers in the United States. AT&T Mobility sought environmental services to be performed on over forty collocation and new construction sites for telecommunications in Kentucky, Illinois, Tennessee, and Mississippi.

CEC APPROACH

For these projects, CEC provided environmental services to General Dynamics, who held a contract with the owner of the sites, AT&T Mobility. CEC's services included:

- Phase I Environmental Site Assessments (ESAs)
- National Environmental Policy Act (NEPA) Checklists
- Federal Communication Commission (FCC) Form 620 Preparation, including coordination with the State Historic Preservation Office (SHPO) and tribal consultation through the Tribal Consultation Notification System (TCNS)
- Geotechnical Services
- Phase II Sampling

CEC performed all collocation work in its entirety, but subcontracted any geotechnical engineering and architectural/archaeological services required for the new construction sites.



Proposed Tower Site, Metropolis, IL

CELLULAR TOWER SITE PROJECTS

LOCATION

North Carolina, South Carolina, Tennessee,

CEC SERVICES

Project Siting Assistance

Survey and Mapping

Wetland & Stream Delineation

Threatened & Endangered Species Review
and Surveys

Subsurface Investigations and
Recommendations

Layout and Grading of Access Roads and
Pads

Erosion and Sedimentation Control Plans

State and Local Municipality Highway
Occupancy Permitting

Construction Quality Assurance Services

CEC has conducted site design, construction document preparation, site permitting, and construction services for tower sites in North and South Carolina as well as Tennessee.

Preliminary services included conceptual designs of the pad and access road to determine the best layout given landowner and site constraints. Field survey services included access easement exhibits, utility easement exhibits, lease area exhibits, 1A and 2C FAA letters. Ecological surveys included wetland and stream delineations, rare, threatened and endangered species surveys. And, subsurface geotechnical investigations were conducted for project design and permit preparation. CEC also prepared proposed site visualization renderings for reviewing agencies.

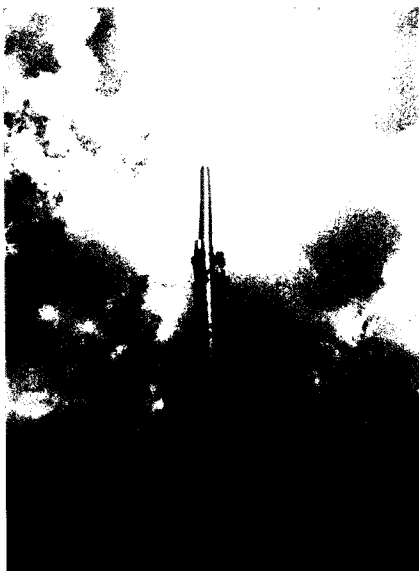
CEC has provided these services for the following clients at the sites listed below:

Optima Towers

- Underhill, Dickson, TN
- South Travelers Rest/White Horse Road, Travelers Rest, SC
- W. Bull Run Valley Drive, Knoxville, TN
- Trident Industria Site, Hanahan, SC
- Dawson Street, Wilmington, NC
- Sunset Beach, Sunset Beach, NC

United States Cellular Telephone

- Barnett Mountain, Marshall, NC
- Chatuga Dam, Hayesville, NC
- Oneida, TN
- Frying Pan Mountain, Waynesville, NC
- DT Waynesville, NC
- Long Branch, Pisgah Forest, NC
- Flats, Tallassee, TN
- Jonathan Creek 2, Waynesville, TN
- Spivey Mountain, Asheville, NC
- Woodland Acres, Calhoun, TN
- DT Vonore, TN
- Decatur Pike, Athens, TN
- DT Englewood, TN
- Peyton Rooftop, Knowville, TN
- DT Newport, TN
- DT Brevard, NC
- Bona Vista, Knoxville, TN



WELL SITE PROJECTS

LOCATION

Ohio, Pennsylvania and West Virginia

CEC SERVICES

Project Siting Assistance

Survey and Mapping

Wetland & Stream Delineation

Threatened & Endangered Species Review and Surveys

Subsurface Investigations and Recommendations

Reinforced Soil Stabilization (RSS) Designs

PADEP Chapter 105 Permits

PADEP/Army Corp Joint Permits

USACE Nationwide Permits

Layout and Grading of Access Roads, Pads, and Impoundments

Erosion and Sedimentation Control Plans

Post-Construction Stormwater Management Plans

ESCGP-1/2/3 Permits

WVDEP Horizontal 6A Well Permit

ODNR Horizontal Well Site Construction Permit

State and Local Municipality Highway Occupancy Permitting

Erosion and Sediment Control Inspections

Post-Construction Monitoring

Construction Quality Assurance Services

CEC has conducted site design, construction document preparation, site permitting, and construction services for natural gas well sites in Ohio, Pennsylvania and West Virginia. Preliminary services included conceptual designs of the well pad, impoundment/tank pad, and access road to determine the best layout given landowner and site constraints, field survey, wetland and stream delineations, rare, threatened and endangered species surveys, and subsurface geotechnical investigations for project design and permit preparation.

CEC has prepared well plats, erosion and sedimentation control plans, post-construction stormwater management plans, PADEP Erosion and Sediment Control General Permit (ESCGP-1/2/3) packages, WVDEP Horizontal 6A Well Permit packages, ODNR Horizontal Well Site Construction Permit packages, PADEP Chapter 105 General Permit packages, USACE Nationwide Permit packages, and Joint Permit Application (JPA) for Pennsylvania Water Obstruction and Encroachment Permit and USACE Section 404 Permit packages. CEC has prepared Department of Transportation and local municipality highway occupancy permit packages for access road connections. CEC has also prepared Subsurface Geotechnical Analysis Reports and reinforced soil stabilization (RSS) designs, which included recommendations and construction plans for on-site construction.

After receipt of permits, CEC provided erosion and sediment control field inspections, post-construction monitoring of stream and wetland impacts as required, post-construction stormwater management best management practices (BMP) inspections, construction quality assurance services, as-built surveys, and permit closeout services.

Clients for whom CEC has provided these services and the magnitude of project work for each are listed below:

Antero

- 15 well sites in Pennsylvania, 25 well sites in West Virginia and 65 well sites in Ohio

Apex Energy

- 16 well sites in Pennsylvania

Arsenal Resources (FKA Mountaineer Keystone)

- 7 well sites in West Virginia

Atlas Resources, LLC

- 6 well sites in Pennsylvania and 1 well site in Ohio

CNX Gas Company, LLC

- 10 well sites in Pennsylvania

Cabot

- 5 well sites in Pennsylvania, 6 well sites in Ohio

WELL SITE PROJECTS

Chesapeake

- 4 well sites in Pennsylvania

Chevron

- 17 well sites in Pennsylvania, 17 well sites in West Virginia, and 1 well site in Ohio

EQT Production Company

- 50+ well sites in Pennsylvania, 5 well sites in Ohio, and 49 well sites in West Virginia

Greylock/ECA

- 13 well sites in Pennsylvania

Huntley and Huntley Energy Exploration, LLC

- 5 well sites in Pennsylvania

Montage/Eclipse

- 20 well sites in Pennsylvania, 5 well sites in West Virginia, and 35 well sites in Ohio

Northeast Natural Energy

- 9 well sites in West Virginia

Olympus Energy

- 19 well sites in Pennsylvania

PDC Energy

- 8 well sites in Ohio, 3 well sites in West Virginia

PennEnergy

- 60 well sites in Pennsylvania

Rex Energy

- 75 well sites in Pennsylvania and 15 well sites in Ohio

Rice Energy

- 4 well sites in Pennsylvania and 1 well site in Ohio

Seneca

- 5 well sites in Pennsylvania

Snyder Bros.

- 2 well sites in Pennsylvania

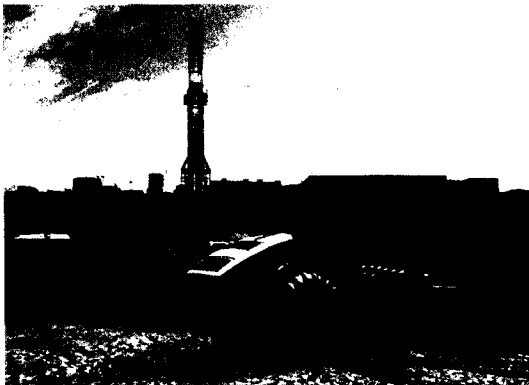
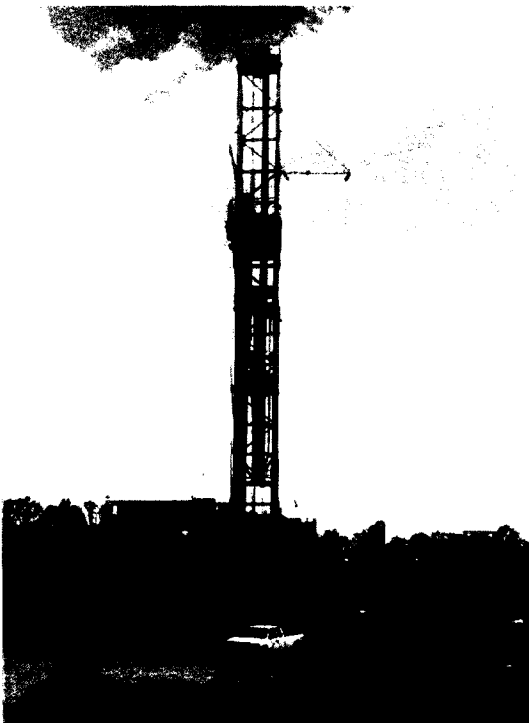
Southwestern Energy

- 2 well sites in Pennsylvania and 3 well sites in West Virginia

Triana

- 2 well sites in West Virginia

XTO



3.5 Resumes of Key Personnel

Brian D. Spray, P.E.

Principal



22 YEARS EXPERIENCE

EDUCATION

B.S., Civil Engineering, George Washington University, 1998

Mr. Spray has over 20 years of experience as a multi-discipline Project Manager within the Site-Civil field for a variety of industries. This experience includes: Due Diligence/Feasibility Studies; Value Engineering; Site Layout/Development; Grading; Stormwater Rate, Volume & Quality design; Erosion & Sedimentation Control; Professional Testimony at municipal buildings and Expert Witness Testimony within a courtroom.

SELECT PROJECT EXPERIENCE

City Center Redevelopment, Allentown, PA

- Five City Center
- 520 Hamilton St
- City Place
- 1 Center Square
- Tower 6
- Walnut Street Commons

Arts Walk Projects, Allentown, PA

- Arts Walk East
- Arts Walk West
- Pocket Park

Penn State Lancaster Hospital Site, Lancaster, PA

Ames-Reese Industrial Expansion, Lancaster, PA

"The Reserve" mid-rise apartments, Lancaster, PA

PA College of Nursing, Lancaster, PA

Covanta Energy metals extraction project, Chester, PA

Carpenter Powder Products Switchgear installation, Bridgeville, PA

Napa Auto Parts Warehouse Expansion, Laurel, MD

Medifast expansion, Baltimore, MD

Performance Pipe Stormwater retrofit, Hagerstown, MD

Special Metals Expansion, Hartford, NY

EXPERTISE

Due Diligence Reports
Feasibility Studies
Stormwater Management Design
Erosion & Sedimentation Control Design
Value Engineering
Subdivision/Land Development Entitlement
Expert Witness Testimony

REGISTRATIONS

- Professional Engineer
- PA PE062154
 - NJ 24GE04599000
 - MD 49251
 - NY 089319
 - OH 79440
 - WV 020993
 - TX 134605
 - KY 35109



Anthony W. Eith, P.E.

Vice President and Philadelphia Office Lead



45 YEARS EXPERIENCE

EDUCATION

B.S., Civil Engineering, University of Louisville, 1974

M.S., Geotechnical Engineering, University of Louisville, 1975

Mr. Eith is a Vice President managing the Philadelphia, Pennsylvania office of CEC and has over 45 years of experience in the geotechnical/civil engineering and solid waste management fields. His experience includes over 12 years as a Group Director of Engineering for a national waste management firm. He has provided geotechnical consulting and expertise for a variety of facilities including industrial site development projects and solid waste landfills.

His career has focused on design engineering, permitting, construction, construction management, and certification of civil engineering and environmental solid waste management facilities. He has also managed engineering and environmental service groups. Mr. Eith is experienced in geotechnical engineering, solid waste management facilities design, construction, quality assurance/quality control, engineering certification and operations. This experience includes design and construction management of solid waste management facilities liner system and final cap system installations, with specialization in design and installation of geosynthetic materials for solid waste management and civil engineering applications. He has led management teams of multimillion-dollar projects completed by multi-discipline technical and construction teams for major solid waste facilities. Geotechnical expertise includes subsurface investigations for soils and solid waste materials with varying types of drilling and sampling procedures, and the development and implementation of laboratory testing programs to determine materials engineering properties and performance characteristics. His experience has focused on geosynthetics and their application, performance, properties and installation procedures and requirements relative to solid waste containment and final cover applications. The focus of his technical overview is to ensure that a constructible design is prepared for permit submittal and that future details related to system construction integrates this into the current design effort and to provide support to operations. Geographic locations of projects have included, generally, the Northeast United States, with additional project experience in the United Kingdom, Spain, Mexico, and Hong Kong.

AWARDS

"1995 Geotechnical Engineer of the Year", Philadelphia Section, American Society of Civil Engineers

"1995 WMI President's Technical Excellence Award", First Place, SENT Landfill Project, Hong Kong

"1996 WMI President's Technical Excellence Award", Third Place, GROWS Landfill Project

"1997 WMI President's Technical Excellence Award", Second Place, Tullytown Landfill Project

"2005 Civil Engineer of the Year", Philadelphia Section, American Society of Civil Engineers

EXPERTISE

Erosion & Sedimentation
Control/NPDES Permitting

Site Layout/Grading and Earthwork
Analyses

Stormwater Management/BMP Design
and Inspections

Construction Materials Engineering and
Testing/Special Inspections

Landslide Assessment, Mitigation and
Remediation

Predevelopment Site Investigations

Slope Stability Analyses and Slope
Design

Subsurface Explorations and In-Situ
Testing

Construction Management

Construction Services

Construction Quality Assurance

Landfill Design and Permitting

Landfill Gas Management

Site Selection and Characterization

Transfer Station and MRF Design and
Permitting

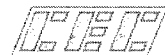
Erosion & Sediment Control Design
and Inspection

REGISTRATIONS

- Professional Engineer
- PA PE03011E
 - DE 20132

CERTIFICATIONS

Certified Construction Reviewer, State
of Delaware, Department of Natural
Resources and Environmental Control,
Watershed Stewardship



Civil & Environmental Consultants, Inc.

Walter J. Kaupp, P.E.
Principal



43 YEARS EXPERIENCE

EDUCATION

B.S., Civil Engineering Technology, Temple University, 1977

EXPERTISE

Managing stormwater in urban and developed environments

Obtaining land development permits and approvals

REGISTRATIONS

Professional Engineer

- PA PE034169E
- NJ 24GE02950400
- DE 15940

Butch Kaupp has more than 43 years of site civil engineering and land development experience. In 1984, Mr. Kaupp started a site civil engineering practice inside of an existing landscape architectural firm located in the greater Philadelphia area. During that time, he served as the Engineer of Record for all of the firm's site civil engineering projects. The total estimated construction cost for those projects are in excess of \$500 million. While working primarily in the Delaware Valley region, Mr. Kaupp has also designed projects along the eastern seaboard from Virginia to Maine. He is a hands on Principal who actively engages in client interaction, project management, setting the design program and monitoring design progress to completion. Mr. Kaupp's core competencies include proposal preparation, proposal and design presentations, communicating with clients and regulatory agencies, project team leadership, site planning, storm water management, erosion control design and facilitating permit acquisitions.

SELECT PROJECT EXPERIENCE

- Philadelphia Police Academy SWAT/Bomb/K-9 Facility, Philadelphia, PA*
- Philadelphia Police Academy Training Facility, Philadelphia, PA*
- Atlantic County Fire Academy, Egg Harbor Township, NJ*
- Washington Crossing National Cemetery, Bucks County, PA*
- Indiantown Gap National Cemetery, Lebanon County, PA*
- Crowne Plaza Hotel, Reading PA*
- Lucien E Blackwell Community Center, Philadelphia, PA*
- Springside Chestnut Hill Academy Master Plan, Philadelphia, PA*
- William Penn Charter School Master Plan, Philadelphia, PA
- William Penn Charter School Athletics and Wellness Center, Philadelphia, PA*
- Leonardo Helicopters Corporate Campus, Northeast Philadelphia Airport, PA*
- Ford Electronics and Refrigeration Plant, Lansdale, PA*
- Hershey Foods Corporate, Data and Fitness Center, Hershey, PA*
- Johnson & Johnson Consumer Inc. Campus Infrastructure, Fort Washington, PA*

* Work performed prior to joining CEC



Michael Urban, R.L.A.

Project Manager II



33 YEARS EXPERIENCE

EDUCATION

B.S., Landscape Architecture, Pennsylvania State University, 1987

Michael J. Urban is a 1987 graduate of Penn State University where he received a Bachelor of Science Degree in Landscape Architecture. His background includes a diverse experience in the private and public sector, gaining a comprehensive knowledge in the design and development of healthcare, educational, commercial and resort/hospitality and parks and playgrounds projects as the landscape architect project manager.

Mr. Urban has been responsible for the documentation of major hospitality projects from Connecticut to the Gulf Coast. As project manager for MGM Grand @ Foxwoods in Connecticut from 2004-2007, and Revel Casino in Atlantic City, NJ from 2007-2011, he has been involved in design and documentation of exterior gardens, restaurant seating areas, water features, green roofs and outdoor pools and spas. Since 1992, Mike has been project manager for over 70 parks and playgrounds for the City of Philadelphia, City of Reading, Pennsylvania and Camden County NJ Parks Department. Recently, Mike has been project manager for various projects for Cooper University Hospital, Abington Memorial Hospital, Kennedy Health System, Penn Presbyterian, Pocono Medical Center and Memorial Sloan Kettering facilities in Commack and Nassau, NY.

PROJECT EXPERIENCE

City of Reading Public Works Playgrounds

Lucien E. Blackwell Community Center, Philadelphia, PA*

Lincoln Square, Kimco Realty, Philadelphia, PA*

Camden County Hall of Justice, Camden County New Jersey, City of Camden, NJ*

William Penn Charter School New Athletic Wellness Center, William Penn Charter School, Philadelphia, PA*

Methodist Hospital Landscape Improvements, Jefferson Health, Philadelphia, PA*

NewCourtland Henry Avenue, NewCourtland Network, Philadelphia, PA*

Kennedy Health Systems Cherry Hill, Kennedy Health Systems, Cherry Hill, NJ*

* Work performed prior to joining CEC

EXPERTISE

ADA Accessibility

Site Layout and Grading

Sustainability Planning/Design

Erosion and Sediment Control Design

Project Feasibility Studies

Construction Details

Roof Deck Design

REGISTRATIONS

Registered Landscape Architect

- PA LA001127E
- NJ 21AS00131300



Civil & Environmental Consultants, Inc.

Todd M. Babcock, LS, P.L.S.
Vice President and Athens Office Lead



36 YEARS EXPERIENCE

EDUCATION

A.A.S., Surveying Engineering, The
Pennsylvania State University, 1984

Todd Babcock is a licensed professional surveyor in the Commonwealth of Pennsylvania and State of New York. Todd has been surveying for over 35 years and currently serves as the Office Lead and Survey Practice Lead in CEC's Sayre, PA office. Prior to joining CEC, he served as the Senior Survey Supervisor in northeastern PA for Chesapeake Energy, Access Midstream and Williams where he coordinated the survey efforts for the construction and as-built of over 600 miles of pipeline development and numerous compressor facilities. He was responsible assuring that the pipeline assets were accurately located and documented for population in the companies GIS database system. He also has experience in terrestrial LiDAR having performed as-built scans on large compressor facilities and facility interconnects. Prior to his involvement in the natural gas industry, he resided and worked in Berks County for 27 years and was the Survey Manager for Forino Co. LP in Sinking Spring, PA where he performed boundary and topographic surveys, construction stakeout, Elevation Certificates, as built and ALTA surveys.

SELECT PROJECT EXPERIENCE

- Construction Stakeout at Reading Fire Department, Southwest Station*
- Preparation of Road Dedication Exhibits and Dedication, Forino Co., Berks County, PA*
- Heidelberg Run Subdivision As-Built, Forino Co. LP, Sinking Spring, Berks County, PA*
- Sediment & Erosion Control Design, Forino Co., LP, Sinking Spring, Berks County, PA*
- Diahoga Trail, Borough of Sayre, Sayre, Bradford County, PA*
- Due-Diligence asset review, Chesapeake Energy Midstream, Towanda, Bradford County, PA*
- 3D Terrestrial Laser Scanning, Williams, Towanda, Bradford County, PA*
- Railroad Tunnel Clearance and Monitoring Surveys, CSX, Philadelphia, PA*
- Compressor Facility As-Built, Williams, Towanda, Bradford County, PA*
- Solar Farm survey, Delaware River Solar, Clean Energy Collective, Gloversville, Fulton County, NY*

* Work performed prior to joining CEC

AWARDS

- Surveyor of the Year, Pennsylvania Society of Land Surveyors (PSLS), 2002
- Reading Chapter Surveyor of the Year, PSLS, 1993, 1997, 2003
- Bucks Chapter Surveyor of the Year, PSLS, 2003
- PSLS Distinguished Service Award, 1992 & 2000

EXPERTISE

- Boundary and ALTA/NSPS Land Title Surveys
- Topographic, Utility and As-Built Surveys
- Construction Surveys/Staking
- Settlement and Deformation Monitoring
- Route/Right of Way Surveys
- Roadway and Railway Surveys
- Oil & Gas Pipeline/Well Site Surveys
- Tree and Stream Surveys
- FEMA Elevation Surveys
- Subdivision, Easement, and Conveyance
- Utility Crossing Alignment Surveys
- Aerial Photography/Videography
- Photogrammetric and 3D LiDAR Topography
- Volume Determinations
- Exterior/Topographic Scanning
- 360 Degree Imagery
- Ortho-Rectified Imagery
- Site Layout/Grading and Earthwork Analyses

REGISTRATIONS

- Land Surveyor
 - NY 050997
- Professional Land Surveyor
 - PA SU038737E

CERTIFICATIONS

- 10-hour Construction Safety, Occupational Safety & Health Administration
- 24-Hour Hazwoper HAZTECH24, The Response Group
- FAA Part 107 Remote Pilot Certification, U.S. Department of Transportation Federal Aviation Administration



Civil & Environmental Consultants, Inc.

Patrick R. Cummings, LSRP, P.G.

Project Manager III



16 YEARS EXPERIENCE

EDUCATION

B.S., Geology (Hydrogeology Focus), Temple University, 2005

B.A., Pre-Law (History+Political Science), Temple University, 2001

Licensed Site Remediation Professional (LSRP) in New Jersey and Licensed Professional Geologist in Pennsylvania and New York with over 16 years of professional experience conducting environmental investigations in accordance with New Jersey's Administrative Requirements for Remediation of Contaminated Sites (ARRCS), Technical Requirements for Site Remediation (TRSR), and Industrial Site Recovery Act (ISRA), Pennsylvania's Land Recycling and Remediation Standards Act (Act 2), and federal Toxic Substances Control Act (TSCA), Resource Conservation & Recovery Act (RCRA), and Comprehensive Environmental Response, Compensation & Liability Act (CERCLA). Managed many diverse and complex environmental projects, from concept to completion, toward achievement of no further action (NFA)/response action outcome (RAO) determinations, and Act 2 liability protection.

Specific project experience includes overburden and fractured bedrock aquifer characterization and remedial design/action; hydrogeological data acquisition and interpretation; contaminant fate and transport modeling (MODFLOW, GMS, MT3D, BIOCHLOR, BIOSCREEN, SESOIL/SESOIL-AT123D); forensic investigations; vapor intrusion investigation and mitigation system design; polychlorinated biphenyl (PCB) remediation, engineering control design, underground storage tank closure; light non-aqueous phase liquid (LNAPL), dense non-aqueous phase liquid (DNAPL), Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) treatment and recovery system design, operation, and optimization.

Additional experience includes management of turn-key engineering for roof-top, canopy, and ground-mount photovoltaic electric generation system development projects, and has management of civil and landscape architectural design projects for commercial and residential real-estate land development.

SELECT PROJECT EXPERIENCE

BHS Fuel Oil Remediation, Bensalem School District, Bensalem Township, PA*
International Airport PFAS Groundwater Treatment System Design, Susquehanna Regional Airport Authority, Harrisburg, PA*
Petroleum Refinery Site Characterization and Remediation, Monroe Energy, Borough of Trainer, PA*
Petroleum Storage Terminal - Remediation, Soil Reuse and Stormwater Permitting, MIPC, Aston, PA*
Former Welsh Farms, Township of Neptune, Township of Neptune, NJ*
Medwick Park, Middlesex County Improvement Authority, Borough of Carteret, NJ*

* Work performed prior to joining CEC

EXPERTISE

Hydrogeology
Fate and Transport Modeling
Fractured Bedrock Aquifer Characterization
LNAPL and DNAPL Remedial System Design
Environmental Forensics
Community and Non-Community Water System Permitting (Groundwater Sourced)

REGISTRATIONS

Licensed Site Remediation Professional
• NJ 626745
Professional Geologist
• PA PG005038
• NY 001253

CERTIFICATIONS

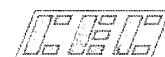
40-Hour OSHA HAZWOPER, Occupational Safety & Health Administration
8-hour HAZWOPER Refresher Training, Safety Unlimited, Inc.
First Aid, American Red Cross

TRAINING

Environmental Forensics
Advanced Petroleum Forensics Geochemistry
Hydro-Structural Geology
Groundwater in Fractured Bedrock
Data Quality Objective/Data Usability Evaluation
Regulatory Training in Underground Storage Tanks
Vapor Intrusion
ESRI ArcGIS Certification
AutoCAD
NJDEP Case Study Training for LSRPs
Innovative Technology in Remediation of Contaminated Sites

AWARDS

Jumping through Hoops Award - 2015



Civil & Environmental Consultants, Inc.

Stephen R. Maxwell, LSRP, P.G.

Senior Project Manager



24 YEARS EXPERIENCE

EDUCATION

B.A., Geology, State University of New York at Buffalo, 1996

M.S., Hydrogeology/Environmental Chemistry, Wright State University, 2001

Mr. Maxwell has been working in the environmental industry as a project manager and technologist since 1996 for mostly clients in the manufacturing, chemical, solid waste and utility markets, but has also worked for state regulatory programs in New York and South Carolina. His strong technological background and leadership have been assets for management of complex sites with multiple impacted media and stakeholders. In addition, he has completed approximately 150 Phase I Environmental Site Assessments (ESAs) for properties as complex as a 48-acre chemical manufacturing facility to as simple as a residential property. Mr. Maxwell has been a licensed Professional Geologist since 2003 and is currently registered in Pennsylvania. He has also been registered as a New Jersey Licensed Site Remediation Professional (LSRP) since 2008.

PROJECT EXPERIENCE

Remedial Investigation at the Suntru Street MGP Site, Rochester, NY

Project Hydrogeologist. Assisted with preparation of a work plan to complete the RI of a former MGP site. Completed direct push soil boring, hollow stem auger soil borings and rock cores using wire-line coring methods. Logged all soils and rock cores and mapped fractures. Assisted with development of the conceptual site model and preparation of the RI Report.

Remedial Investigation at the UGI former MGP Site, Scranton, PA

Senior Geologist. Acted as the senior geologist for preparation of a Remedial Investigation Report and provided QA/QC support. Reviewed data collected during the RI and developed the site CSM. Impacted media included, soil, groundwater and sediments.

Remedial Investigation at a Former MGP Site, Owego, NY

Project Hydrogeologist. Completed several phases of remedial investigation to evaluate the extent of coal tar and cyanide contamination of soil and groundwater. Installed soil borings and monitoring wells, sampled soil and groundwater. Evaluated the data and updated the site CSM based on the new information. Prepared technical drawings, work plans and reports for client and NYSDEC review.

PA Act 2 Site Characterization at the Norfolk Southern Allentown Yard, Allentown, PA

Project Manager for completion of a PA Act 2 Site Characterization. Completed a soil investigation at a fuel spill site within the Allentown switch yard. Completed soil borings and sample collection and data comparison to the State-wide Health Standards. A final report documenting attainment of the State-wide Health Standards was completed within 90 days of the release, avoiding the need to submit a Notice of Intent to Remediate.

EXPERTISE

New Jersey Site Remediation

Pennsylvania Act 2

South Carolina UST Program

Contaminant Fate and Transport

Subsurface Remedial Techniques

CERCLA

RCRA

TSCA

Phase I/II Environmental Site Assessments

NPDES

Health and Safety

REGISTRATIONS

Licensed Site Remediation Professional

- NJ 592408

Professional Geologist

- PA PG004835



Blaine M. Orth, P.E.
Senior Project Manager



25 YEARS EXPERIENCE

EDUCATION

B.S., Civil Engineering, Georgia Institute of Technology, 1995

M.Eng., Geotechnical Engineering, University of Maryland, 2007

REGISTRATIONS

Professional Engineer

- DC PE900301
- TX 119905
- AR 17323
- OK 29067
- PA PE089950
- MD 54749
- WV 23746
- DE 24169

CERTIFICATIONS

Licensed Engineer with an NCEES Record, NCEES

Mr. Orth has 25 years of engineering experience in geotechnical engineering and construction fields with extensive practice in site field investigation, foundation engineering analyses, and construction oversight. He has worked in the power, mining, transportation, environmental, and oil and gas sectors, including 5 years overseas in a design and resident engineer role and 1 year as a consultant for offshore oil & gas projects. His primary duties include coordination, planning and execution of geotechnical field investigations for various projects, planning and directing laboratory testing programs, interpretation and incorporation of field data and laboratory test results, and developing geotechnical recommendations for suitable foundation alternatives, subgrades and pavements or slabs, viability of ground improvement, seismicity and susceptibility to liquefaction, soil engineering properties, and considerations for earthworks, excavations and/or constructability. Field duties during construction have included verification of earthworks and foundation construction, coordination and planning with contractors, regulators and third-party inspectors and/or consultants and over-sight of sub-contractors.

PROJECT EXPERIENCE

Mountain View Reclamation - Cell 21B2, Waste Management, Greencastle Franklin, PA

Fairless Landfill - Cells 3, 4 & 6 Extension, Waste Management, Morrisville, PA

Lycoming County Landfill - Fields 1 to 4 Final Cover Replacement, Lycoming County Resource Management Services, Montgomery, PA

MVR Tract 2 Final Cap, Waste Management, Greencastle, PA

PROFESSIONAL AFFILIATIONS

National Society of Professional Engineers

American Society of Civil Engineers





3.6 Professional References

3.6.1 Majorsville Cell Tower

- Patrick O'Reilly, Regional Manager-Site Development
- Amercian Tower Corp.
116 Huntington Ave., 11th Floor
Boston, MA 02116
- 609-352-5735
- Patrick.O'Reilly@AmercianTower.com

3.6.2 Oil & Gas Client for Environmental Services in Lycoming County

- Adam Wightman, Environmental-Specialist IV, Permitting Department
- Williams
30351 Route 6
Wysox PA 18854
- 570-268-7930
- adam.weightman@williams.com

3.6.3 Oil & Gas Client for Civil Engineering Services in Lycoming County

- Josh McLaughlin, Manager, Geomatics
- Seneca Resouces Company, LLC
5800 Corporate Drive, Suite 300
Pittsburgh, PA 15237
- 412-548-2500
- McLaughlinJ@srcx.com

3.5.4 Leonardo North American Campus

- Michael Grosso, Senior Manager Facilities & Safety
Leonardo DRS, Inc.
3050 Red Lion Road
Philadelphia, PA 19114
- 215-281-1436
- michael.grosso@leonardocompany.com



August 18, 2020

To whom it may concern:

Civil & Environmental Consultants, Inc. is a valued client of PNC Bank. We have a significant lending relationship with the company. Civil & Environmental Consultants, Inc. maintains significant deposit balances. All accounts are current and have been handled in satisfactory manner.

Civil & Environmental Consultants, Inc. has demonstrated ongoing financial stability and has a positive credit history with PNC Bank.

This letter speaks only as of the date hereof, and the Bank expressly disclaims any liability which may be suffered as a result of any reliance on this letter.

If you have any questions or concerns, please contact me directly at 412-645-9959.

Sincerely,

A handwritten signature in cursive script, appearing to read "Felicia E. Leksono".

Felicia E. Leksono
Vice President
PNC Bank

The PNC Financial Services Group

The Tower at PNC Plaza 300 Fifth Avenue Pittsburgh Pennsylvania 151222
www.pnc.com



4.0 Project Implementation Schedule

4.1 Introduction

CEC is providing a Project Schedule that forecasts our anticipated workflow. We are committed to maintaining an aggressive approach to the development of the site design and to facilitating permit/approval acquisitions. CEC believes that personal communication with Owner's and Regulators will contribute to our ability to maintain the projected project schedule.

4.2 Project Schedule

The Project Schedule is located in the Attachments Section. This schedule provides timelines for the Design Phases listed in Section 1. In order to meet the completion date of February 28, 2021, CEC is providing for overlaps between Design Phases. We will commence the Permit Document phase two weeks before the end of the Site Investigation Phase and as the documents are completed we will be submitting for permits/approvals. We expect to be able to start the Construction Documents Phase two weeks before the end of the Permit Acquisition Phase. Typically by that time the project scope is clearly defined, Regulatory Agency questions/comments have been addressed and we are processing documents for final approval.

Expectations

The Project Schedule is based on a timely flow of information between Project Team members. CEC does not have control over the time required for Regulatory Agencies to review and approve applications. The timeliness of those reviews may be impacted by the backlog of permit applications at the time of our submissions. Additionally, CEC cannot forecast the community's reaction to the proposed Projects. Community opposition generally expands the Permit Acquisition Phase.



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5.0

Attachments

- **Design Fee Matrix**
- **Expense Matrix**
- **Category Rate Table**
- **Project Schedule**
- **Non-Collusion Form**
- **Exception Form**
- **Addendum No. 1**
- **Master Services Agreement**



This page has been inserted to accommodate two-sided printing.



DESIGN FEE MATRIX **8/21/2020**
ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE
 PREPARED FOR: COUNTY OF LYCOMING
 PREPARED BY: CIVIL AND ENVIRONMENTAL CONSULTANTS, INC.

Task	Land Survey		Environmental		Geotechnical		Civil/Site		Electrical SC		Geotechnical SC		Total	
	Hrs.	Cost	Hrs.	Cost	Hrs.	Cost	Hrs.	Cost	Hrs.	Cost	Hrs.	Cost	Hrs.	Cost
Site Grading/Site Layout							81.50	\$10,100					81.50	\$10,100
Stormwater Drainage Design							53.00	\$7,900					53.00	\$7,900
Erosion/Sediment Control							47.50	\$6,700					47.50	\$6,700
Civil Permitting							38.00	\$5,300					38.00	\$5,300
Geotechnical					69.50	\$10,090							69.50	\$10,090
Geotechnical Boring Stakeout	11.00	\$1,600											11.00	\$1,600
Construction Stakeout	29.00	\$4,600											29.00	\$4,600
Soil Resistivity					6.50	\$510					4.00	\$560	10.50	\$1,070
Preliminary and Final Construction Drawings							15.00	\$2,000	25.00	\$2,500			40.00	\$4,500
Utility Coordination							20.00	\$2,500	26.00	\$2,600			46.00	\$5,100
Zoning Information							17.00	\$2,600					17.00	\$2,600
FAA/FCC							6.00	\$750					6.00	\$750
Field Surveying/Courthouse Research	53.00	\$8,700											53.00	\$8,700
Survey Plans	9.00	\$1,160											9.00	\$1,160
Environmental Investigation			25.00	\$2,750									25.00	\$2,750
Infiltration Testing					24.00	\$3,110							24.00	\$3,110
Wetlands/Stream Delineation			28.00	\$4,750									28.00	\$4,750
Phase 1 Investigation and Report			30.00	\$2,700									30.00	\$2,700
Hearing Attendance			6.00	\$900			24.00	\$4,900					30.00	\$5,800
Phase 2 Investigation and Report	6.00	\$600	34.50	\$3,250									40.50	\$3,850
NEPA/SHPO Services			13.00	\$1,380									13.00	\$1,380
Total	108.00	\$16,660	136.50	\$15,730	100.00	\$13,710	302.00	\$42,750	51.00	\$5,100	4.00	\$560	701.50	\$94,510

DESIGN FEE MATRIX													8/21/2020	
ENGINEERING AND SURVEYING SERVICES FOR HESKER HILL TOWER SITE														
PREPARED FOR: COUNTY OF LYCOMING														
PREPARED BY: CIVIL AND ENVIRONMENTAL CONSULTANTS, INC.														
Task	Land Survey		Environmental		Geotechnical		Civil/Site		Electrical SC		Geotechnical SC		Total	
	Hrs.	Cost	Hrs.	Cost	Hrs.	Cost	Hrs.	Cost	Hrs.	Cost	Hrs.	Cost	Hrs.	Cost
Site Grading/Site Layout							72.00	\$9,800					72.00	\$9,800
Stormwater Drainage Design							53.00	\$7,900					53.00	\$7,900
Erosion/Sediment Control							48.50	\$6,700					48.50	\$6,700
Civil Permitting							38.00	\$5,300					38.00	\$5,300
Geotechnical					69.50	\$10,090							69.50	\$10,090
Geotechnical Boring Stakeout	11.00	\$1,600											11.00	\$1,600
Construction Stakeout	29.00	\$4,600											29.00	\$4,600
Soil Resistivity					6.50	\$510					4.00	\$560	10.50	\$1,070
Preliminary and Final Construction Drawings							9.00	\$1,200	25.00	\$2,500			34.00	\$3,700
Utility Coordination							20.00	\$2,500	26.00	\$2,600			46.00	\$5,100
Zoning Information							17.00	\$2,600					17.00	\$2,600
FAA/FCC							6.00	\$750					6.00	\$750
Field Surveying/Courthouse Research	21.00	\$3,540											21.00	\$3,540
Survey Plans	9.00	\$1,160											9.00	\$1,160
Environmental Investigation			25.00	\$2,750									25.00	\$2,750
Infiltration Testing					21.00	\$2,710							21.00	\$2,710
Wetlands/Stream Delineation			28.00	\$4,750									28.00	\$4,750
Phase 1 Investigation and Report			30.00	\$2,700									30.00	\$2,700
Hearing Attendance			6.00	\$900			24.00	\$4,900					30.00	\$5,800
Phase 2 Investigation and Report	6.00	\$600	34.50	\$3,250									40.50	\$3,850
NEPA/SHPO Services			13.00	\$1,380									13.00	\$1,380
Total	76.00	\$11,500	136.50	\$15,730	97.00	\$13,310	287.50	\$41,650	51.00	\$5,100	4.00	\$560	652.00	\$87,850



EXPENSES MATRIX							
ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE							
PREPARED FOR: COUNTY OF LYCOMING							
PREPARED BY: CIVIL AND ENVIRONMENTAL CONSULTANTS, INC.							
Description	Drawings	Specifications	Reports	Mailings	Travel	Subsistence	Cost
Kick off meeting/Site visit					\$200		\$200
Wolf Twp Planning Commission	\$960		\$180	\$120	\$400		\$1,660
Wolf Twp Board of Supervisors	\$480		\$90	\$60	\$200		\$830
Lycoming County	\$190		\$90	\$60			\$340
PADEP NPDES	\$140		\$180	\$120			\$440
Final CD	\$800	\$250		\$60			\$1,110
Courthouse Recording	\$280						\$280
Geotechnical				\$250	\$260	\$40	\$550
Soil Resistivity					\$100	\$20	\$120
Infiltration Testing				\$50	\$220	\$40	\$310
Environmental Investigation					\$100	\$20	\$120
Wetlands/Stream Delineation					\$100	\$20	\$120
Phase 1 Investigation and Report					\$100	\$20	\$120
Hearing Attendance					\$300	\$60	\$360
Phase 2 Investigation and Report					\$100	\$20	\$120
NEPA/SHPO Services					\$100	\$20	\$120
Survey Topo					\$340		\$340
Survey Geotechnical Stakeout					\$170		\$170
Survey Construction Stakeout					\$340		\$340
Total	\$2,850	\$250	\$540	\$720	\$3,030	\$260	\$7,650

EXPENSES MATRIX							8/21/2020
ENGINEERING AND SURVEYING SERVICES FOR HESKER HILL TOWER SITE							
PREPARED FOR: COUNTY OF LYCOMING							
PREPARED BY: CIVIL AND ENVIRONMENTAL CONSULTANTS, INC.							
Description	Drawings	Specifications	Reports	Mailings	Travel	Subsistence	Cost
Kick off meeting/Site visit					\$200		\$200
Lycoming County Planning Commission	\$960		\$180	\$120	\$400		\$1,660
PADEP NPDES	\$140		\$180	\$120			\$440
Final CD	\$800	\$250		\$60			\$1,110
Courthouse Recording	\$280						\$280
Geotechnical				\$250	\$260	\$40	\$550
Soil Resistivity					\$100	\$20	\$120
Infiltration Testing				\$50	\$220	\$40	\$310
Environmental Investigation					\$100	\$20	\$120
Wetlands/Stream Delineation					\$100	\$20	\$120
Phase 1 Investigation and Report					\$100	\$20	\$120
Hearing Attendance					\$300	\$60	\$360
Phase 2 Investigation and Report					\$100	\$20	\$120
NEPA/SHPO Services					\$100	\$20	\$120
Survey Topo					\$340		\$340
Survey Geotechnical Stakeout					\$170		\$170
Survey Construction Stakeout					\$340		\$340
Total	\$2,180	\$250	\$360	\$600	\$2,830	\$260	\$6,480



CATEGORY RATE TABLE
ENGINEERING AND SURVEYING SERVICES FOR TOWER SITES
 PREPARED FOR: COUNTY OF LYCOMING
 PREPARED BY: CIVIL AND ENVIRONMENTAL CONSULTANTS, INC.
 AUGUST 21, 2020

Title	Rate
Senior Principal	\$280.00
Principal	\$205.00
Senior Project Manager	\$180.00
2-Person Survey Crew w/equipment	\$160.00
Project Manager III	\$150.00
Project Manager II	\$125.00
Project Manager	\$120.00
Project Manager I	\$120.00
Assistant Project Manager	\$120.00
Technician III	\$115.00
Senior Construction Technician III	\$115.00
Project Engineer	\$105.00
Designer	\$105.00
Cad Operator	\$105.00
Office Manager	\$80.00
Secretary	\$80.00
Administrative	\$80.00
Project Scientist	\$80.00
Project Consultant	\$76.00
Staff Consultant	\$70.00
Staff Geologist	\$70.00
Staff Scientist	\$65.00
Technician II	\$60.00
Technician I	\$51.00

Proposal for Engineering and Surveying Services
 for Hughesville Water Authority Tower Site and Hesker Hill Tower Site

PROJECT SCHEDULE							8/21/2020	
ENGINEERING AND SURVEYING SERVICES FOR TOWER SITES								
PREPARED FOR: COUNTY OF LYCOMING								
PREPARED BY: CIVIL AND ENVIRONMENTAL CONSULTANTS, INC.								
Phase	WKS	2021				2020		
		Sept	Oct	Nov	Dec	Jan	Feb	
Project Mobilization	2							
Site Investigation	5							
Permit Documents	6							
Permit Acquisition Period	13							
Construction Documents	3							
Project Close Out	2							

INSTRUCTIONS FOR NON-COLLUSION AFFIDAVIT

This Non-Collusion Affidavit is material to any contract awarded pursuant to this proposal. According to the Pennsylvania Antbid-Rigging Act, 62 Pa.C.S.A. § 4501, et seq, government agencies may require Non-Collusion Affidavits to be submitted together with proposals.

This Non-Collusion Affidavit must be executed by the member, officer or employee of the Bidder who makes the final decision on prices and the amount quoted in the proposal.

Bid rigging and other efforts to restrain competition and the making of false sworn statements in connection with the submission of proposals are unlawful and may be subject to criminal prosecution. The person who signs the affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the Bidder with responsibilities for the preparation, approval or submission of the proposal.

In the case of a proposal submitted by a joint venture, each party to the venture must be identified in the proposal documents, and an Affidavit must be submitted separately in behalf of each party.

The term “complementary bid” as used in the Affidavit has the meaning commonly associated with that term in the bidding process, and includes the knowing submission of proposals higher than the proposal of another firm, and intentionally high or noncompetitive proposal, and any other form of proposal submitted for the purpose of giving a false appearance of competition.

Failure to file an Affidavit in compliance with these instructions will result in disqualification of the proposal.

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal _____

State of Pennsylvania

County of Lycoming

I state that I am Anthony W. Eith, PE (Title) of Vice President (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. Civil & Environmental Consultants, Inc. (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

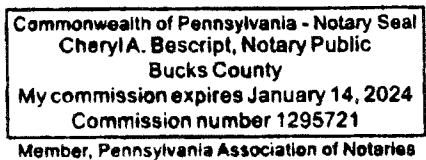
N/A

I state that Civil & Environmental Consultants, Inc. (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

A statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: Anthony W. Eith, PE
Signature: *Anthony W. Eith*
Title Vice President

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 19TH DAY
OF August, 20 20



Cheryl A. Bescript
Notary Public

My Commission Expires: Jan 14, 2024

Legal Ad
Sun Gazette
To Be Run: July 30th and August 3rd

NOTICE TO BIDDERS

ADDENDUM NO. 1 RFP FOR ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE

The additions and/or deletions contained in this Addendum shall be made a part of the plans and specifications and contract documents for the above-referenced solicitation, and shall be subject to all applicable requirements thereunder, as if originally shown and/or specified. In case of any conflict between the specifications, and this Addendum, this Addendum shall govern.

This Addendum must be returned with your bid as acknowledgment of its receipt. Bidders may obtain the Addendum on the County website at www.lyco.org and Request for Bids.

The following modification is made to the text for the referenced solicitation:

The scope of the project has changed from one (1) tower site to two (2) tower sites, resulting in a number of changes to the RFP issued. Please see the following changes for the Lycoming County RFP for E&S services.

1. Change from “Hughesville Water Authority Tower Site” to “Hughesville Water Authority Tower Site and Hesker Hill Tower Site: (1) on the cover page, (2) on Notice to Bidders page 1-1, second paragraph, and (3) on Section 2, page 2-2, paragraph 2.9, third line.

2. Change to Scope of Work & Technical Specifications, Introduction, page 5-1 is as follows:

Lycoming County is currently upgrading our existing radio system to better serve the residents, businesses, tourists and public safety agencies of the county. In order to achieve the overall plan, Lycoming County will be contracting for the construction of two (2) raw lands to finish tower sites to improve RF coverage for our first responders. Additionally, on the one site, a second plot of land is to be cleared for the water authority to use (no further development of the second plot is required).

3. Changes to Scope of Work & Technical Specifications, General Requirements, item 1, page 5-1 are as follows:

1. The names and locations of the two (2) new proposed tower sites are:

- a. Hughesville Water Authority tower site
 - i. Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
 - ii. Street address: 279 Reservoir Road, Hughesville, PA
 - iii. Township: Wolf
 - iv. County: Lycoming
 - v. Size of site plot: 100'x100'
 - vi. Height of tower: 250'

Hughesville Water Authority land which is to be cleared (not developed) for water authority use is:

- i. Street address: 279 Reservoir Road, Hughesville, PA
- ii. Township: Wolf
- iii. County: Lycoming
- iv. Approximate size of plot to be cleared for the water authority: 100'x100'

- b. Hesker Hill tower site
 - i. Latitude: 41-14-19.1 N, longitude: 77-14-35.1 W
 - ii. Street address: 1324 Hesker Hill Road, Jersey Shore, PA
 - iii. Township: Piatt
 - iv. County: Lycoming
 - v. Size of site plot: 75'x75'
 - vi. Height of tower: 250'

The County will be responsible for procurement of site and leasing of property.

4. Change to Mandatory Site Walk on Notice to Bidders, page 1-1, paragraph 4 is as follows:

A mandatory site walk will be held on Wednesday, August 5, 2020, at 10:00 AM for the two (2) tower sites, starting at the Hughesville Water Authority site located at 279 Reservoir Road, Hughesville, PA.

5. Change to Price Proposal, section 6.1 Cost Elements is as follows:

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final	

Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	
Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HUGHESVILLE	

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	

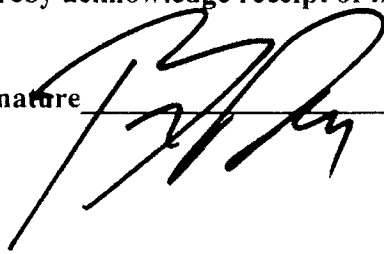
Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services Deliveries, Copies, Etc.	
SUBTOTAL FOR HESKER HILL	

GRAND TOTAL FOR BOTH SITES	
-----------------------------------	--

ACKNOWLEDGEMENT

I hereby acknowledge receipt of this Addendum for the above noted project.

Signature



Date

8/19/20

MASTER SERVICES AGREEMENT
BETWEEN
THE COUNTY OF LYCOMING, PENNSYLVANIA
AND
CIVIL & ENVIRONMENTAL
CONSULTANTS, INC.
FOR
PROFESSIONAL SERVICES

THIS IS AN AGREEMENT effective as of the 10th day of July, 2020 ("Effective Date") between THE COUNTY OF LYCOMING, PENNSYLVANIA ("Owner") and CIVIL & ENVIRONMENTAL CONSULTANTS, INC. ("Engineer").

Engineer agrees to provide engineering and environmental consulting services to Owner in accordance with separate written scope and fee authorizations ("Task Authorizations", also sometimes referred to herein as "Project") that will be agreed upon with Owner on an as requested basis, with the understanding that each Task Authorization will be mutually agreed upon in writing between Owner and Engineer.

Owner and Engineer further agree as follows:

1.1 Basic Agreement

- A. Engineer shall provide, or cause to be provided, the services set forth in each Task Authorization, and Owner shall pay Engineer for such services as set forth in Paragraph 2.01. Once duly signed by Owner and Engineer, each Task Authorization will be deemed a part of and incorporated in this Agreement by reference. A template for Task Authorizations is provided herein as Exhibit A.
- B. Initial 2020 Task Authorizations *have* been included in Exhibit A. Additional Task Authorizations for other projects may be amended to this Agreement as the parties agree to in writing, using the template in Exhibit A, to be performed at the approved schedule of rates and charges then in effect.

2.1 Payment for Services

- A. Payment: Owner shall pay Engineer in the amount and in the manner set forth in each signed Task Authorization. Unless indicated otherwise in a particular Task Authorization, Owner's payments to Engineer shall be on a time and expense basis in accordance with Engineer's hourly billing rates referenced in Exhibit B, plus reimbursable expenses and any subcontracted services, subject to any fee limit referenced in each Task Authorization. Unless specifically indicated

otherwise in a particular Task Authorization, Engineer's charges for any subcontracted services shall be invoiced at cost plus ten percent.

- B. Preparation of Invoices. Engineer will prepare invoices no more frequently than monthly for submittal to Owner for review. Unless otherwise directed by Owner, separate invoices shall be submitted for each Task Authorization, based on payment methods and amounts set forth in each Task Authorization. Supporting information will be provided with each invoice, to the extent requested by Owner in a Task Authorization.
- C. Payment of Invoices. Invoices are due and payable within 30 days of the date of the invoice. If Owner fails to make a timely payment due Engineer, then Engineer may, without liability, after giving seven days written notice to Owner, suspend services under this Agreement until Engineer has been paid in full all amounts due for services, expenses, and other related charges.

3.1 Additional Services

- A. If mutually agreed by Owner and Engineer, or if required because of changes in a Project, Engineer shall furnish services in addition to those set forth in an executed Task Authorization via a written amendment thereto.
- B. Owner shall pay Engineer for such additional services as follows: (1) as may be mutually agreed to in writing, or (2) for additional services of Engineer's employees engaged directly on the Project in an amount equal to the cumulative hours charged to the Project by each class of Engineer's employees times hourly billing rates for each applicable billing class; plus reimbursable expenses and charges for Engineer's subconsultants, if any.

4.1 Termination

- A. The obligation to provide further services under this Agreement may be terminated:
 - 1. For cause,
 - a. By either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the Agreement's terms through no fault of the terminating party.
 - b. By Engineer:
 - 1) upon seven days written notice if Engineer believes that Engineer is being requested by Owner to furnish or perform services contrary to Engineer's responsibilities as a licensed professional; or
 - 2) upon seven days written notice if the Engineer's services for the Project are delayed or suspended for more than 90 days for reasons beyond Engineer's control.
 - 3) In the event Engineer terminates this Agreement for either of the above-specified reasons, Engineer shall have no liability to Owner on account of such termination.
 - c. Notwithstanding the foregoing, this Agreement will not terminate as a result of a substantial failure under Paragraph 4.01.A.1.a if the party receiving such notice begins, within seven days of receipt of such notice, to correct its failure and proceeds diligently to cure such failure within no more than 30 days of receipt of notice; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.

2. For convenience, by Owner effective seven days after the receipt of written notice by Engineer.
3. The terminating party under Paragraphs 4.01.A.1 or 4.01.A.2 may set the effective date of termination at a time up to 30 days later than otherwise provided to allow Engineer to demobilize personnel and equipment from the Project site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.
4. In the event of any termination under Paragraph 4.01.A.1, Engineer will be entitled to invoice Owner and to receive full payment for all services performed or furnished in accordance with this Agreement and all reimbursable expenses incurred through the effective date of termination. Upon making such payment, Owner shall have the limited right to the use of Documents, at Owner's sole risk.
5. In the event of termination by Owner for convenience or by Engineer for cause, Engineer shall be entitled, in addition to payment for those items identified in Paragraph 2.01, to payment of a reasonable amount for services and expenses directly attributable to termination, both before and after the effective date of termination, including, but not limited to, reassignment of personnel, costs of terminating contracts with Engineer's subconsultants, and other related close-out costs, using Engineer's hourly billing rates referenced in Exhibit B.

5.1 Controlling Law

- A. This Agreement is to be governed by the laws of the Commonwealth of Pennsylvania, the state in which the Project is located, without regard to its conflict of law provisions. Any dispute regarding this Agreement shall be brought solely in a state or federal court of competent jurisdiction sitting at or near the Project site.

6.1 Successors, Assigns, and Beneficiaries

- A. Owner and Engineer each is hereby bound and the successors, executors, administrators, and legal representatives of Owner and Engineer (and to the extent permitted by Paragraph 6.01.B the assigns of Owner and Engineer) are hereby bound to the other party to this Agreement and to the successors, executors, administrators, and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.
- B. Neither Owner nor Engineer may assign, sublet, or transfer any rights under or interest (including, but without limitation, moneys that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is mandated or restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. This provision shall not preclude Engineer from retaining subconsultants as it deems reasonably necessary for the completion of the services rendered hereunder.

7.1 General Considerations

- A. The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement shall be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Engineer and its subconsultants may use or rely upon the design services of others, including, but not limited to, contractors, manufacturers, and suppliers.
- B. Engineer shall not at any time supervise, direct, or have control over any contractor's work, nor shall Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any contractor, for safety

precautions and programs incident to a contractor's work progress, nor for any failure of any contractor to comply with laws and regulations applicable to contractor's work.

- C. Engineer neither guarantees the performance of any contractor nor assumes responsibility for any contractor's failure to furnish and perform its work in accordance with the contract between Owner and such contractor.
- D. Engineer shall not be responsible for the acts or omissions of any contractor, subcontractor, or supplier, or of any of contractor's agents or employees or any other persons (except Engineer's own employees) at the Project site or otherwise furnishing or performing any construction work, or for any decision made based on interpretations or clarifications of the construction contract given by Owner without consultation and advice of Engineer.
- E. The Contract Documents for construction contracts prepared as a service under this Agreement are to be the Engineer's template Contract Documents, including but not limited to General Conditions, General Requirements, Information for Bidders and bidding documents, as may be amended by the Owner.
- F. All design, as-built and permitting documents prepared or furnished by Engineer are instruments of service, and Engineer retains an ownership and property interest (including the copyright and the right of reuse) in such documents, whether or not the Project is completed. Engineer grants Owner a perpetual license to use the instruments of service for Project construction, permitting and permitting renewal as is the intended purpose of the documents, and for the purpose of maintenance and repair of the Project
- G. BLANK
- H. The parties acknowledge that Engineer's scope of services does not include any services related to a Hazardous Environmental Condition (the presence of asbestos, PCBs, petroleum, hazardous substances or waste, and radioactive materials). If Engineer or any other party encounters a Hazardous Environmental Condition, Engineer may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until Owner: (i) retains appropriate specialist consultants or contractors to identify and, as appropriate, abate, remediate, or remove the Hazardous Environmental Condition; and (ii) warrants that the site is in full compliance with applicable Laws and Regulations.
- I. The services to be provided by Engineer under this Agreement DO NOT INCLUDE advice or recommendations with respect to the issuance, structure, timing, terms or any other aspect of municipal securities, municipal derivatives, guaranteed investment contracts or investment strategies. Any opinions, advice, information or recommendations provided by Engineer are understood by the parties to this Agreement to be strictly *engineering* opinions, advice, information or recommendations. Engineer is not a "municipal advisor" as defined by 15 U.S.C. 78o-4 or the related rules of the Securities and Exchange Commission. Owner and any other parties with an interest in the Project or this Agreement should determine independently whether they require the services of a municipal advisor.

8.1 Dispute Resolution

- A. Owner and Engineer agree to negotiate all disputes between them in good faith for a period of 30 days from the date of notice by either party of the existence of the dispute. If a dispute involves matters other than a claim by Engineer for payment of fees and the parties fail to resolve the dispute through negotiation then Owner and Engineer agree that they shall first submit any and all such unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement or the breach thereof ("Disputes") to mediation by a mutually acceptable mediator. Owner and Engineer agree to participate in the

mediation process in good faith and to share the cost of the mediation equally. The process shall be conducted on a confidential basis, and shall be completed within 120 days. If such mediation is unsuccessful in resolving a Dispute, then (1) the parties may mutually agree to a dispute resolution of their choice, or (2) either party may seek to have the Dispute resolved by a court of competent jurisdiction.

9.01 BLANK

10.01 Indemnification

The Owner agrees to hold the Engineer harmless for Owner property damaged or lost through no fault of the Engineer while in the care and possession of the Engineer. Engineer shall indemnify and hold the Owner harmless from and against any and all claims, demands, damages and causes of action to the extent arising out of or pertaining to any intentional, willful or negligent act or omission of the Engineer, its officers, directors, agents, servants and/or employees.

11.1 Insurance

- A. Engineer shall procure and maintain insurance as set forth in Exhibit C, "Insurance". Engineer shall cause Owner to be listed as an additional insured on applicable general liability insurance policies carried by Engineer.
- B. Owner shall require all Project construction Contractors to purchase and maintain policies of insurance covering workers' compensation, general liability, property damage, motor vehicle damage and injuries, and other insurance necessary to protect Owner's and Engineer's interests in the Project. Owner shall require Contractor to cause Engineer and any of its subconsultants to be listed as additional insureds with respect to such liability and other insurance purchased and maintained by Contractor for the Project, and shall require Contractor to deliver to Engineer certificates of insurance for the required coverages.
- C. Engineer shall deliver to Owner certificates of insurance evidencing the coverages indicated in Exhibit C. Such certificates shall be furnished prior to commencement of Engineer's services and at renewals thereafter during the life of the Agreement.
- D. All policies of insurance shall contain a provision or endorsement that the coverage afforded will not be canceled or reduced in limits by endorsement, and that renewal will not be refused, until at least 30 days prior written notice has been given to Owner and Engineer and to each other additional insured (if any) to which a certificate of insurance has been issued.

12.01 BLANK

13.1 Total Agreement

This Agreement, including any expressly incorporated Task Authorizations and Exhibits, constitutes the entire Agreement between Owner and Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or cancelled by a duly executed written instrument.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, as of the Effective Date of which is indicated on page 1.

OWNER: THE COUNTY OF LYCOMING,
PENNSYLVANIA

ENGINEER: CIVIL
&
ENVIRONMENTAL
CONSULTANTS,
INC.

By: *Scott L. Metzger*
Title: Chairman

By: *Anthony W. Ertl*
Title: Vice President
Anthony W. Ertl

Date Signed: 7/14/2020

Date Signed: 10 July 2020

Address for giving notices:

Address for giving notices:

LCRMS

Civil & Environmental Consultants, Inc.

P.O. Box 187

370 East Maple Avenue, Suite 304

Montgomery, PA 17752

Langhorne, PA 19047

Exhibit A - 2020 Task Authorizations

THE COUNTY OF LYCOMING, PENNSYLVANIA ("Owner") entered in to a Master Services Agreement with Civil & Environmental Consultants, Inc. ("Engineer" or "CEC") with an effective date of __ in accordance with that Master Services Agreement, the following Task Authorization is hereby approved and Engineer is authorized by Owner to proceed with the services as delineated below. This is Engineer's *1st* Task Authorization.

Effective Date of this Task Authorization:

CEC Project Name: Lycoming County Landfill 2020 Engineering Professional Services

CEC Project Number:

CEC Project Manager:

Owner's Project Manager: Jason Yorks

Fee Limit for this Task Authorization, if any: NA

Payment Method: Time and Expense per hourly billing rates

Engineer's Scope of Services:

Approved for Owner By: _____
(Signature and date)

Type Name and Title of Owner's Approver:

Approved for CEC, - _____
(Signature and date)

Type Name and Title of CEC Approver:

Exhibit A - Template for Task Authorizations

THE COUNTY OF LYCOMING, PENNSYLVANIA ("Owner") entered in to a Master Services Agreement with Civil & Environmental Consultants, Inc. ("Engineer" or "CEC") with an effective date of [INSERT DATE]. In accordance with that Master Services Agreement, the following Task Authorization is hereby approved and Engineer is authorized by Owner to proceed with the services as delineated below. This is Engineer's *[e.g.,]* Task Authorization.

Effective Date of this Task Authorization:

CEC Project Name:

CEC Project Number:

CEC Project Manager:

Owner's Project Manager:

Fee Limit for this Task Authorization, if any:

Payment Method: *[e.g., Time & Expense per hourly billing rates; lump sum]*

Engineer's Scope of Services:

Approved for Owner by.....
[Insert signature and date of signature]

Type Name and Title of Owner's Approver:

Approved for CEC by: -----
[Insert signature and date of signature]

Type Name and Title of CEC Approver:

Exhibit B - Engineer's Hourly Billing Rates Schedule

Note: The billing rates schedule shown below will be in effect for the entire calendar year indicated on the rates schedule, and will be replaced with Engineer's new billing rates schedule effective on January 1st of each and every subsequent year of this Agreement.

CEC Category Rate Table: 2020 LCRMS – Master Service Agreement

Title	Rate
Senior Principal	250.00
Principal	200.00
Senior Project Manager	185.00
Project Manager III	170.00
Project Manager II	155.00
Project Manager I	150.00
Project Manager	150.00
Assistant Project Manager	140.00
Project Engineer	120.00
Project Consultant	120.00
Project Scientist	120.00
Staff Geologist	105.00
Staff Consultant	105.00
Staff Scientist	105.00
Designer	110.00
Cad Operator	110.00
Senior Construction Technician III	100.00
Technician III	90.00
Administrative	90.00
Technician II	85.00
Technician I	75.00

Exhibit C - Insurance

The kinds and amounts of insurance required of the ENGINEER are as follows:

- a) A policy or policies providing protection for employees of the ENGINEER in the event of job-related injuries, generally referred to as "Worker's Compensation Insurance".
- b) Automobile Liability policies with a combined single limit of not less than \$1,000,000 for each person, or each accident because of bodily injury, sickness, or disease including death at any time resulting therefrom, sustained by any person, and for damages because of injury or destruction of property, including the loss of use thereof, caused by accident and arising out of the ownership, maintenance, or use of owned, non-owned or hired automobiles.

- c) Commercial General Liability Insurance shall be furnished with the limits of not less than:

General Aggregate	\$2,000,000	Each Occurrence	\$1,000,000
Products - Comp/Op Agg.	\$2,000,000	Damage to Rented Premises	\$100,000
Personal/Adv. Injury	\$1,000,000	Medical Expense	\$5,000

- d) Excess Liability Insurance Umbrella Form, bodily injury and property damage combined:

Each Occurrence	Aggregate
\$1,000,000	\$1,000,000

- e) Professional Liability Insurance, including errors and omissions, shall be maintained with minimum limits of not less than Three Million Dollars (\$3,000,000).

PROPOSAL FORM

Important note to Bidders:

It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to:

Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 21, 2020. **This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: Stahl Sheaffer Engineering

Company Address: 301 Science Park Road, Suite 333

State College, PA 16803

Main Telephone: (814) 689-1562 Main Fax: (814) 689-1885

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Michael Haynes, P.E., SIT

Contact Telephone: (814) 689-1562 Fax: (814) 689-1885

Contact Email: mhaynes@sse-llc.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Michael Haynes, P.E., SIT / Project Manager

Office Address: 301 Science Park Road, Suite 333

State College, PA 16803

Telephone: (814) 689-1562 Fax: (814) 689-1885

Email: mhaynes@sse-llc.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	<u>1</u>	Date	<u>8/1/2020</u>
Addendum No	<u> </u>	Date	<u> </u>
Addendum No	<u> </u>	Date	<u> </u>
Addendum No	<u> </u>	Date	<u> </u>

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

Company Type (check one):

- Sole Proprietorship Partnership Corporation Joint Venture

PRICE PROPOSAL

6.1 Cost Elements. Services not specifically mentioned in this RFP, but are necessary to provide the functional capabilities described, shall be included as part of the cost elements. Bidders should utilize this table below to justify costs.

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	\$ 9,208.00
Stormwater Drainage Design	\$ 12,821.00
Erosion/Sediment Control	\$ 3,869.00
Civil Permitting*	\$ 7,828.00
Geotechnical	\$ 15,710.00
Geotechnical Boring Stakeout	\$ 538.00
Construction Stakeout	\$ 1,842.00
Soil Resistivity	\$ 660.00
Preliminary and Final Construction Drawings (CDs)	\$ 4,737.00
Utility Coordination	\$ 3,390.00
Zoning Information	\$ 1,520.00
FAA/FCC	\$ 1,456.00
Field Surveying/Courthouse Research	\$ 3,695.00
Survey Plans	\$ 1,283.00
Environmental Investigation	N/A
Infiltration Testing	\$ 3,448.00
Wetlands/Stream Delineation	\$ 2,860.00
Phase 1 Investigation and Report	\$ 2,415.00
Hearing Attendance (If Needed)	N/A
Phase 2 Investigation Report (If Needed)	TBD
NEPA/SHPO Services	\$ 7,200.00
Deliveries, Copies, Etc.	\$ 2,388.88
SUBTOTAL FOR HUGHESVILLE	\$ 86,868.88

PRICE PROPOSAL

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	\$ 5,758.00
Stormwater Drainage Design	\$ 8,965.00
Erosion/Sediment Control	\$ 2,899.00
Civil Permitting*	\$ 2,350.00
Geotechnical	\$ 13,004.00
Geotechnical Boring Stakeout	\$ 693.00
Construction Stakeout	\$ 1,532.00
Soil Resistivity	\$ 660.00
Preliminary and Final Construction Drawings (CDs)	\$ 3,129.00
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Zoning Information	\$ 2,362.00
FAA/FCC	\$ 1,456.00
Field Surveying/Courthouse Research	\$ 2,145.00
Survey Plans	\$ 991.00
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Deliveries, Copies, Etc.	\$ 1,739.52
SUBTOTAL FOR HESKER HILL	\$ 64,441.52
GRAND TOTAL FOR BOTH SITES	\$ 151,310.40

The undersigned, as Bidder, hereby declares that the total project costs as indicated above, includes all necessary work to complete this project in full according to the general specifications contained in the RFP. Products and services not specifically mentioned, but are necessary to provide the functional capabilities shall be listed and included as part of the cost elements.

The undersigned further understands and agrees that if the County accepts the bid, no additional funds will be allowed beyond the stated total project costs.

Company Name: Stahl Sheaffer Engineering

Address: 301 Science Park Road, Suite 333, State College, PA 16803

Point of Contact: Michael Haynes, P.E., SIT Phone Number: (814) 689-1562

Fax Number: (814) 689-1885 Email address: mhaynes@sse-llc.com

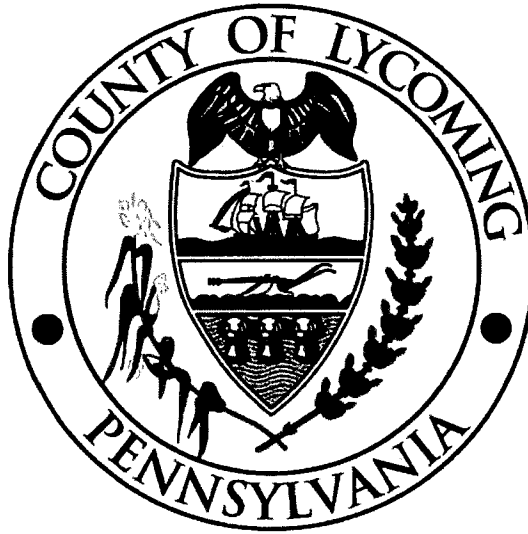
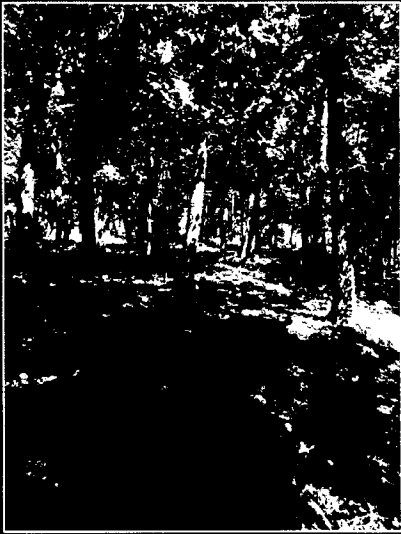
Name of person submitting proposal: Rod Stahl, P.E.

Signature:  Date: 8/19/2020

When submitting a bid, place the bid form sheet as the top page of the bid package and the bid price schedule as the second page of the bid package.

RFP for Engineering and Surveying Services for Hughesville Water Authority Tower Site and Hesker Hill Tower Site

County of Lycoming, PA



Submitted to:

Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

Submitted by:

Stahl Sheaffer Engineering
301 Science Park Road, Suite 333
State College, PA 16803

August 21, 2020

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This document contains proprietary and confidential information of Stahl Sheaffer Engineering and shall not be used, disclosed, or reproduced, in whole or in part, for any purpose other than to evaluate this document, without the prior written consent of Stahl Sheaffer Engineering.

August 21, 2020

Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

Re: RFP for Engineering and Surveying Services for Hughesville Water Authority Tower Site
and Hesker Hill Tower Site

Dear Lycoming County Board of Commissioners:

Stahl Sheaffer is pleased to submit this proposal to Lycoming County to provide turnkey engineering and surveying services for the Hughesville Water Authority Tower Site and Hesker Hill Tower Site. We understand and share Lycoming County's goal of upgrading the existing radio system to better serve the residents, businesses, tourists, and public safety agencies of the county. The Stahl Sheaffer team also includes RUE Environmental, LLC to provide cultural and historic services. As detailed in the Technical Compliance section of this proposal, our team can provide all engineering and surveying design services for the tower sites.

Please find enclosed the following documentation that has been requested for this proposal:

- Proposal Form (previously enclosed at the top of the bid package)
- Price Proposal (previously enclosed at the top of the bid package)
- Technical Compliance
- Project / Operational Costs
- Vendor References
- Project Implementation Schedule
- Non-Collusion Affidavit
- Exception Form Acknowledgement
- Signed Acknowledgement of Receipt of Each Addendum

The Project Manager for this project will be Michael Haynes, P.E., SIT who will serve as the key point of contact with Lycoming County. He can be reached at (814) 404-0564 or via email at mhaynes@sse-llc.com.

Sincerely,



Rod Stahl, P.E., Principal
Stahl Sheaffer Engineering

Copy | File P20-385

1. Technical Compliance

Project Scope of Work

Stahl Sheaffer will provide complete engineering, surveying, permitting, and related site design services to construct the two new proposed tower sites at the locations provided by Lycoming County. We understand no tower design services or coordination with a tower manufacturer are required.

General Requirements

We have read and understand the general requirements listed in the RFP. Stahl Sheaffer is in good standing with state boards and fully authorized and licensed to provide professional engineering services and surveying in Pennsylvania.

Engineering Services

A. Civil Site Engineering

Stahl Sheaffer's proposal is a turnkey proposal for civil engineering services with a lump-sum price for the following items, included in our price proposal:

1. **Site Grading/Site Layout:** With the issuance of Addendum 1 and the Question and Answer Responses issued by the County, there will be two tower locations. The original tower location at the Hughesville Water Authority will now be a 50'x60' pad size accessed by a 12' gravel roadway that will follow the existing trail northwest from the existing water tank before making a hard turn back to the east to make the final approach to the tower location at the top. A maximum vertical grade of 14% will be held for the design of the roadway with truck turning movements being evaluated to ensure they can negotiate the curves. Site 1 will also include clearing an area and grading an area approximately 100'x100' for a future 40' diameter water tank replacement. The completed pad will be graded close to the existing tank pad elevation. The current access road to the tank and tower will be maintained for construction traffic to access the site. The second tower site located on the property of Dean Edwards along Heskler Hill Road will utilize the existing field access to construct a 60'x60' gravel pad for the communications tower.
2. **Stormwater Drainage Design:** Stahl Sheaffer will develop a stormwater drainage design that meets the governing stormwater management regulations for each site. For Tower Site 1 on the Hughesville Water Authority parcel, the receiving waters are an UNT (Unnamed Tributaries) to Muncy Creek. Muncy Creek is classified as a CWF (Cold Water Fishes) and TSF (Trout Stocked Fishes) and has an Approved ACT 167 Plan. Wolf Township's local stormwater ordinance will need to be met and a stormwater management plan will be submitted to the Municipal Engineer for review and approval since the proposed impervious area will exceed 5,000 SF. Per the ordinance, any areas designed to initially be gravel or crushed stone shall be assumed to be impervious. 25 Pa. Code, Chapter 102.8 PCSM requirements will also need to be met as required for coverage under an NPDES permit since the total disturbance for the tower pad, access road improvements, and water tank pad will be greater than one acre.





Tower Site 2 in Piatt Township is governed by the County Stormwater Ordinance and falls within an approved ACT 167 Plan. A stormwater management plan will be developed and submitted to the County's Review Engineer in accordance with the ordinance. The receiving waters for this site are UNTs to Larrys Creek which have a designated use of WWF (Warm Water Fishes) with an existing use EV (Exceptional Value). Disturbance for this site is anticipated to be under one acre, so an NPDES permit will not be necessary at this site.

3. **Erosion and Sediment (E&S) Control Design:** The Erosion and Sediment Control Plan for both of the Tower Sites will be developed in accordance with the Pennsylvania Title 25, Chapter 102 Rules and Regulations; the PA DEP Erosion and Sediment Control Manual, March 2012 Edition and recent updated policies. For Tower Site 1, a PAG-02 NPDES General Permit for Discharges of Stormwater Associated with Construction Activities will be prepared and submitted to the Lycoming County Conservation District since the limit of disturbed area is anticipated to be over two acres for this site. An E&S plan will be developed along with the completion of the E&S module 1 to be included with the NPDES permit. Tower Site 2 will require only an E&S plan be developed for the disturbance area under one acre.
4. **Applicable Permitting Documents:** Stahl Sheaffer will prepare the required permitting documents for these two tower locations and submit them to the appropriate review entity.

For Tower Site 1, the following permitting documents are anticipated for this project.

- Zoning Application
- Land Development Plan
- Stormwater Management Plan
- NPDES Permit to be submitted to Lycoming County Conservation District.

Tower Site 2 will require the following submissions to the Township and County:

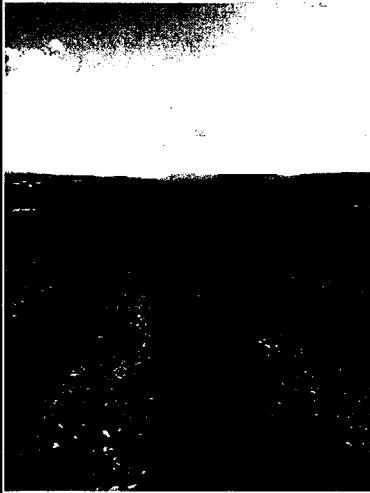
- Zoning Application for a Special Exception
- Land Development Plan
- Stormwater Management Plan

5. **Geotechnical Testing and Report:**

Based on the RFP issued on July 20, 2020, three test borings are proposed in general accordance with ASTM D1586-18, within the footprint of the planned tower site foundation. Due to the steepness and site condition of the Hughesville Water Authority Tower Site, clearing and benching may be necessary to perform the borings safely. The drilling depths will be approximately 35 feet below existing surface grades.

The following items are included in this scope of work for each boring location:

- Provide a PennDOT qualified drilling inspector to direct all subsurface sampling.
- Perform continuous split spoon sampling to refusal (estimated 20 feet below ground surface) and perform Standard Penetration Testing (SPT) at six (6) inch intervals. Soil samples will be procured.



- Perform rock coring (if obstructions are encountered) to predetermined depths (estimated 15 feet into rock). Rock Quality Designation (RQD) and Percent Recovery will be determined from the rock core samples.
- Visually inspect the boring samples to identify potentially unsuitable construction materials or conditions, such as, but not limited to, organic soil, expansive soil, and mine reclamation fill.
- Collect photographic documentation and record 360° video of the project site and findings.
- Ensure that all the borings will be grout backfilled upon completion.
- Take ground water table measurement at 0 hours and 24 hours.

Stahl Sheaffer will provide geotechnical laboratory testing on the representative boring samples. All the laboratory tests will be performed at Stahl Sheaffer's AASHTO re:source (AMRL)-accredited geotechnical lab. The following laboratory tests are included in this scope of work:

- Water (Moisture) Content of Soil and Rock by Mass (ASTM D2216-19)
- Sieve Analysis (ASTM D6913/D6913M-17)
- Liquid and Plastic Limits (ASTM D 4318-17e1)
- Specific Gravity (ASTM D 854-14)
- Standard Practice for Classification of Soils for Engineering Purposes (ASTM D2487-17e1)
- Unconfined Compressive Strength (UCS) of Rock (ASTM D7012-14e1)

Stahl Sheaffer will prepare a geotechnical report, including the field exploration findings, laboratory testing results, and geotechnical concerns and recommendations. The draft of the geotechnical investigation report will be submitted for Lycoming County's review and comment. Upon receipt of comments, the draft report will be revised, and a final report submitted.

6. Soil Resistivity Testing and Report:

Stahl Sheaffer will perform Soil Resistivity Testing in the field using the Wenner Four-Electrode Method, in general accordance with ASTM G57-12. The resistance values will be collected automatically from Miller 400D Digital Resistance Meter. Based on the RFP issued on July 20, 2020, the length and spacing of the resistivity intervals will be every 30' out to 300'. Two line tests are required. The findings in Soil Resistivity Testing will be summarized in a report.

B. Site Design

Stahl Sheaffer will complete all work in compliance with existing regulatory codes, industry standards, and FAA/FCC regulations.

1. Stahl Sheaffer will provide a preliminary legible drawing of the proposed site that will include:

- a. Compound layout with all applicable facilities, shelter, propane tank, generator, construction details, and tower drawings as provided by MCM, Consulting Group, Inc.
 - b. Lease area of site with metes and bounds.
 - c. Fencing, grounding, and electrical plan and details.
2. Stahl Sheaffer will be responsible for utility coordination, which includes: submission of one-calls, coordination of site walks with appropriate utility firms for utility routing, and any associated ROW that will be required for utility corridors.
 3. Stahl Sheaffer will prepare construction drawings based on all information collected and agreed upon during the site walk phase. Results based on geotechnical and soil resistivity reports, tower drawings, foundations, shelter, propane tank and generator, FAA Notice, permitting, and site survey (included as a separate section below) will also be incorporated.
 4. Stahl Sheaffer understands that the facilities required at each of the tower sites are power and communications.

Surveying Services

Stahl Sheaffer will perform all surveying services at both tower locations in accordance with the RFP, including the following :

- Provide topography and elevations along the access routes (30'+/- width) and at the tower/cleared sites. Elevations shall be field measured and shown to within 1.0 feet of the U.S.G.S. datum or NGVD 88 datum when not in a special flood hazard zone.
- Location of all structures within 50 feet of the proposed sites will be shown, including any abandoned structures.
- Locate all above-ground utilities including power and telephone poles, overhead wires, and other utility structures. Underground utilities will be also shown and noted within 25 feet of proposed construction area. Any and all utility firms or other owners will be labeled and shown.
- All tax maps, blocks, and lot numbers and the deed book and page numbers will be verified and shown for the parent parcels and adjoining parcels within 100 feet.
- All corners of proposed lease parcels, easements, and other boundaries will be permanently marked with iron pins or pipes not less than 18 inches in length and 1" in diameter. Where a particular benchmark is used as the starting point, its description, location, and elevation will be noted on the drawing.
- Provide a 2C letter accurate within the FAA Horizontal Accuracy Code 2 (+/- 50 feet) and the elevation provided shall be accurate within FAA Vertical Accuracy Code (+/- 20 feet).
- A permanent benchmark shall be set in the immediate vicinity of the proposed new construction.
- A survey map will be produced that contains the following items:
 - The scale shall normally be 1"=20' or 1"=3-' if necessary and 24 inches in depth by 36 inches in width. A key map at a scale of 1"=2000' will be included in the area designated on the standard drawing format sheet



(upper right-hand corner) and shall usually consist of a reproduction of the U.S.G.S. 7.5-minute quadrangle map with the site location noted in heavy outline and circled for clarity.

- A north arrow showing deed bearing north, magnetic north, and geographic true north.
- Contours at two-foot intervals.
- The metes and bounds of the tower lease area to the nearest whole second and distance to the nearest hundredth of a foot.
- Proposed and existing easements and/or rights of ways will be shown.
- All legal names and widths of any adjoining streets or dedicated public rights of way will be shown.
- Signature of the supervising Professional Land Surveyor.

Environmental Surveying

A. Wetland and Stream Delineation and Permitting

Stahl Sheaffer shall provide a site-specific wetland, stream, and natural resources investigation complying with local, state, and national procedures. We will be responsible for conveying wetland, stream, and natural resource findings with the client and will advise a viable permitting solution for any field findings that requires mitigation, permitting, or site re-design.

A wetland identification and delineation will be conducted as follows:

- Wetland Identification and Delineation will be performed in accordance to the 1987 Army Corps of Engineers (USACOE) Wetland Delineation Manual and the Regional Supplement to the USACOE Wetland Delineation Manual: Eastern Mountains and Piedmont Region (April 2012 Version 2.0)
- The limits of the “area of investigation” or AOI is undetermined. The investigation will be conducted along a 100 foot-wide corridor following the preliminary access road alignment. The preliminary access road alignment will be proposed by Stahl Sheaffer with input and review from the client. The reivev will also include the area designated for the tower site and a 50 foot buffer around limits of cut and fill. Both tower locations will be conducted during one field trip. If the delineation requires additional time, it will be added to the overall fee on a time and material basis.
- Wetlands will be marked with pink flagging tied onto live vegetation, sturdy dead vegetation, or wooden stakes. Pink pin flags may also be used if ribbon flagging is not easily attached and readily visible. The flags will be sequentially numbered and recorded in the memo according to the same numbering.
- A brief memo summarizing the findings of the investigation will be provided to the client. A formal wetland delineation report is not required and will not be prepared under this scope of work. A formal report can be provided upon request for additional fees.
- The memo summarizing the findings of the investigation will be delivered electronically via email, FTP, or other similar method as well as one hard copy mailed to the client.



- The flagged boundary of all wetlands identified will be surveyed with a handheld GPS capable of sub-meter accuracy or better as required by the Army Corps of Engineers for wetland and waters impact permitting. Any identified wetlands will be shown on the site plans.
- Streams (waters) and water bodies within the AOI will be located and mapped during the wetland delineation. Small streams will be surveyed with the handheld GPS along the centerline. Larger streams will be surveyed on both sides. Wetlands and streams will be represented on the project drawings and in the wetland delineation mapping. Streams adjacent to the AOI but not within the AOI will be approximated from aerial imagery and noted as such.

As a result of desktop review and the site visit, Stahl Sheaffer does not anticipate the need for waterway or wetland permitting. Waterway and wetland impact permitting is not a part of this scope of work.

Additional Services

A. SHPO Compliance

Stahl Sheaffer has teamed with Rue Environmental, LLC to provide cultural and historic resource reviews. Rue Environmental, with quality control provided by Stahl Sheaffer, will provide State Historic Preservation Office coordination and compliance (SHPO), including the necessary submittals. We will be responsible for ensuring compliance with the Pennsylvania State Historic Code, PHMC Submissions, conducting tribal coordination, and completing FCC Form 620. A farmland assessment is not anticipated. If a review of farmlands is requested by PHMC, we will complete and submit the necessary documentation, including the Historic Resource Form, with an amendment to the contract. We will incorporate the necessary cultural and historic forms and research results into the NEPA checklist.

B. NEPA Documentation/NEPA Checklist

Stahl Sheaffer's environmental professionals have many years of experience completing Categorical Exclusions and Environmental Assessment documentation for state and federal agencies. We will complete the NEPA checklist to determine if additional environmental clearance work is required. We will use the NEPAassist tool on the EPA website to expedite the completion of the NEPA process. We anticipate that the Hughesville site will have a potential conflict with the Northern Long Eared bat. We expect that a seasonal tree cutting restriction will be implemented as a conservation measure. This will allow a significant cost saving by avoiding a bat survey. If the conservation measure cannot be implemented due to construction schedules, Stahl Sheaffer could complete a bat habitat survey to determine if bat habitat is present. Bat summer roosting habitat is likely at the Hughesville site. If potential habitat is present, Stahl Sheaffer can conduct an emergence survey to determine if any bats are present in the area of proposed disturbance. We expect the project to qualify for a categorical exclusion and not require an Environmental Assessment (EA). If potential conflicts uncovered through completion of the NEPA checklist, an EA may be required. An EA is not included in this scope of work. Bat and bat habitat surveys would require an amendment to the contract.



C. Coordinate/Prepare Phase I and II Site Assessments

Stahl Sheaffer will complete a Phase I Environmental Site Assessment (ESA) of the proposed tower sites. We understand a Phase I ESA is required and that based on the findings of the Phase I ESA, a Phase II ESA could be required.

The following will be performed to complete the Phase I ESA:

Stahl Sheaffer will prepare a Phase I Environmental Site Assessment in accordance with ASTM Practice E1527-13. In following this standard practice an "All Appropriate Inquiry" (AAI) will be completed to identify recognized environmental conditions connected to the property. The Phase I will be completed for the parcels that will be directly affected by the proposed tower construction activity. We will complete the following task in preparation of the Phase I ESA.

1. Database Search

Stahl Sheaffer will request an appropriate level database search from a recognized third-party search company. The database package will include the following up-to-date ASTM/AAI compliant records review:

- Radius Map Report
- Historical Aerials
- Historical Topographical Maps
- Stahl Sheaffer will perform additional database searches in an attempt to fill in any "data gaps" deemed significant.

2. Mapping Review

Stahl Sheaffer will gather available mapping to characterize the physical setting of the property. Map review could consist of the following map types:

- Topographic
- Farm service agency
- Mining
- FEMA
- Database search maps

Using these mapping sources, Stahl Sheaffer will assess past land uses as they pertain to potential existing environmental hazards.

3. Site Reconnaissance

Stahl Sheaffer will coordinate a site visit with the landowner. The entire site will be walked to take note of any existing environmental conditions that might create or are creating hazardous conditions.

4. Interviews

Stahl Sheaffer will conduct the following interviews as necessary to satisfy the AAI rule and the Standard Practice E1527-13:

- Current landowner
- Past owners or operators
- Local health and/or fire officials regarding past events, if applicable

5. Report Preparation

Stahl Sheaffer will prepare a Phase I Environmental Site Assessment Report for the property in accordance with ASTM Practice E1527-13, Appendix X4 Recommended Table of contents and Report Format.

Assumptions:

- A Chain of Title search and an Environmental Lien search are not included in the proposal.
- The landowner will provide past ownership and contact information if known.

The results of a Phase I will dictate if a Phase II is necessary and the level of effort required for the particular Phase II. As a result of our desktop review and site review and the nature of the proposed construction activity, Stahl Sheaffer does not anticipate the need for a Phase II ESA. A Phase II ESA is not part of this scope of work.

D. Zoning Permitting

Stahl Sheaffer is knowledgeable and experienced with the zoning process. This service will include zoning drawings and zoning package submittal. All information will be compliant with county and city zoning requirements. Attendance at a zoning hearing is not anticipated, as the tower is considered an acceptable accessory use in the current zoning.

Tower Site 1 is zoned Residential-Surburban and the communications is permitted as an accessory use and structure. A zoning permit will be required for the tower. Stahl Sheaffer will prepare the application and submit to Wolf Township.

Tower Site 2 is zoned Countryside with a communications tower permitted under a Special Exception which is granted by the Lycoming County Zoning Hearing Board. Stahl Sheaffer will prepare all the necessary applications to obtain this approval.

Miscellaneous

A. Expenses

1. As part of the proposal, in addition to the lump sum, Stahl Sheaffer has included all reimbursable expenses and rates.
2. Stahl Sheaffer will document and bill all reimbursable costs with a 0% mark-up.

B. Change in Scope of Work

1. Stahl Sheaffer has provided an hourly fee rate sheet for work which may arise due to a change in the proposed scope of work.
2. All additional services arising from a change in the scope of work will not be commenced without a fully executed contract amendment. Stahl Sheaffer will be responsible for indicating to the County if any services are recommended to be rendered outside the scope of work. We understand that Lycoming County will not be required to honor any requests for compensation for additional services that begin or are completed before a fully executed contract amendment is issued.

2. Project / Operational Costs

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	\$ 9,208.00
Stormwater Drainage Design	\$ 12,821.00
Erosion/Sediment Control	\$ 3,869.00
Civil Permitting*	\$ 7,828.00
Geotechnical	\$ 15,710.00
Geotechnical Boring Stakeout	\$ 538.00
Construction Stakeout	\$ 1,842.00
Soil Resistivity	\$ 660.00
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Deliveries, Copies, Etc.	\$ 1,739.52
SUBTOTAL FOR HESKER HILL	\$ 64,441.52

GRAND TOTAL FOR BOTH SITES	\$ 151,310.40
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As part of the proposal, in addition to the lump sum, Stahl Sheaffer has included all reimbursable expenses and rates. Stahl Sheaffer will document and bill all reimbursable costs with a 0% mark-up.

Hourly Fee Rate Sheet

Stahl Sheaffer has provided an hourly fee rate sheet below for work which may arise due to a change in the proposed scope of work.

All additional services arising from a change in the scope of work will not be commenced without a fully executed contract amendment. Stahl Sheaffer will indicate to the County if any services are recommended to be rendered outside the scope of work. We understand that Lycoming County will not be required to honor any requests for compensation for additional services that begin or are completed before a fully executed contract amendment is issued.

Standard Consulting Rates by Employee Classification

- Principal..... \$160.00 / hour
- Senior Project Manager..... \$140.00 / hour
- Project Manager..... \$130.00 / hour
- Project Engineer (Registered P.E.)..... \$125.00 / hour
- Professional Surveyor (Registered PLS)..... \$120.00 / hour
- Senior Professional..... \$115.00 / hour
- Senior Designer \$115.00 / hour
- Project Coordinator..... \$105.00 / hour
- Designer..... \$ 95.00 / hour
- Analyst..... \$ 95.00 / hour
- Senior Technician \$100.00 / hour
- Technician \$ 85.00 / hour
- Field Technician..... \$ 80.00 / hour
- Construction Manager \$100.00 / hour
- Construction Inspector III..... \$ 95.00 / hour
- Construction Inspector II..... \$ 82.00 / hour
- Construction Inspector I..... \$ 66.00 / hour
- Administrative Services..... \$65.00 / hour

Survey Crew Rates

- 3D Terrestrial Scanning Survey Crew \$235.00 / hour
- 360° Mobile LiDAR/Mapping Survey Crew..... \$235.00 / hour
- Mapping Control Survey Crew \$185.00 / hour
- Two Person Survey Crew..... \$155.00 / hour

Reimbursable Expenses

- Mobile LiDAR: Image + Point Cloud (Survey Grade).....\$800.00 / day
- Mobile LiDAR: Image + Point Cloud (Mapping Grade) \$400.00 / day
- Mobile Mapping: 360° Image Only \$300.00 / day
- 3D Terrestrial Scanner..... \$300.00 / day
- Nuclear Density Gauge..... \$50.00 / day
- Mileage..... \$.575/mile (or current IRS approved rate)
- Lodging and Mealsat cost

- Copies (B&W) \$0.10 / copy
- Copies (Color).....\$0.35 / copy
- Plan Plots (B&W).....\$0.50 / sq ft
- Plan Plots (Color).....\$1.00 / sq ft
- Mail & Overnight Delivery.....at cost
- Fees paid for permits, applications, construction services..... at cost
- Subcontracted Servicesat cost

Standard Unit Price Services

- Construction Inspector II with Nuclear Gauge \$1,500.00 / day
(12-hour day rate on site; includes all expenses)
- ACI Concrete Field Technician with Test Equipment \$1,500.00 / day
(12-hour day rate on site; includes all expenses)

Notes:

1. *These rates shall be effective for the 2020 calendar year.*
2. *Additional classifications and rates shall be furnished for projects of a special nature.*
3. *Reimbursable expenses not listed will be invoiced at cost.*
4. *Standard unit price services will be prorated based upon actual time on site.*

3. Vendor References

List of Recent Projects with Professional References

Erie County Department of Public Safety Cell Tower Site Design, Erie County, PA

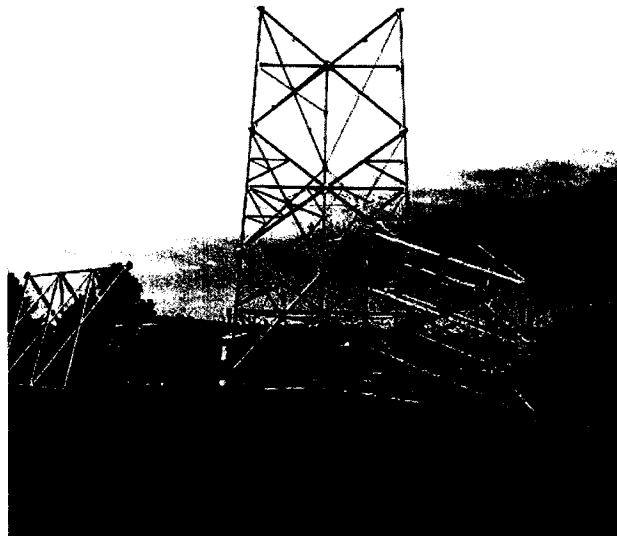


Erie County was upgrading its existing radio system to better serve residents, businesses, and tourists of the county. To achieve the overall plan, Erie County contracted the construction of eight raw lands to finish tower sites across the county to provide RF coverage for first responders. This project consisted of eight cell towers located at Union City, Corry City, Waterford Township, Girard Township, Fairview Township, Greenfield Township, Harborcreek Township, and Springfield Township.

Stahl Sheaffer provided site engineering and geotechnical services for the project. The site survey included research to identify property deeds and easements to assist in locating proposed towers. Stahl Sheaffer also provided construction stakeout.

Geotechnical services included subsurface investigation, laboratory testing, geotechnical analysis, and report. The subsurface investigation included drilling inspection, visual inspection of the boring samples, determination of Rock Quality Designation (RQD) and Percent Recovery of rock core samples, photographic documentation of project site and findings, ground water table measurement, digitize the boring log. All laboratory tests were performed at Stahl Sheaffer's AASHTO resources-accredited geotechnical lab. The tests included natural water content, Atterberg Limit, sieve analysis, soil classification, soil density, soil resistivity, unconfined compressive strength and direct shear of soil, and compressive strength of rock core. Based on the results of the subsurface investigation and laboratory testing, Stahl Sheaffer estimated the parameters for the design of drilled shafts and a shallow pad foundation. The parameters estimated included soil strength, Skin Frictional Resistance of soil and rock, Ultimate Bearing Pressure, Strain E50, and Lateral Subgrade Modulus. All findings were described in the geotechnical report.

- **Year Completed:** 2017
- **County Size:** Approx. 270,000
- **Professional Reference:** John Grappy, ENP – Director, Erie County Department of Public Safety, (814) 451-7945, JGrappy@eriecountypa.gov
- **Financial Report**
 - **Contract Amount:** \$137,400.00
 - **Actual Project Cost:** \$136,600.00



Luzerne County Communication Tower Construction, Geotechnical Investigation, Luzerne County, PA



Stahl Sheaffer provided geotechnical investigation and recommendations for NG Radio Tower Foundation for the construction of two communication towers in White Haven and Hazleton in Luzerne County, PA. Stahl Sheaffer conducted field investigations, subsurface exploration, and laboratory testing on the proposed sites.

- **Year Completed:** 2018
- **County Size:** Approx. 320,000
- **Professional Reference:**

Andrew Zahorsky, ENP – Data & Technical Support Manager, Luzerne County 9-1-1 Communications Center, (570) 826-3060, Andy.Zahorsky@luzernecounty.org

- **Financial Report**
 - **Contract Amount:** \$15,600.00
 - **Actual Project Cost:** \$15,600.00

Morris Township Cellular Communication Survey & Land Development, Greene County, PA

Stahl Sheaffer is serving as the engineering team leader for a proposed 195' communication tower and 35' repeater tower located in Morris Township, Greene County. In addition to coordinating the tower design and environmental permitting requirements, Stahl Sheaffer is directly providing surveying support, land development, geotechnical services, tower coordination, and contract documents for the project. A topographic and existing conditions survey was completed for the proposed project area, as well as the site layout, grading, utility design, and erosion & sediment control as required for the land development design and approval process. Additionally, a geotechnical investigation was completed for the tower and roadway design. Stahl Sheaffer previously provided a cellular communication survey for the proposed cell phone tower in 2019 to check and document existing radio frequency signals to assist the Township determine the tower height, location, type, etc.

- **Year Completed:** In Progress
- **County Size:** <320,000 (approx. 40,000)
- **Professional Reference:** Robert Keller, Supervisor, Morris Township, (724) 627-9844, morristwp@windstream.net
- **Financial Report**
 - **Contract Amount:** \$82,910.00
 - **Actual Project Cost:** In Progress (\$13,435 billed to date)



The City of Williamsport Brandon Park Rehabilitation, Lycoming County, PA

Stahl Sheaffer provided project management and design services as the lead consultant for the Brandon Park Rehabilitation. The project included improvements and additions such as a nature playground, walking trails, parking lot overlay and expansion, park site lighting, stormwater bioretention areas, and tennis court resurfacing. This project was one of PA DCNR's pilot Nature Play projects, exploring the potential of this type of recreational experience to connect children with their natural environment. The nature play area incorporated natural play materials such as log structures and stone and gravel play areas, a homestead play house, an edible garden and native plantings, and interpretive signage. There are also opportunities for future build-out in the center of the play space for a natural play structure. Stahl Sheaffer led the overall design effort and managed the project team, including a landscape architecture consultant to design the Nature Play area. The project began in the conceptual stages and included coordination with City staff and officials before moving to final design. Following conceptual design, the project moved to final design and coordination with PA DCNR to facilitate the grant funding process. Stahl Sheaffer managed the permitting requirements for the project, which included a Stormwater NPDES permit and PA Labor & Industry permit.

- **Year Completed:** In Progress
- **County Size:** Approx. 113,000
- **Professional Reference:** Jessie Novinger, Director of Recreation & Special Events, City of Williamsport, (570) 327-7510
- **Financial Report**
 - **Contract Amount:** \$61,978.00
 - **Actual Project Cost:** \$61,978.00

City of DuBois Maple Avenue Streetscape Improvements, Clearfield County, PA

Stahl Sheaffer is providing engineering design for streetscape improvements to approximately one mile of Park Avenue and Maple Avenue in the City of DuBois. Work included coordinating with the City to understand their goals and desired look for the streetscape improvements. Stahl Sheaffer's specific role includes survey, an existing sidewalk condition evaluation, landowner tree removal coordination, sidewalk design, lighting layout, utility avoidance, a cost estimate and preparation of bidding documents for construction and tree clearing. Temporary impacts to a floodplain and floodway are proposed. Stahl Sheaffer prepared a Joint Permit Small Project format for Chapter 106 floodplain impacts and Chapter 105 floodway impacts.



- **Year Completed:** In Progress
- **County Size:** Approx. 80,000
- **Professional Reference:** Christopher Nasuti, City Engineer, City of Dubois, (814) -371-2000, chris.nasuti@duboispa.gov
- **Financial Report**
 - **Contract Amount:** \$137,801.00
 - **Actual Project Cost:** \$137,796.60 (billed to date)

City of DuBois Penn Highlands Access Road, Clearfield County, PA

Stahl Sheaffer is providing engineering design services for roadway and stormwater management improvements for access roads to Penn Highlands Healthcare DuBois East location. The project consists of four different roadways leading to Penn Highlands DuBois East which intersect with



Maple Avenue. Stahl Sheaffer's role consists of providing roadway design, stormwater design, bid document preparation, and cost estimating.

- **Year Completed:** In Progress
- **County Size:** Approx. 80,000
- **Professional Reference:** Christopher Nasuti, City Engineer, City of Dubois, (814) -371-2000, chris.nasuti@duboispa.gov
- **Financial Report**
 - **Contract Amount:** \$225,354.00
 - **Actual Project Cost:** \$137,907.31 (billed to date)

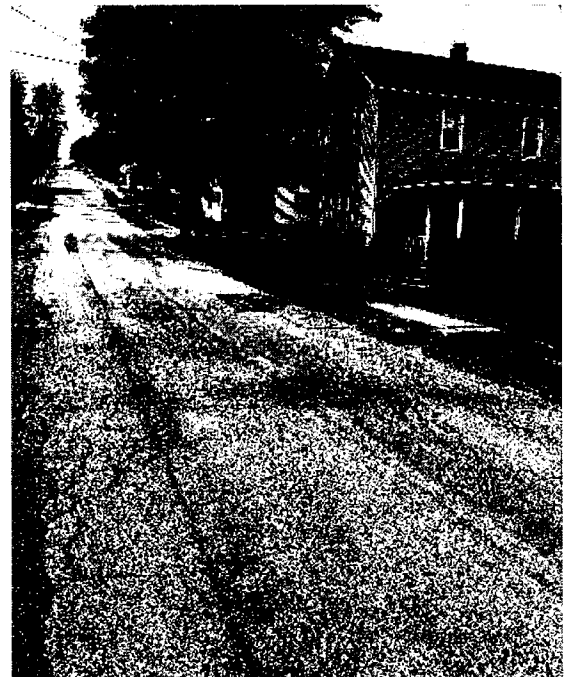
Gamble Pad J & Access Road, Lycoming County, PA

Stahl Sheaffer provided design and permitting services for a new well pad and 1,750' access road in Gamble Township, Lycoming County. The stormwater management design was completed in accordance with the Gamble Township Stormwater Management Ordinance and the Lycoming County Act 167 Plan. A stormwater consistency verification report was prepared and submitted to Gamble Township for review and approval. An ESCGP-2 permit application was developed and submitted to DEP's Eastern Oil and Gas District Office. Stahl Sheaffer prepared and submitted a highway occupancy permit to PennDOT's District 3-0 office for review and approval.

- **Year Completed:** 2018
- **County Size:** Approx. 113,000
- **Professional Reference:** Ben Williams, Construction Manager, Seneca Resources Company, 814-220-1551, williamsB2@srcx.com
- **Financial Report**
 - **Contract Amount:** \$144,695
 - **Actual Project Cost:** \$144,695

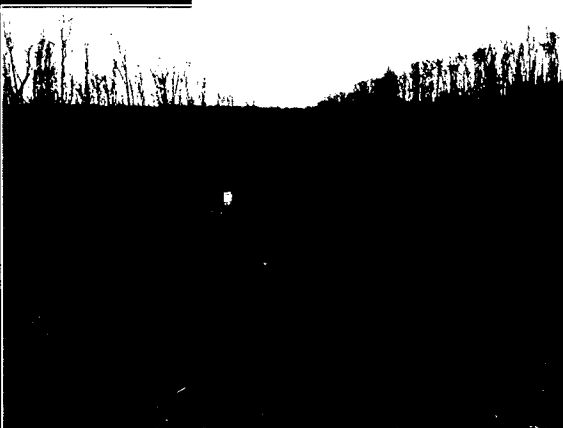
City of St. Marys Charles Street Roadway Reconstruction, Elk County, PA

Stahl Sheaffer completed the design for the complete reconstruction of Charles Street from the intersection of SR 255 (Maurus Street) to Benedict Street. The length of the improvement was approximately 1,050 feet and included concrete curb, 28-foot pavement width, four to five feet lawn strips, four feet of sidewalk, drive apron reconstruction, storm and sanitary reconstruction, and associated lawn restoration.



- **Year Completed:** 2019
- **County Size:** Approx. 30,000
- **Professional Reference:** Tim Brennan, City Engineer, St. Marys (814) 781-1718 ext. 234, tbrennan@stmaryspa.gov
- **Financial Report**
 - **Contract Amount:** \$86,975.00
 - **Actual Project Cost:** \$86,975.00

City of St. Marys Airport Industrial Park NPDES Permit & Stormwater Management Design, Elk County, PA



Stahl Sheaffer provided engineering and environmental services for the reestablishment of an NPDES permit at the St. Marys Airport Industrial Park. The park was previously covered by a permit, but it had expired. Stahl Sheaffer initiated coordination with DEP early in the application process. Through early coordination, we were able to gain consensus on permission to use previously approved designs and reports. Ultimately, this approach saved the client significant engineering cost. Our specific roles included completing and gathering all application forms and required attachments, performing a wetland identification and delineation of the entire industrial park, and inspection of existing stormwater basins for meeting design plan requirements. Additionally, an NPDES major modification was

completed that included an infiltration basin design for a single lot development within the park. Stahl Sheaffer also performed the infiltration testing required for the basin design.

- **Year Completed:** 2017
- **County Size:** Approx. 30,000
- **Professional Reference:** Tim Brennan, City Engineer, St. Marys (814) 781-1718 ext. 234, tbrennan@stmaryspa.gov
- **Financial Report**
 - **Contract Amount:** \$15,468.00
 - **Actual Project Cost:** \$15,468.00

Treasure Lake Stormwater Management Strategic Plan, DuBois, Clearfield County, PA



Stahl Sheaffer provided civil and environmental engineering services to support the Treasure Lake Stormwater Management Strategic Plan. The purpose of the plan was to serve as a guidance for the Treasure Lake Property Owners Association, improve stormwater management infrastructure and decision making, and protect property. Stahl Sheaffer verified types of existing infrastructure including ditches, swales, channels, culverts including stream crossing structures, and catch basins and storm drains. Stahl Sheaffer also identified potential causes of sedimentation from stormwater into lakes and streams, the overall condition of

the existing stormwater management infrastructure, main sources of floodflow capture and retention, and passive areas and the benefits they provide. Concerns, including the need for ditch cleaning, structural maintenance, proper culvert installation, and floodwater control were also identified as well as strategies for property managers.

- **Year Completed:** 2017
- **County Size:** Approx. 80,000
- **Professional Reference:** John Worzbyt, Treasure Lake Property Owners Association, Stormwater Committee, (814) 371-0711, jcworz@gmail.com
- **Financial Report**
 - **Contract Amount:** \$48,000.00
 - **Actual Project Cost:** \$48,000.00

PennDOT District 2-0 Atherton Street Section 152 Improvements, Centre County, PA

This project scope focused on upgrading deteriorated drainage facilities, pavement reconstruction with minor roadway widening, curb and sidewalk replacements, incorporated water and sewer line replacements, box culvert installation and traffic signal upgrades from Aaron Drive to Park Avenue. The phased traffic control schemes centered on maintaining access to existing businesses.



- **Year Completed:** 2017
- **County Size:** Approx. 162,000
- **Professional Reference:** Dean Ball, P.E., Portfolio Manager, PennDOT Engineering District 2-0, (814) 765-0439, deball@pa.gov
- **Financial Report**
 - **Contract Amount:** \$521,168
 - **Actual Project Cost:** \$518,293

Organizational List of All Key Personnel

Following are Stahl Sheaffer's proposed key personnel for this project with tasks defined. Resumes are included for identified staff on the following pages.

Name, Title (Firm)	Title	Tasks	Years of Experience
Mike Haynes, P.E., SIT (Stahl Sheaffer)	Project Manager	Project Manager	17
Paul McClellan, P.E. (Stahl Sheaffer)	Director – Energy/Site/Environmental	Quality Control	18
Jason Reed (Stahl Sheaffer)	Environmental Manager	Environmental Lead	23
Chad Shaffer, PLS (Stahl Sheaffer)	Project Manager	Survey Lead	30
Jingan Wang, Ph.D., P.E. (Stahl Sheaffer)	Geotechnical Manager	Geotechnical Lead	7
Michael Vaow (Stahl Sheaffer)	Project Coordinator	Designer	15
Michael Fox, EIT (Stahl Sheaffer)	Designer	Designer	2
David Rue, Ph.D. (RUE Environmental)	Owner & Project Manager	Cultural & Historical Resources Lead	35

Michael Haynes, P.E., SIT – Project Manager**EDUCATION**

Bachelor of Science in Civil Engineering Technology, Pennsylvania College of Technology (2003)
Associate of Applied Science in Surveying Technology, Pennsylvania College of Technology (2003)

PROFESSIONAL EXPERIENCE

Mr. Haynes will be your Project Manager. As a Project Manager for Stahl Sheaffer, he is responsible for engineering projects including highway design, land development, stormwater management, Erosion & Sediment control planning and environmental permitting. Duties include the preparation, oversight, and review of plans and reports and monitoring the design schedule and budget to keep the project manager abreast of any issues or problems that may have an impact on either one of these items. He directs junior engineers and CAD support staff for plan preparation and highway assignments. Mr. Haynes has over 17 years of project management and design experience including the following services that may be relevant to this project:

- **Hemlock Ridge Estates Unit Pad, Private Energy Client, Lycoming County, PA –** Project Manager responsible for the preparation of an ESCGP-3 permit application, post construction stormwater management design, the erosion and sediment pollution control design, and Zoning Permit for a well pad in McNett Township. The project was located within a watershed with an ACT 167 Stormwater Management plan that required a 70% release rate for the PCSM plan requirements for all storm events.
- **Kupscznk Water Transfer Pad, Susquehanna County, PA – Private Energy Client –** Project Manager overseeing the preparation of an NPDES permit for an existing water transfer pad that the landowner wanted to take control of and modify upon terminating the facility as an oil and gas use by the operator.
- **T-561 Norris Brook Roadway Improvements, Tioga County – Private Energy Client –** Project Manager for the permitting, construction plans and bid package of three miles of roadway and drainage improvements along a Township Road. The project consisted of replacing 15 culverts, cleaning of roadside ditches, full-depth reclamation and gravel overlay of the roadway. Safety improvements included adding signing and delineation along the roadway.
- **PennDOT District 2-0, Bradford Airport Industrial Park Access Road, McKean County, PA –** Lead roadway design during preliminary engineering for approximately 800 feet of a new access road for the Bradford Industrial Park Access Road. The project consisted of new roadway, drainage and PCSM facilities. This was a local project through the airport with oversight from PennDOT.
- **PennDOT District 2-0, SR 3014 Section CRB Drainage Study, Centre County, PA –** Project Manager for a drainage study approximately seven miles long along North and South Atherton Streets in State College. The study included an inventory, video inspection and evaluation of the condition of the existing storm drainage collection system, and recommendation for replacement and repairs for upcoming highway projects.
- **PennDOT District 2-0, SR 3014 Section 151 & Section 152 Drainage Improvement Projects, Centre County, PA –** Project Manager for the design of several drainage improvement projects Atherton Street project in State College. The projects consisted

of drainage upgrades, minor roadway widening, ADA ramp upgrades, traffic signal upgrades, historic studies and 4(f) impacts. The project involved significant coordination with local municipalities, Penn State University, Centre Region Planning, and regulatory agencies.

- **PennDOT District 2-0, SR 144 Section A03 Linn Street Wall Project in Bellefonte Borough, Centre County, PA** – Project Manager for the preliminary engineering of a retaining wall and slope stabilization of a failing slope between SR 0144 and SR 0150. This project required extensive coordination with the engineer and Geotechnical unit to develop a sound approach for remediation of the slope.
- **PennDOT District 2-0, SR 253 Section A02 Bridge Replacement over East Branch of Little Muddy Run, Clearfield County, PA** – Project Manager for the preliminary engineering and final design of a single span bridge replacement with a concrete box culvert. The project utilized a short duration two-week detour to complete construction and required extensive utility coordination with aerial impacts to electric, telephone and cable that resulted in five relocated utility poles. Underground impacts resulted in special protection and additional concrete encasement to a sanitary sewer force main and a 500' waterline relocation.
- **PennDOT District 2-0, SR 120 Section EWS East Water Street Streetscape Project in the City of Lock Haven, Clinton County, PA** – Project Manager for a streetscape project along East Water Street consisting of concrete sidewalk replacement, concrete curb, ornamental lighting, and street trees. Construction cost was just over half a million dollars.
- **PennDOT District 2-0, T-523 Bridge Replacement over Elk Creek, Centre County, PA** – Project Manager for final design and construction consultation of a single-span bridge replacement owned by the municipality. The project was delayed for several years due to an issue with the previous consultant engineer. The project included significant political interest and required close Township coordination.
- **PennDOT District 2-0, SR 1001 Section EWS Monument Square Streetscape Project in Lewistown Borough, Mifflin County, PA** – Project Manager for a streetscape project along three blocks of East Market Street consisting of concrete sidewalk replacement, concrete curb, ornamental lighting, and street trees. Construction cost was \$1.4 million.

CREDENTIALS

- Professional Engineer (P.E.): PA (#PE079080) 2011
- Pennsylvania Surveyor in Training (ST000569) 2003



Paul McClellan, P.E. – Quality Control

EDUCATION

Bachelor of Science, Civil Engineering Technology, University of Pittsburgh

PROFESSIONAL EXPERIENCE

Mr. McClellan will provide project oversight and quality control on the project. As a Director at Stahl Sheaffer, he provides project oversight monitoring project budgets and project schedules, and management of all technical aspects of site engineering and environmental permitting. Mr. McClellan has 18 years of project management experience, including more than 50 projects as an employee for PennDOT District 2-0 covering highway rehabilitation, realignments, bridge replacements, streetscape improvements, trail development, and feasibility studies of varying complexity for projects varying in cost from \$300,000 to \$12 million. As a consultant, Mr. McClellan has managed hundreds of municipal and private transportation projects. Relevant projects include:

- **Pleasant Valley Road, SR 2022, Lycoming County, PA** – Project Manager for this public/private partnership project where Stahl Sheaffer, representing a private client, partnered with PennDOT to complete improvements on approximately two miles of Pleasant Valley Road. Stahl Sheaffer performed a safety review of the project resulting of minor sight distance improvements, curve widening, and super elevation corrections. The project also included drainage improvements, roadway striping, resetting guide rail, and shoulder backup.
- **Hagerman Run Road Culvert Extensions & Retaining Wall Replacement, Lycoming County, PA** – Project Manager for the replacement of a 175’ concrete block retaining wall with a 134’ concrete block retaining wall. The wall became structure deficient due to local flooding events and was replaced under an emergency joint permit application. Also Project Manager for three culvert extensions to pass Hagerman Run through Hagerman Run Road. These culverts included adding extensions and wingwalls to the upstream and downstream sides of each existing corrugated pipe arch culvert. The purpose of these extensions was to widen Hagerman Run Road at the culvert locations to maintain safe travel on Hagerman Run Road. These projects also include roadway drainage improvements and full depth reclamation.
- **Brucklacher Road, Hepburn Township, Lycoming County, PA** – Project Manager for the design and reconstruction of approximately 0.75 miles of roadway and drainage improvements along Brucklacher Road and Ridge Top Road. Close coordination with Hepburn Township was required to address drainage concerns along Ridge Top Road. An HOP was prepared and submitted to PennDOT District 3-0 for intersection improvements to the Brucklacher Road/Pleasant Valley Road Intersection.
- **T-459 Spook Hollow Road, Hepburn Township, Lycoming County, PA** – Project Manager for a 0.75-mile roadway betterment project. Project included intersection widening, culvert extension under a GP-11, roadway widening to promote safe two-way truck traffic, and full depth reclamation, and paving. An NPDES was prepared for the project. Stormwater management was designed in accordance to Hepburn Township stormwater ordinance and Lycoming County Act 167. The project also required the design and permitting of the Case Waste Area. A separate NPDES was

prepared for the site to handle excess material from the Spook Hollow Road Improvements.

- **Sellers Staging Area, Gamble Township, Lycoming County, PA** – Project Manager for design and permitting services for a new water transfer facility off of Rose Valley Road. Stormwater management design was completed per the Gamble Township Stormwater Management Ordinance and Lycoming County Act 167 Plan. A stormwater consistency verification report was prepared and submitted to Gamble Township for review and approval. An ESCGP-2 permit application was developed and submitted to DEP’s Eastern Oil and Gas District Office.
- **Gamble Pad J, Gamble Township, Lycoming County, PA** – Project Manager for design and permitting services for a new well pad and 1,750’ access road. Stormwater management design was completed per the Gamble Township Stormwater Management Ordinance and Lycoming County Act 167 Plan. A stormwater consistency verification report was prepared and submitted to Gamble Township for review and approval. An ESCGP-2 permit application was developed and submitted to DEP’s Eastern Oil and Gas District Office. Stahl Sheaffer prepared and submitted a highway occupancy permit to PennDOT’s District 3-0 office for review and approval.
- **Hemlock Ridge Estates Unit Pad, McNett Township, Lycoming County, PA** – Director responsible for oversight for design and permitting for a new well pad and 650’ access road. Stormwater management was completed in accordance to the Lycoming County Act 167 Plan. An ESCGP-2 permit application was developed and submitted to DEP’s Eastern Oil and Gas District Office. A complex environmental review and coordination with DEP was required to accurately delineate site environmental features due to the red parent material located in this region.
- **Atherton Street Corridor Drainage Upgrades, Centre County, PA** – Project Manager for upgrading deteriorated drainage facilities and pavement rehabilitation along the Atherton Corridor. The phased traffic control schemes centered on maintaining access to existing businesses. Fourteen separate utility companies were present along this corridor, resulting in complex utility coordination. Most utilities were able to be avoided and minimal relocations resulted, eliminating potential schedule delays. The project limits were increased three months prior to advertisement, and the team was able to incorporate the additional improvements (approximate 0.5-mile additional improvements, six additional temporary and permanent traffic signal designs, and additional utility impacts) and exceed the original let date of the project by two weeks.
- **PennDOT District 2-0, SR 3018 Section N10, Centre County, PA** – Project Manager for the design for the widening and reconstruction of three miles of roadway. The project scope included the addition of a continuous turning lane, bicycle lanes, and sidewalks; traffic signal upgrades and turning lanes; geophysical surveys and evaluation of Karst geological formations that are prone to sinkholes; traffic impact studies; archeology studies; historic studies; and 4(f) evaluations. The project involved significant coordination with local municipalities, Penn State, Centre Region Planning, and environmental agencies.

CREDENTIALS

- Professional Engineer (P.E.): PA (#PE078178) 2010
- American Society of Highway Engineers (ASHE)

Jason Reed – Environmental Lead

EDUCATION

Bachelor of Science, Environmental Resource Management, The Pennsylvania State University

PROFESSIONAL EXPERIENCE

Mr. Reed will serve as Environmental Lead. He is Stahl Sheaffer's Manager of Environmental Services. He brings over 21 years of natural resource planning and environmental consulting experience with 19 years in the consulting engineering industry. Mr. Reed's experience spans a wide array of project types including aviation, roadway, bridge, utilities, stream enhancement, oil and gas development, commercial land development, surface mine permitting, pollution treatment systems, and recreational facilities. Relevant experience includes:

- **Wetland & Waters Reviews, Confidential Clients, Various Locations, PA** – Private Environmental Scientist for wetland and water identification and delineation and report preparation for various projects ranging from energy exploration, roadway system modifications and pipeline routing throughout Pennsylvania, Ohio, and West Virginia.
- **Archer Road Bypass, Confidential Client, Washington County, PA** – Environmental Scientist for assisting and guiding the completion of a General NPDES Permit for the creation of a new roadway. This project was designed to create a new roadway to bypass an existing township road to alleviate damages caused from gas well development traffic.
- **Clearfield Soccer Association Soccer Facility Improvements, Clearfield County, PA** – Project Manager and Environmental Scientist for project management and design items including preparing an NPDES permit for construction and wetland investigation. Project involved improvement to a 2,000-foot-long driveway, drainage design, soccer field expansion, installation of electric service, installation of an on-lot septic system, installation of a new garage and an addition to the existing concession building. This project was funded with DCNR C2P2 grants. Also coordinated with DCNR and created bid documents in accordance with the funding agency requirements.
- **Penn Commons Redevelopment, Lewisburg, Union County, PA** – Environmental Scientist for performing a Phase I Environmental Site Assessment due diligence review for existing or past hazardous material concerns on the property. The site was proposed as a redevelopment of existing abandoned lots that which included a vacant house and past uses that supported manufacturing of furniture at the Pennsylvania House, Inc. furniture manufacturing facility located immediately north of the study site. Responsible for site reconnaissance, records review, interviews, and preparation of the Phase I report.
- **Philips Ultrasound ECR4 Land Development, Mifflin County, PA** – Environmental Manager responsible for oversight and assistance of tree surveys and bat emergence surveys as an evaluation of potential threatened and endangered bat roosting trees. The survey was needed to evaluate potential effects of proposed tree clearing and construction on Indiana Bat (*Myotis sodalists*) and Eastern Small-footed Myotis (*Myotis leibii*) populations. Surveys were conducted during three separate evenings. Bats were observed and confirmed to not be emerging from trees within the project site. Nine different tree species were identified within the project study area.

- **Beechwood B09-I, Energy Client, Cameron County, PA** – Environmental Manager responsible for leading and managing the completion of a wetland delineation and reviewing the wetland report for an area of investigation of 503 acres. The project involved the review of alternative areas for the development of a new unconventional natural gas well pad and upgrades to existing access roadways. GIS software and electronic wetland data collection software was used to streamline the wetland delineation task.
- **Buffalo and Pittsburgh Railroad New Access Road, Sandy Township, Clearfield County, PA** – Environmental Scientist responsible for wetland delineation and preparation of a Joint 105/404 waterway permit. This project involved the construction of a new access road and stream crossing in the floodplain of Sandy Lick Creek. Tasks included performing wetland delineation, an environmental assessment, an alternative analysis, a wetland functional assessment, and cultural resources coordination.
- **Shooters Gauntlet Shooting Range, Bradford County, PA** – Environmental Manager responsible for the completion of a wetland identification and delineation and NPDES permit application preparation. The project was the permitting of earth disturbance required to develop a long-range shooting range in mountainous terrain in northcentral Pennsylvania. Site constraints consisted of wetlands and streams within the line of site and bedrock outcrops. Responsibilities included completion of erosion and sediment control plans and the design and siting of a soil amendment post construction stormwater BMP for control of increased stormwater runoff. The permit was approved with minimal comments in approximately half the agency review time frame.

CREDENTIALS

- DCNR Wild Plant Management Permit, 2020
- DEP Stormwater Best Management Practices Manual, 2007
- NEPA and the Transportation Decision Making Process, 2005
- Advanced Natural Channel Design (Level 4 Rosgen Equivalent), 2003
- U.S. Environmental Protection Agency Watershed Training Certificate, 2001
- Endangered Species Act Workshop, 2002
- Introduction to Stream Functions and Processes (Level 1 Rosgen Equivalent), 2002
- Identification of Grasses, Sedges, and Rushes, 2000
- Wetland Delineator Certification Preparatory Training Course, 1999
- USDA/NRCS 2010 Field Indicators of Hydric Soils in the U.S.
- Mine Safety and Health Administration (MSHA), Experienced Miner
- Phase I and Phase II Environmental Site Assessments for Commercial Real Estate



Chad Shaffer, PLS – Survey Lead

EDUCATION

Associate Civil Engineering Technology, Penn College of Technology (1990)

PROFESSIONAL EXPERIENCE

Mr. Shaffer will be the Survey Lead. He is the Project Manager for Stahl Sheaffer’s Survey Department, responsible for performing review of projects, directing staff surveyors and technicians, and managing client contact and project progress. He has 30 years of experience, and relevant projects include:

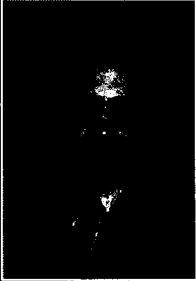
- **EMS Towers, Erie County, PA** – Project Surveyor for eight new EMS Tower sites. Provided topographical and boundary surveys for eight new tower locations throughout Erie County. Also provided construction stakeout of each tower site.
- **Muncy Borough, Lycoming County, PA** – Project Surveyor for numerous pre and post elevation certificates for a flood remediation project.
- **Williamsport Area School District Safe Roads to School, Lycoming County, PA** – Project surveyor responsible for deed and right-of-way research, surveys to establish road right-of-way, intersection surveys, and topographical surveys.
- **PA Turnpike Commission, New Baltimore Slide** – Mr. Shaffer was responsible for the setup and operation of a 3D monitoring system using a robotic total station. This system provided continual 3D monitoring, prior to and during construction, of over 100 prisms located on the slide. The system then provided post constructing monitoring of the slide using 10 strategically placed prisms. During the monitoring, the data was transmitted wirelessly to a dedicated computer, which then allowed the information to be accessed from any computer. Weekly reports were then generated from this data and provided to the PA Turnpike and Geo-technical consultants.
- **Pennsylvania Department of Transportation** – Project surveyor for numerous bridge replacement projects throughout Pennsylvania. Responsible for topographical surveys, H&H surveys, right-of-way establishment and right-of-way plans.
- **PA DCNR, Bureau of Facility Design and Construction** – Stahl Sheaffer currently holds three open end agreements with DCNR for bridge design, bridge inspection, and construction inspection. Mr. Shaffer completed full topographic and TS&L surveys for the structural design of 24 bridge and culvert replacements, hydrological studies, and roadway reconstruction plans.
- **The Pennsylvania State University, Clearwater Musser Gap Trail** – Project surveyor for completing topographic survey, design, and permitting for a pedestrian and bike trail across University property that connects State College area trails to the nearby State Forest tracts. This project was partially funded by DCNR.
- **Oakwood Grove Land Development Plan, Snyder County, PA** – Project surveyor and designer for 90-unit condominium development. As surveyor, he was responsible for deed and right-of-way research, boundary survey, aerial control survey, and utility locations. As design engineer, he was responsible for design of all streets and utilities, grading plans, erosion and sedimentation control plans, NPDES Permits, Post-

construction stormwater management plans, Highway Occupancy Plans, and Right-of-way dedication plans.

- **Oak Hall & Whitehall Road Regional Parks, Centre County, PA** – Project designer for land development plan submissions, including approvals and permits such as DEP NPDES, Erosion and Sedimentation Control Plan, PennDOT Highway Occupancy Permits, DEP Utility Line Stream Crossing Permit, and Public Water Service Verification.
- **Penn Commons Multi-Family Residential Survey, Union County, PA** – Seven multi-story wood framed residential structures with 31 apartment units. Managed survey for 2.21-acre site in East Buffalo Township. The project included the construction code-based design of seven multistory wood framed residential structures with 31 apartment units along with related parking and infrastructure improvements. Stahl Sheaffer also performed Phase I Environmental Site Assessment due diligence review and structural design.
- **The Pennsylvania State University, West Campus Chiller Plant, State College, PA** – Completed full survey and land development services for a building addition and parking lot expansion for the West Campus Chiller Plant.
- **The Pennsylvania State University, Ag Intramural Fields, University Park, PA** – Completed full topographical survey as well as Stormwater Management Plans, NPDES permitting, and Highway Occupancy Permits.
- **Route 74 Repaving/Reconstruction Project, Perry County, PA** – Project Surveyor for 1.5-mile repaving/reconstruction project, responsible for construction layout and calculations for portions of Route 74 that were reconstructed due to steepness, drainage problems, etc. Also responsible for the Type C surveying of the repaved sections of Route 74.
- **North Atherton Street 3D Survey, Centre County, PA** – Survey/project manager for 3D survey and base mapping of approximately 9000 linear feet of North Atherton Street. Responsible for the oversight and scheduling of the survey crew and technicians as well as scheduling traffic control.
- **The Pennsylvania State University, Clean Fill Site** – Completed full topographical and boundary survey, roadway profiles, grading plans, Stormwater Management Plans, NPDES permitting, and HOPs for a proposed clean fill site.
- **The Pennsylvania State University, West Campus Rugby Fields Land Development Plan** – Project manager for full survey and land development services for upgrades to the West Campus Rugby Fields.
- **Selinsgrove Borough, Snyder County, PA** – Project Surveyor for pre and post construction elevation certificates for two single-family dwellings elevated above the 100-year floodplain.

CREDENTIALS

- Professional Land Surveyor (PLS): PA (#SU060672) 2003
- Pennsylvania Society of Land Surveyors (PSLS), Member
- Pennsylvania Association of Professional Land Surveyors (PA-PLS), Member
- Presenter: Survey and Structural Solutions for FEMA Flood Elevation Requirements



Jingan Wang, Ph.D., P.E. – Geotechnical Lead

EDUCATION

Ph.D. in Civil Engineering, Washington State University (2013)

Master of Civil Engineering, Beijing Jiaotong University (2009)

Bachelor of Science, Environmental Engineering, China Agricultural University (2007)

PROFESSIONAL EXPERIENCE

Dr. Wang will serve as Geotechnical Lead. As a Geotechnical Project Manager, Dr. Wang's major responsibilities include mechanical analysis of the foundation and retaining wall analysis / design, pavement design and performance prediction, roadway design and detail drawing, cost estimation, contract bid preparation, review of Mechanistic-Empirical pavement design, Full Depth Reclamation (FDR) mix design, and Cold In-Place Recycling (CIR) mix design, report preparation for geotechnical analysis and pavement management plan, geotechnical lab management. He has completed engineering designs in pavement, well pad foundation, slope stability analysis, and pipeline buried depth. He has taken the lead on over 160 FDR mix designs and over 80 CIR mix designs. These clients include private owners, oil & gas industry, state and local agencies from PA, OH, WV, and DE.

As a researcher, he leads Stahl Sheaffer's geotechnical research work, including (1) Cold-Weather Full Depth Reclamation (FDR) with Cement Stabilization, (2) Pavement Design for Low-Volume Roads under Heavy Hauling Traffic, and (3) Bearing Capacity Analysis of Cement Stabilized Soil Foundation. He has presented his research findings at national conferences and co-authored peer-reviewed journal papers in geotechnical engineering. Dr. Wang also serves as a technical paper reviewer for several international journals, including the Transportation Research Board, Road Materials and Pavement Design, Geotechnical Testing Journal, International Journal of Geomechanics, Environmental Geotechnics, Engineering Sustainability, Environmental Geotechnics, Geotechnical Research, Ground Improvement, International Journal of Physical Modelling in Geotechnics, and Journal of Testing and Evaluation.

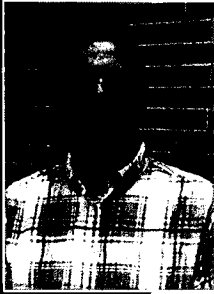
- **Tower Site Design, Erie County / Luzerne County, PA** – Stahl Sheaffer was retained to provide geotechnical services for the NG Radio Tower Project in Erie County (eight cell towers located in eight different municipalities) and Luzerne County (two cell towers located in two different municipalities), PA. Dr. Wang was the Geotechnical Manager for subsurface investigation, laboratory testing, and geotechnical analysis and report. Based on the results of the subsurface investigation and laboratory testing, Stahl Sheaffer estimated the parameters for the design of drilled shafts and a shallow pad foundation. The parameters estimated included soil strength, Skin Frictional Resistance of soil and rock, Ultimate Bearing Pressure, Strain E50, and Lateral Subgrade Modulus. All the findings were described in the geotechnical report.
- **PennDOT District 2-0, PA SR 53 Emergency Slide Repair (Design / Build), Clearfield County** – Prepared geotechnical recommendations for this project, which remediated two significant landslides (150 feet and 200 feet) on SR 53. Design and construction were performed per PennDOT Specifications. Reviewed the subsurface investigation data log and recommended the geotechnical parameters for the analysis. Both walls were cantilever soldier pile walls, using wide flanged, steel piles encased in concrete (caissons); Pile sizes ranged from W 24X102 to 40X215 and were socketed into approximately 10 feet of rock. The drilled soil and rock shafts ranged in diameter from

36-inches to 54-inches. Pile lengths were up to 35 feet with a maximum exposed wall height of 14 feet.

- **West Virginia Roadway Improvement Initiative, Confidential Energy Client, Various Counties** – Geotechnical Manager for 183-mile roadway improvement project in WVDOH Districts 1-0, 2-0, 3-0, 4-0, and 6-0. Includes about 100 roadway rehabilitation projects, eight bridge replacement or rehabilitation projects, and numerous slide repairs. Assists in design and construction of these roadway improvement projects as part of project scope.
- **Kinder Rd. (T-798) Bridge Replacement Project, North Bethlehem Township, Washington County, PA** – Geotechnical Manager for the Kinder Rd. Bridge Replacement Project, which included the existing load posted bridge replacement with a new reinforced concrete box culvert. Responsible for geotechnical/foundation reports.
- **Full Depth Reclamation (FDR) Mix Designs** – Led over 160 FDR mix designs, including Belmont CR 5 Clover Ridge Rd., OH; Washington T-786 Baker Rd., PA; and Marshall CR 25 Loudenville Road, WV. Responsibilities included QA-QC lab data, geotechnical analysis, report preparation, and addressing client comments.
- **Cold In-Place Recycling (CIR) Mix Designs** – Led over 80 CIR mix designs, such as Furnance Rd. in Lancaster County, PA, and Columbia Rd., DE. In CIR designs, his responsibilities were similar to FDR designs and included QA-QC lab data, geotechnical analysis, report preparation, and addressing client comments.
- **Access Road Maintenance Plan, Bell Point 6 Well Pad & Porter Well Pad, Westmoreland County, PA** – Senior geotechnical analyst responsible for field reconnaissance, field data analysis, pavement design and report, and plan set preparation.
- **Cold-Weather FDR with Cement Stabilization** – Lead researcher to identify optimal techniques for Cold-Weather FDR construction, including (a) identify additives into FDR/cement to increase strength in cold weather and reduce freezing point, (b) evaluate freeze-thaw damage if curing temperature fluctuates around freezing point, and (c) establish correlations between additive dosage and strength/freezing point. Developed lit review, research plan, test methods, lab data analysis, model, academic papers, and conference presentation. This technique has been successfully applied on Roane CR 8.

CREDENTIALS

- Professional Engineer (P.E.): PA (#PE086852) 2017
- American Society of Civil Engineers (ASCE), Member
- Certified Asphalt Mix Design
- Pittsburgh Geological Society



Michael Vaow – Designer

EDUCATION

Bachelor of Arts, Environmental Studies, University of Pittsburgh (2005)

PROFESSIONAL EXPERIENCE

Mr. Vaow will be a Designer. He has 15 years of experience in environmental and engineering consulting. As Project Coordinator for Stahl Sheaffer Engineering, he assists with drafting and stormwater report reviews. He is responsible for environmental reviews and site assessments, drainage design, stormwater management design, erosion and sediment pollution control design, and Chapters 78, 102, and 105 permitting. Mr. Vaow has experience with new well sites, pipeline projects, well-plugging projects, notice of termination, and landowner resolutions. He is familiar with AutoCAD, HydroCAD, MicroStation, and data collecting via GPS and total station methods. Relevant projects include:

- **Commercial and Industrial Land Development & Permitting, Multiple Clients, Various Locations, PA** – Provided wetlands/streams delineation, site layout, stormwater design, E&S design, stormwater design, quantity-take-offs and permitting services for multiple developers. Regulatory agencies include townships, county conservation districts, PA DEP, PennDOT, and ACOE.
- **Oil & Gas Site Development and Permitting, EQT, Noble Energy, Campbell Oil and Gas, Carrizo Marcellus & Appalachia Midstream Services, LLC, PA, Various Locations, PA** – Provided wetlands/streams delineation, well pad design, stormwater design, E&S design, site restoration design and permitting services, SPCC plans, Chapters 78, 102, and 105 permitting, as-built survey and well plat exhibits, temporary waterline routing and permitting, and access road/entrance upgrades and HOPs for well site traffic.
- **Wetland & Waters Reviews Confidential Clients, Various Locations, PA** – Environmental Scientist responsible for wetland and water identification and delineation and report preparation for various projects ranging from energy exploration, land development, roadway system modifications, and pipeline routing.
- **Scotts Pools, Clearfield County, PA** – Environmental Specialist responsible for the coordination and completion of a Phase I Environmental Site Assessment (ESA). The project consisted of a commercial property purchase of a tire store and automotive garage for the intent of renovating into a showroom and shop. He also provided supporting written and photographic documentation of the characteristics of the existing and historical conditions of the subject property. This documentation was required to determine environmental liability risk for the prospective buyer.

CREDENTIALS

- Wetland Professional in Training (WPIT)
- SafelandUSA
- MSHA Mine Safety Certified Surface, Coal, Metal, & Nonmetal
- OSHA 10-hour Construction Safety and Health, 2018
- PennDOT Stormwater Control Measures Visual Screening Inspection (VSI) Certified, 2019
- PennDOT Stormwater Control Measures Condition Assessment Inspection (CAI) Certified, 2019

Michael J. Fox, EIT – Designer

EDUCATION

Master of Science in Environmental Resources Engineering with a concentration in Water Resources Engineering, SUNY College of Environmental Science and Forestry (2018)

Bachelor of Science in Environmental Engineering, Saint Francis University (2016)

PROFESSIONAL EXPERIENCE

Mr. Fox will serve as a Designer. He has over two years of experience in site design and chapter 102 permitting. He is a certified Engineer in Training. As Civil Designer for Stahl Sheaffer, he provides design, inspection, site evaluation, permitting and testing services to various private and public clients. This includes performing stormwater, site, E&S and roadway designs, ESCGP-2, ESCGP-3, and NPDES permit preparation, infiltration testing and soil evaluation, highway occupancy permitting, and traffic studies. Relevant projects include:

- **Communication Towers, Greene County, PA** – Lead Designer for the construction and permitting of two proposed communication tower sites for a municipality. The design included grading in a level gravel pad, and access road for both sites. The first site was for the installation of a master communication tower, and the second site was for the installation of the repeater tower. The stormwater and site design for each location was completed according to the county, and municipality requirements. The project included the creation of both a construction plan set and land development plan set, as well as the bid package and design specification documents.
- **Hemlock Ridge Estates Unit Pad, Private Energy Client, Lycoming County, PA** – Designer for the preparation of an ESCGP-3 permit application, post construction stormwater management design, the erosion and sediment pollution control design, and Zoning Permit for a well pad in McNett Township. The project was located within a watershed with an ACT 167 Stormwater Management plan that required a 70% release rate for the PCSM plan requirements for all storm events.
- **Marsh Creek Water Transfer Station, Tioga County, PA** – Assisted with the highway occupancy permit for the creation of two access roads along SR 6 for Seneca Resources.
- **Laurel Unit Pad, Bradford County, PA** – Lead Designer on a major modification to existing ESCGP-1 permit. The alterations to the site layout required the permit to be updated to follow the permitting requirements of an ESCGP-3 with stricter stormwater management standards. The well pad surface will be expanded and the containment berms removed. The change in permitting moved the site into the permitting requirements of an ESCGP-3 with stricter stormwater management requirements. Stormwater management design included diverting excess stormwater to better handle runoff peaks from the well pad surface with two proposed infiltration basins. Design was completed to stay in the original limit of disturbance while avoiding wetlands around the site.
- **Belawske Unit Pad, Bradford County, PA** – Lead Designer on a major modification to an existing ESCGP-1 permit. The alterations to the site layout required the permit to be updated to follow the permitting requirements of an ESCGP-3 with stricter stormwater management standards. The well pad surface will be expanded and containment berms removed. The change in permitting moved the site into the permitting requirements of an ESCGP-3 with stricter stormwater management requirements. Stormwater

management design included diverting excess stormwater to better handle runoff peaks from the well pad surface with four proposed infiltration berms. Design was completed to stay within the original limit of disturbance while avoiding wetlands around the site.

- **R&N Unit Pad, Sullivan County, PA** – Assisted in stormwater management and design for a major modification to an existing ESCGP-1 permit.
- **RHL31, Greene County, PA** – Assisted in compiling the ESCGP-2 package for the creation of a Well Pad. Completed the NOI, NOI checklist, E&S calculations, Sensitive Resources Map, both E&S and PCSM reports, and assisted with the PCSM BMP calculations.
- **F-14 COP-I Well Pad, Elk County, PA** – Assisted with stormwater management design. Site design constrained by a maximum limit of disturbance, Act 167 stormwater regulations, and chapter 93 and 102 requirements for the receiving stream. The number of bio-retention berms their sizes and placement relative to the well pad were determined by maximizing stormwater management credit and minimizing footprint.
- **MAWC Well Pluggings, Westmoreland County, PA** – Lead Designer on three well plugging and four additional E&S and Restoration plan sets.

CREDENTIALS

- Engineer in Training (EIT): PA (#ET022046) 2016

David Rue, Ph.D. – Cultural & Historic Resources Lead (Rue Environmental)**EDUCATION**

Ph.D. in Anthropology, Geology Minor, The Pennsylvania State University (1986)

M.A. in Anthropology, The Pennsylvania State University (1982)

B.A. in Sociology/Anthropology, History, Clarion State College (1978)

PROFESSIONAL EXPERIENCE

Dr. Rue will serve as Cultural & Historic Resources Lead. As owner of Rue Environmental LLC, he has 30 years of experience as a participant in cultural resource projects. Dr. Rue has supervised preparation of over 200 technical reports, and has provided management for large, multi-disciplinary environmental projects. His background has been multi-regional, and his client base has been diverse (gas pipelines, highways, fiber optics, federal facilities, power, and more). Before forming Rue Environmental in 2010, Dr. Rue developed and managed two highly successful cultural resources management programs, including WAPORA from 1987-1990, 3D/ESI from 1990-1993, then joined A&HC from 1993-2010. Dr. Rue was featured in a PBS television series on archaeology, titled "Out of the Past". Dr. Rue is a paleoecologist and palynologist, and has published a variety of academic papers, including: "Early Agriculture and Early Postclassic Maya Occupation in Western Honduras," *Nature* 326:285-286, 1987. Dr. Rue was co-recipient of a grant from the National Oceanic and Atmospheric Administration (NOAA) to study processes of environmental change and human impacts in Central America through lake sediment cores. Relevant projects include:

- Project Manager, Phase I Survey for Proposed 6.4-Mile Seneca-Tenn Natural Gas Pipeline, a Marcellus Shale Project, in Elk and McKean Counties, Pennsylvania, for Wilson Ecological Services and EOG, Inc.
- Project Manager, Phase I Archaeological Survey for Proposed Chestnut Flats Wind Power Project, in Blair and Cambria Counties, Pennsylvania for L.R. Kimball and Gamesa Energy.
- Project Manager, Phase I Archaeological Survey for Intersection Improvements at US 9 and SR 30, Hudson Road, and Dairy Farm Road, Sussex County, Delaware, for Delaware Department of Transportation.
- Project Manager, Phase III Data Recovery of Site 7K-F-11 for SR 1, Frederica North Grade Separated Intersection Project in Kent County, Delaware, for Delaware Department of Transportation.
- Co-Project Manager, Phase II Testing of 20 Urban Historic Sites for proposed SR 51 Improvements portion of Mon-Fayette Expressway Project, Allegheny County, Pennsylvania for Mackin Engineering and the Pennsylvania Turnpike Commission.
- Project Manager, Phase I Survey Team (with Gray & Pape, inc.) for 300-Mile Pennsylvania Segment of El Paso Natural Gas' Northeast Passage Project in Pennsylvania, for ENSR.
- Project Manager, Phase III Data Recovery at Site 36BL106 for Walters Business Park Access Road Project, Blair County, Pennsylvania for the Pennsylvania Department of Transportation (PennDOT).

- Project Manager, Phase II Testing at Four Late Eighteenth/Early Nineteenth Century Sites, Maryland Route 16 Improvements, Church Creek, Dorchester County, Maryland, for Maryland State Highway Administration.
- Project Manager, Phase III Data Recovery at Site 36BK870 for SR 61, Section 15S Improvements Project, Berks County, Pennsylvania for Mackin Engineering and Pennsylvania Department of Transportation (PennDOT).
- Project Manager, Phase I Archaeological Survey for T-301 Bridge over Spring Creek Replacement Project, Elk County, Pennsylvania for Joseph P. Lehman Engineering and PennDOT.
- Phase I Archaeological Survey for SR 26 Bridge over Yellow Creek Replacement Project, Bedford County, Pennsylvania for the Markosky Group and PennDOT.
- Project Manager, Phase I Archaeological Survey for SR 2033 Bridge Replacement Projects, Montgomery County, Pennsylvania for Pennoni Associates, Inc. and PennDOT.
- Project Manager, Phase I Archaeological Survey for Granite Run Development Project, Lancaster County, Pennsylvania, for Berkshire Development LLC.
- Project Manager, Phase I Archaeological Survey for two Wetland Replacement Areas associated with Turnpike Reconstruction in Lawrence County, Pennsylvania for McTish, Kunkel & Associates and the Pennsylvania Turnpike Commission.

4. Project Implementation Schedule

Stahl Sheaffer understands that the anticipated contract award date will be on or around October 24, 2020 with a termination date of February 28, 2021. Stahl Sheaffer will complete work in accordance with your project schedule considering the following timelines for project milestones. We will do what we can to expedite the project timeline to facilitate the project to meet your timeframe. However, we cannot control the timeframe for review and approvals as that is determined by the review agencies.

Design & Construction Schedule

Task Description	Completion Time	Estimated Schedule
Project Award	--	Oct 23
Survey and Existing Conditions Plan Preparation	1 Week	Oct 26 – Oct 30
Preliminary Site Layout	4 Weeks	Nov 2 – Nov 27
Review of Layout and Address Comments	2 Weeks	Nov 30 – Dec 11
Final Design	3 weeks	Dec 14 – Jan 1
Civil Permitting Submission / Review / Approval	11 Weeks	Dec 14 – Feb 26
Contract Complete		Feb 28

Non-Collusion Affidavit

NON-COLLUSION AFFIDAVIT

RFP for Engineering and Surveying Services for Hughesville Water
Contract/Bid/Proposal Authority Tower Site and Hesker Hill Tower Site

State of Pennsylvania

County of Centre Pennsylvania

I state that I am Principal (Title) of Stahl Sheaffer Engineering, LLC (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. Stahl Sheaffer Engineering, LLC (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

I state that Stahl Sheaffer Engineering, LLC (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

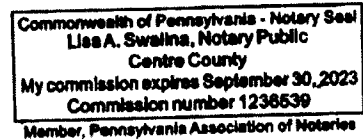
A statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: Rod Stahl, P.E.

Signature: *R. Stahl*

Title Principal

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 17th DAY
OF August, 2020



Lis A. Swalina
Notary Public

My Commission Expires: Sep 30, 2023

Exception Form Acknowledgement

Stahl Sheaffer Engineering understands that in submitting a response to this RFP, we shall comply with all terms, conditions, special conditions, general specifications, and requirements stated in the RFP. We have not included the Exception Form as we do not take exception to any provisions listed in the RFP.

Signed Acknowledgement of Receipt of Each Addendum

Legal Ad
Sun Gazette
To Be Run: July 30th and August 3rd

NOTICE TO BIDDERS

ADDENDUM NO. 1 RFP FOR ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE

The additions and/or deletions contained in this Addendum shall be made a part of the plans and specifications and contract documents for the above-referenced solicitation, and shall be subject to all applicable requirements thereunder, as if originally shown and/or specified. In case of any conflict between the specifications, and this Addendum, this Addendum shall govern.

This Addendum must be returned with your bid as acknowledgment of its receipt. Bidders may obtain the Addendum on the County website at www.lyco.org and Request for Bids.

The following modification is made to the text for the referenced solicitation:

The scope of the project has changed from one (1) tower site to two (2) tower sites, resulting in a number of changes to the RFP issued. Please see the following changes for the Lycoming County RFP for E&S services.

1. Change from “Hughesville Water Authority Tower Site” to “Hughesville Water Authority Tower Site and Hesker Hill Tower Site: (1) on the cover page, (2) on Notice to Bidders page 1-1, second paragraph, and (3) on Section 2, page 2-2, paragraph 2.9, third line.

2. Change to Scope of Work & Technical Specifications, Introduction, page 5-1 is as follows:

Lycoming County is currently upgrading our existing radio system to better serve the residents, businesses, tourists and public safety agencies of the county. In order to achieve the overall plan, Lycoming County will be contracting for the construction of two (2) raw lands to finish tower sites to improve RF coverage for our first responders. Additionally, on the one site, a second plot of land is to be cleared for the water authority to use (no further development of the second plot is required).

3. Changes to Scope of Work & Technical Specifications, General Requirements, item 1, page 5-1 are as follows:

1. The names and locations of the two (2) new proposed tower sites are:

- a. Hughesville Water Authority tower site
 - i. Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
 - ii. Street address: 279 Reservoir Road, Hughesville, PA
 - iii. Township: Wolf
 - iv. County: Lycoming
 - v. Size of site plot: 100'x100'
 - vi. Height of tower: 250'

Hughesville Water Authority land which is to be cleared (not developed) for water authority use is:

- i. Street address: 279 Reservoir Road, Hughesville, PA
- ii. Township: Wolf
- iii. County: Lycoming
- iv. Approximate size of plot to be cleared for the water authority: 100'x100'

- b. Hesker Hill tower site
 - i. Latitude: 41-14-19.1 N, longitude: 77-14-35.1W
 - ii. Street address: 1324 Hesker Hill Road, Jersey Shore, PA
 - iii. Township: Piatt
 - iv. County: Lycoming
 - v. Size of site plot: 75'x75'
 - vi. Height of tower: 250'

The County will be responsible for procurement of site and leasing of property.

4. Change to Mandatory Site Walk on Notice to Bidders, page 1-1, paragraph 4 is as follows:

A mandatory site walk will be held on Wednesday, August 5, 2020, at 10:00 AM for the two (2) tower sites, starting at the Hughesville Water Authority site located at 279 Reservoir Road, Hughesville, PA.

5. Change to Price Proposal, section 6.1 Cost Elements is as follows:

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final	

Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	
Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HUGHESVILLE	

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	

Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HESKER HILL	
GRAND TOTAL FOR BOTH SITES	

ACKNOWLEDGEMENT

I hereby acknowledge receipt of this Addendum for the above noted project.

Signature *PI Shurt* Date 8/21/2020

This proposal was prepared in the State College office of Stahl Sheaffer Engineering, a Pennsylvania Limited Liability Corporation, under the direction of Rod G. Stahl, P.E., Principal of the firm, who is empowered to represent, negotiate for, bind, and commit the firm.

Stahl Sheaffer Engineering
301 Science Park Road, Suite 333
State College, PA 16803
814.689.1562

Taxpayer ID #11-3759367

Stahl Sheaffer Engineering has always maintained a policy of recruiting, hiring, training, and promoting based solely on an individual's qualifications without regard to race, color, religion, sex, age, national origin, sexual orientation, or handicap. We provide equal employment opportunity to all persons. Discrimination does not exist in any personnel action such as recruiting or advertising for employment, hiring, scheduling, promotion, compensation, performance evaluation, benefits, selection for professional education, transfer, or termination.



EXECUTIVE SUMMARY

Local Presence

Andrew Keister will serve as the overall point of contact and Project Manager for the MKA Team. Andy has focused in the areas land development, surveying, and site/civil engineering for the past 25 years. He manages MKA's Montoursville office.

Eric Sechrist will lead the design team for MKA. Eric lives in Loyalsock Township and is a recent graduate of Leadership Lycoming program.

For more than 20 years, the team members of MKA have worked in and around Lycoming County representing clients in front of zoning hearing boards and planning commissions to permit complex and unique projects. Additionally, our Project Manager has nationwide experience in surveying and civil engineering which gives him a unique vision and insight.

Being local allows us to understand the intricacies of the municipal and county agencies which in turn results in faster responses and a shorter design timeframe.

Focused Approach

These projects have a short timeline and there are a number of critical steps required as a part of the permitting process. As a result, it is imperative that the design consultant have a well thought out plan for completion prior to starting design. Delay in any of the initial, critical steps will have a direct impact on the completion date of the design and permitting portion of the project.

Zoning approvals are the first critical path item. It appears that at least one site will require a special exception so the first step of the project will need to be the preparation of a sketch plan and submission of zoning applications. Zoning approvals typically need to precede any other site plan approval.

The Hughesville Water Authority site is complex and as a result, needs to be the focus following submission of zoning applications. Our approach is to utilize Lidar mapping of the site to identify potential corridors to the top of the hill considering allowable maximum grades, truck turning movements and geologic/grading considerations. Once an alignment is identified, we can focus on field survey and geotechnical investigations needed to complete final site design.

The Hesker Hill site is relatively straight forward and should not require a NPDES permit nor a land development plan approval to site design can coincide with the design at the Hughesville Water Authority since it is not on the critical path.



Demonstrated Success

The MKA team has a history of completing successful projects similar in scope to these tower sites. These projects are similar in many aspects to the commercial/industrial, wind energy and oil and gas projects we complete on a regular basis.

Andy was the Principal in Charge of the Laurel Hill wind energy project while working for another consultant. This project included the complex routing of access roadways up steep slopes where pads were constructed to assemble the wind turbines. Included in the project was the management of stormwater in steep, rocky areas, geotechnical investigations, zoning permits and FAA approvals.

More recently, MKA served as the consultant for a \$25 million dollar improvement project at the Bloomsburg Area School District that included complex stormwater management, NPDES permitting and FAA submission for new stadium lighting. After design was completed, the MKA team was successful in obtaining all required site permitting within 3 months.

Lycoming County can feel comfortable selecting MKA for this project since we have an excellent history completing complex project on time and on budget.



PROJECT UNDERSTANDING

The Lycoming County has issued a Request for Proposals (RFP) to complete surveying and civil design for two different tower sites. The first will be located north of the existing water tank at the Hughesville Water Authority site and the second will be constructed on a farm north of Hesker Hill Road. In addition to work required for the construction of the two towers, the consultant will be responsible to design a new pad for a second water tank at the Hughesville site.

In general, services to be provided include:

- Topographic survey of each site including the access roadways
- Boundary survey only as necessary to compute lease areas for each site
- Site civil design
- Land development permitting, if required
- Zoning approvals
- E&S/NPDES approvals
- Geotechnical investigation
- FAA approvals
- Utility coordination

The Hesker Hill tower location is a rather straight-forward site that sits in an open hay field accessed by an existing field road. Critical path items for this site include zoning approvals as it appears as though a tower is a Special Exception in Piatt Township.

The Hughesville Water Authority site is more complex. The site is extremely steep and the first task will include the identification of the access corridor to get to the top of the hill. Site design will be difficult and land development plan approvals and the NPDES permit will be critical path items.

Based on our staff's previous experience with projects similar in scope within Lycoming County, we anticipate first starting survey on the Hesker Hill site so we can get a quick start on the civil design. At the same time, we will initially use lidar data to assess the Hughesville site in order to determine the best means of access. Once a driveway alignment is determined, we will begin survey at Hughesville.



SCOPE OF WORK

MKA has fully reviewed the required engineering, permitting and surveying Request for Proposal entitled Engineering and Surveying Services for Hughesville Water Authority Tower Site and Hesker Hill Tower Site. MKA will provide a “turn-key” Scope of Services to Lycoming County for the permitting, lease plat, subsurface exploration and design for two (2) communications tower sites, land to be cleared for water authority, and associated parking and access roads. Specifically, the MKA Team will accomplish these tasks by performing the following Scope of Work.

MKA will perform the initial work by preparing a conceptual site plan by utilizing publicly available PAMAP Lidar contours and orthophotography, as well as perform a PA One Call for the site. The base map will be followed up by performing a field survey of critical areas. All corners of the proposed lease parcels, easements and other boundaries will be permanently marked, and topographic contours shown at a minimum within 100 feet of the construction area. Permanent benchmarks will be set in the vicinity of the construction site.

MKA’s surveyors will field mark the location of the proposed soil/rock borings and resistivity grid locations. MKA will utilize the services of Hillis-Carnes Engineering Associates to perform the required subsurface exploration and resistivity testing. Hillis-Carnes will provide a geotechnical sub-surface exploration report for use by the County to perform final tower design and bidding of tower construction.

MKA will perform a site-specific Wetland, Stream and Natural Resource investigation and compile an aquatic resource delineation report. A preliminary evaluation indicates the sites should not contain wetlands/streams. MKA will convey any findings to the County to determine a viable solution. MKA will conduct a formal PNHP (PNDI) review of the sites. A preliminary evaluation indicates the sites should have no conflicts with protected species. If formal PNDI review indicates potential conflicts, agency coordination will be performed as an additional service.

MKA will utilize the services of Rue Environmental, LLC to perform the required PHMC/SHPO coordination and completion of FCC Form 620. Rue Environmental will provide a report of each site. MKA will perform a Phase I Environmental Site Assessment (ESA). MKA does not anticipate the need for a Phase II ESA, but if one is required, MKA will coordinate the work and it will be considered a reimbursable expense.

Field data will be compiled into an AutoCAD format in order to create a final survey base map including boundary lines, contours, surface features, structures, land encumbrances, water resources, and soil types. MKA’s Engineering Department will prepare a site grading plan that will include design of the pads for the towers, cleared land for water authority, parking for the towers, access road plan and profiles, and proposed stormwater management facilities for the sites. Preliminary plans will be submitted to the County for review and comment.



MKA will prepare the base maps into a formal permitting plan sets and submit the required earth disturbance permits, zoning and land development plans to the proper regulatory agencies. MKA assumes that an NPDES Permit will be required for the Hughesville site because the site will have disturbance areas of greater than one acre. As part of the NPDES Permit for earth disturbance, MKA will prepare the required Erosion and Sedimentation Control Plans (E&S Plans) and Narrative, and a Post Construction Stormwater Management (PSCM) Plans and Narrative. Based on the pre-bid site visit discussions, MKA assumes the Hesker Hill Tower Site will not require any improvements to the existing access. Therefore, MKA assumes the site will have a disturbance area less than one acre and will require only an Erosion and Sediment Control Plan submission to the County Conservation District.

Prior to final design, a zoning application and Special Exception request for Tower Sites will be submitted to the Lycoming County Zoning Hearing Board. In order to acquire Special Exception approval, the site development must meet the requirements of Section 3240Q Communication Towers of the Lycoming County Zoning Ordinance. In order to acquire the Special Exception, the FCC and FAA approvals for the tower will have to be acquired. MKA is familiar with the acquisition of notification criteria for towers and will prepare the applications. MKA assumes that the tower manufacturer will provide input on the final tower locations, fence type, and grounding requirements.

MKA will either self-perform the electrical design or else solicit a subconsultant once the electrical design requirements are more fully defined by the tower vendor.

Upon completion of all design and permit acquisition, MKA will provide the County with electronic files in AutoCAD format.



MKA TEAM

Andrew Keister

Andy will serve as the Project Manager and will be the primary contact at MKA. He will be responsible for maintaining schedules, coordinating design submissions, coordinating subconsultants and attending meetings.

Eric Sechrist

Eric will be MKA's lead engineer and will be responsible for all site plan preparation including drafting, civil design, stormwater management and permitting.

Josh Barry

Josh will be responsible for surveying services and will schedule and oversee all deed research, field work, survey plan preparation and survey stakeout.

Steve Shaw

Steve will be responsible for wetland delineation, PNHP submissions and Phase 1 ESA preparation.

Rue Environmental

David Rue will prepare the PHMC/SHPO submissions including the FCC Form 620.

Hilles-Carnes Engineering

Hilles-Carnes Engineering will perform all geotechnical investigations for both sites.



SCHEDULE MILESTONES

Notice to Proceed	September 8, 2020
Zoning Submissions	September 25, 2020
Define Access Alignment – Hughesville	September 25, 2020
Field Survey Complete – Hesker Hill	September 18, 2020
Field Survey Complete – Hughesville	October 5, 2020
Geotechnical Complete – Hesker Hill	October 16, 2020
Geotechnical Complete – Hughesville	October 30, 2020
Final Design Complete – Hesker Hill	December 4, 2020
Land Development Plan Submission – Hughesville	November 25, 2020
NPDES Submission – Hughesville –	November 25, 2020
NPDES/Land Development Plan Approval – Hughesville	February 16, 2021
Final Design Complete – Hughesville	February 19, 2021

PRICE PROPOSAL

6.1 Cost Elements. Services not specifically mentioned in this RFP, but are necessary to provide the Functional capabilities described, shall be included as part of the cost elements. Bidders should utilize this table Below to justify costs.

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	\$3,300
Stormwater Drainage Design	\$3,300
Erosion/Sediment Control	\$1,100
Civil Permitting*	\$9,300
Geotechnical	\$9,000
Geotechnical Boring Stakeout	\$400
Construction Stakeout	\$1,800
Soil Resistivity	\$7,000
Preliminary and Final Construction Drawings (CDs)	\$9,500
Utility Coordination	\$13,200
Zoning Information	\$1,800
FAA/FCC	\$1,500
Field Surveying/Courthouse Research	\$2,600
Survey Plans	\$2,100
Environmental Investigation	\$300
Infiltration Testing	\$1,600
Wetlands/Stream Delineation	\$1,800
Phase 1 Investigation and Report	\$4,000
Hearing Attendance (If Needed)	\$1,000
Phase 2 Investigation and Report (If Needed)	\$10,000
NEPA/SHPO Services	\$3,800
Deliveries, Copies, Etc.	\$1,700
SUBTOTAL FOR HUGHESVILLE	\$90,100

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	\$2,700
Stormwater Drainage Design	\$2,300
Erosion/Sediment Control	\$1,100
Civil Permitting*	\$2,700
Geotechnical	\$9,000
Geotechnical Boring Stakeout	\$600
Construction Stakeout	\$1,400
Soil Resistivity	\$7,000
Preliminary and Final Construction Drawings (CDs)	\$5,000
Utility Coordination	\$12,500
Zoning Information	\$2,000

FAA/FCC	\$1,500
Field Surveying/Courthouse Research	\$1,900
Survey Plans	\$1,600
Environmental Investigation	\$300
Infiltration Testing	\$1,100
Wetlands/Stream Delineation	\$1,800
Phase 1 Investigation and Report	\$4,000
Hearing Attendance (If Needed)	\$600
Phase 2 Investigation and Report (If Needed)	\$10,000
NEPA/SHPO Services	\$3,800
Deliveries, Copies, Etc.	\$1,300
SUBTOTAL FOR HESKER HILL	\$74,200

GRAND TOTAL FOR BOTH SITES	\$164,300
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The undersigned, as Bidder, hereby declares that the total project costs as indicated above, includes all Necessary work to complete this project in full according to the general specifications contained in the RFP. Products and services not specifically mentioned, but are necessary to provide the functional capabilities shall Be listed and included as part of the cost elements.

The undersigned further understands and agrees that if the County accepts the bid, no additional funds will be Allowed beyond the stated total project costs.

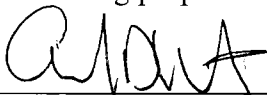
Company Name: McTish, Kunkel and Associates

Address: 1500 Sycamore Road, Montoursville, PA 17754

Point of Contact: Andrew Keister Phone Number: 570-368-3040

Fax Number: 570-368-3166 Email Address: akeister@mctish.com

Name of person submitting proposal: Andrew Keister

Signature:  Date: 8/20/20

When submitting a bid, place the bid form sheet as the top page of the bid package and the bid prince Schedule as the second page of the bid package.

PROPOSAL FORM

Important note to Bidders:

It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to:

Lycoming County Controller's Office
Lycoming County Executive Plaza
Building 330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 21, 2020, 2020 **This proposal is valid for 60 days**
From the date of the public opening of the proposals.

This proposal is submitted by:

Company Name: McTish, Kunkel and Associates

Company Address: 1500 Sycamore Road

Montoursville, PA 17754

Main Telephone: 570-368-3040 Main Fax: 570-368-3166

Communications and questions concerning this proposal are to be directed to:

Company Name: McTish, Kunkel and Associates

Company Address: 1500 Sycamore Road

Montoursville, PA 17754

Contact Email: akeister@mctish.com

**In the event your company is awarded a contract as a result of the RFP, the following individual will
Serve as project liaison/manager:**

Name/ Title: Andrew D. Keister, Vice President

Office/Address: 1500 Sycamore Road

Montoursville, PA 17754

Telephone: 570-368-3040 Fax: 570-368-3166

Email: akeister@mctish.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	<u>1</u>	Date	<u>8/3/20</u>
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and Shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

Company Type (check one):

- Sole Proprietorship Partnership Corporation Joint Venture

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal Hughesville Water Authority and Hesker Hill Tower Sites

State of Pennsylvania

County of Lycoming

I state that I am Vice President (Title) of McTish, Kunkel and Associates (Name of Firm) and That I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am The person responsible in my firm for the price(s) and the amount of this proposal.

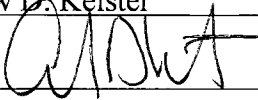
I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. McTish, Kunkel and Associates (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

I state that McTish, Kunkel and Associates (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

A statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: Andrew D. Keister

Signature: 

Title: Vice President

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 20th DAY
OF August, 2020.



My Commission Expires: December 23, 2020

Commonwealth of Pennsylvania - Notary Seal
Patricia L. Gaskins, Notary Public
Lycoming County
My commission expires December 23, 2023
Commission number 1237495
Member, Pennsylvania Association of Notaries

Bidder attests that:

1. He/She has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements.
2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor And material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

McTish, Kunkel and Associates
Company Name

23-1982094
Federal ID#

1500 Sycamore Road
Street Address

PO Box

Montoursville
City

PA
State

17754
Zip

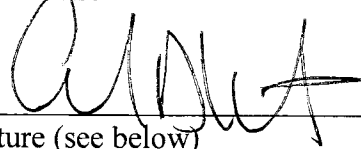
570-368-3040
Telephone #

570-368-3166
Fax #

WITNESS:

COMPANY:

Brenda E. Pittinger
Signature (see below)


Signature (see below)

Brenda E. Pittinger
Name (print)

Andrew D. Keister
Name (print)

Administrative Assistant
Title (print)

Vice President
Title (print)

EXCEPTION FORM

Section Number	Explanation
5	The Price Proposal form doesn't include a line item for review/permit fees so we did not include the fee in any of the line items. We anticipate between \$6000 to \$7000 for permit fees that will be passed on as a direct reimbursable expense to Lycoming County.
5	At the walk through, the County was clear that they wanted full boundary retracement surveys of the tracts that the towers would be located upon but subsequent rounds of questions seemed to indicate that only surveys of the actual tower locations should be included. MKA has only included fees for topographic survey of the tower sites and access roadways along with limited boundary surveys to define lease/easement areas for the towers and roadways.
5	Land Development and NPDES for the Hesker Hill site is not included because the County has indicated that they will be reusing the access driveway as-is so the project size should be smaller in size than the thresholds that would require either land development or NPDES.

Legal Ad
Sun Gazette
To Be Run: July 30th and August 3rd

NOTICE TO BIDDERS

ADDENDUM NO. 1 RFP FOR ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE

The additions and/or deletions contained in this Addendum shall be made a part of the plans and specifications and contract documents for the above-referenced solicitation, and shall be subject to all applicable requirements thereunder, as if originally shown and/or specified. In case of any conflict between the specifications, and this Addendum, this Addendum shall govern.

This Addendum must be returned with your bid as acknowledgment of its receipt. Bidders may obtain the Addendum on the County website at www.lyco.org and Request for Bids.

The following modification is made to the text for the referenced solicitation:

The scope of the project has changed from one (1) tower site to two (2) tower sites, resulting in a number of changes to the RFP issued. Please see the following changes for the Lycoming County RFP for E&S services.

1. Change from "Hughesville Water Authority Tower Site" to "Hughesville Water Authority Tower Site and Heskler Hill Tower Site: (1) on the cover page, (2) on Notice to Bidders page 1-1, second paragraph, and (3) on Section 2, page 2-2, paragraph 2.9, third line.

2. Change to Scope of Work & Technical Specifications, Introduction, page 5-1 is as follows:

Lycoming County is currently upgrading our existing radio system to better serve the residents, businesses, tourists and public safety agencies of the county. In order to achieve the overall plan, Lycoming County will be contracting for the construction of two (2) raw lands to finish tower sites to improve RF coverage for our first responders. Additionally, on the one site, a second plot of land is to be cleared for the water authority to use (no further development of the second plot is required).

3. Changes to Scope of Work & Technical Specifications, General Requirements, item 1, page 5-1 are as follows:

1. The names and locations of the two (2) new proposed tower sites are:

- a. Hughesville Water Authority tower site
 - i. Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
 - ii. Street address: 279 Reservoir Road, Hughesville, PA
 - iii. Township: Wolf
 - iv. County: Lycoming
 - v. Size of site plot: 100'x100'
 - vi. Height of tower: 250'

Hughesville Water Authority land which is to be cleared (not developed) for water authority use is:

- i. Street address: 279 Reservoir Road, Hughesville, PA
- ii. Township: Wolf
- iii. County: Lycoming
- iv. Approximate size of plot to be cleared for the water authority: 100'x100'

b. Hesker Hill tower site

- i. Latitude: 41-14-19.1 N, longitude: 77-14-35.1 W
- ii. Street address: 1324 Hesker Hill Road, Jersey Shore, PA
- iii. Township: Piatt
- iv. County: Lycoming
- v. Size of site plot: 75'x75'
- vi. Height of tower: 250'

The County will be responsible for procurement of site and leasing of property.

4. Change to Mandatory Site Walk on Notice to Bidders, page 1-1, paragraph 4 is as follows:

A mandatory site walk will be held on Wednesday, August 5, 2020, at 10:00 AM for the two (2) tower sites, starting at the Hughesville Water Authority site located at 279 Reservoir Road, Hughesville, PA.

5. Change to Price Proposal, section 6.1 Cost Elements is as follows:

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final	

Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	
Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HUGHESVILLE	

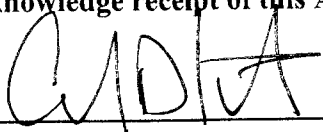
Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	

Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HESKER HILL	

GRAND TOTAL FOR BOTH SITES	
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ACKNOWLEDGEMENT

I hereby acknowledge receipt of this Addendum for the above noted project.

Signature 

Date 8/20/20



Andrew D. Keister, P.E., P.L.S.

Vice President



P: 570.368.3040



akeister@mctish.com



1500 Sycamore Road, Suite 320
Montoursville, PA 17754

Profile

Andy is a professional engineer with more than 25 years of experience in design, project management and operational leadership. He's been the leader of civil and geospatial staff in Pennsylvania, Ohio, West Virginia, New York and Texas. He is responsible for residential and commercial development, K-12, higher education, athletic and recreation facilities, public infrastructure water resources and county and municipal consulting.

Notable Assignments

Laurel Hill Wind Energy Project, Lycoming County, PA

Principal for a large wind energy project that included complicated modeling to route large trucks up steep slopes and around narrow turns. Work also included stormwater management on steep, mountainous terrain and FAA approvals for all turbines and towers.

Ball Hill Wind Energy Project, Fredonia, NY

Principal for the preliminary engineering large wind energy project in northwest New York. Services performed included grading, site/civil design, stormwater management, boundary surveys and right-of-way plats.

Bloomsburg Area School District Improvement Project, Bloomsburg, PA

Project manager for a \$25m improvement project that involved the site/civil design for building additions, athletic facilities, and parking lots within a new flood mitigation project. New site lighting was constructed on the site that required FAA submission and approval because the site is located in close proximity to the Bloomsburg Municipal Airport.

Artificial Turf Field, Bloomsburg University, Bloomsburg PA

Performed comprehensive design for a new artificial turf multi-purpose field for NCAA field hockey, soccer, and lacrosse. The project included new bleachers, lighting, landscaping, and stormwater drainage and required FAA approval due to the proximity to the Bloomsburg Municipal Airport.

Bloomsburg University Apartments, Bloomsburg, PA

Performed full design for a 120-student apartment complex including stormwater management, retaining walls, site lighting, and permitting. Site and roadway lighting required FAA submission and approval due to the proximity to the Bloomsburg Municipal Airport.

Bolig Stadium, Selinsgrove Area School District, Selinsgrove, PA

Performed design and contract administration for renovations to Bolig Stadium including artificial turf, new bleachers, team rooms, concessions, restrooms, and synthetic track.

Honeysuckle Apartments, Bloomsburg, PA

Completed full design for a 408-student apartment complex, including stormwater management, retaining walls, site lighting, and permitting.

Columbia County Bikeway, Bloomsburg, PA

Completed comprehensive planning design for a 7-mile long bikeway.

East Fifth Street Recreation Area, Mount Carmel, PA

Performed comprehensive design for two new soccer fields on an old strip mine reclaimed with PPL Stabil-Fill material.

Phase 1, Mount Carmel Recreation Area, Mount Carmel, PA

Did master planning and comprehensive design for a new baseball field, parking area, walking trail, and pool renovations.

Millville Park Improvements - Phase 1, Millville, PA

Completed grant application preparation and design for new playground facilities, and parking areas with handicap accessibility.

Millville Park Improvements - Phase 2, Millville, PA

Performed full design for two new tennis courts including concrete retaining wall, removable fencing, and parking areas with handicap accessibility.

Susquehanna Health, Muncy Industrial Park Parcel, Muncy, PA

The project included updating a topographic survey, preparation of a traffic impact study, creation of a master site plan, sketch plan presentation to Lycoming County, and completion of an NPDES permit application for the site.

Presbyterian Homes, Bloomsburg Hospital Site, Bloomsburg, PA

The project included master plan for a senior living community and the preparation of an opinion of probable cost for site improvements.

Presbyterian Homes, Normandie Ridge Site, York, PA

The project included master plan for a senior living community and the preparation of an opinion of probable cost for site improvements.

Albright Care Services, Normandie Ridge Site, York, PA

Managed projects that included the preparation of an overall master site plan for future development and expansion of the campus, preparation of opinions of probable cost for site improvements, and the design of stormwater management plans to mitigate off-site runoff.

Albright Care Services, Riverwoods Site, Lewisburg, PA

Managed projects that included the preparation of an overall master site plan for future development and expansion of the campus, preparation of opinions of probable cost for site improvements, and the preparation of land development plans for new independent living cottages.

Bloomsburg University Apartments, Bloomsburg, PA

Performed full design for a 120-student apartment complex including stormwater management, retaining walls, site lighting, and permitting.

Lowe's of Lock Haven, Mill Hall, PA

Performed site design for a 94,000 s.f. Lowe's store on a previously developed commercial site located within the floodplain.

St. Pius X Catholic Church, Selinsgrove, PA

Completed site design for a new church including stormwater management, grading, and permitting.

Nearstown Little League, Houston, TX

Completed comprehensive design for a new Little League stadium as a part of Little League's Urban Initiative program.

Duquesne Little League Field Renovations, Pittsburgh, PA

Performed design of renovations for two Little League fields as a part of Little League's Urban Initiative program.

Little League Baseball Fields, York, PA

Performed comprehensive design for four new Little League fields at Allen and Bantz Parks in the City of York as a part of Little League's Urban Initiative program.

Education

The Pennsylvania State University

1993

Bachelor Degree

Civil Engineering

Training

Senior Executive's Institute, ACEC (21 days over a span of 24 months), 2011-2013.

- Five separate sessions focusing on personal mastery, strategic planning, leadership styles, and systems thinking.

Miller Heiman Strategic Selling. June 2016.

A/E/C Principal's Bootcamp. PSMJ, April 2012.

High-Impact Presentations. Dale Carnegie, 2006.

The Business of Design Consulting. ACEC, 2004.

Certifications

Professional Engineer, Pennsylvania - PA 05638-E
Professional Engineer, Maryland - MD 35492 Professional Engineer,
New York - NY 085685 Professional Engineer,
Texas - TX 111053 Professional Engineer, Oklahoma - OK
25251 Professional Engineer, Virginia - VA 0402039766
Professional Engineer, West Virginia - WV 019161
Professional Engineer, Indiana - IN 10504967
Professional Engineer, Ohio - OH E-68934 Professional
Land Surveyor, Pennsylvania - PA 054381-E

Professional / Community Affiliations

Bloomsburg University - STEM Program Mentor (2016 - present)

Industrial Properties Corporation - Board Member (2014-2017)

ASTM - Plastic Pipe Committee Member (2010 - present)

Bloomsburg YMCA - Board Member - Vice Chair (2012-2015), Reachout Campaign Chairman 2014-2015

Bloomsburg Municipal Authority - Vice Chairman (2009-2015)



Eric J. Sechrist, P.E.

Project Engineer



P: 570.368.3040



esechrist@mctish.com



1500 Sycamore Rd., Suite 320
Montoursville, PA 17754

Profile

Eric Sechrist has seven years of experience and serves as a Land Development Engineer for MKA's Montoursville Office. His experience includes design, permitting and construction of projects involving municipal consulting, civil/site development, stormwater management, natural gas meter stations and compressor stations. Duties for projects include coordinating with client, federal, state and local agencies, acquiring various permits ranging from Erosion and Sediment Control General Permit (ESCGP-1/2), National Pollutant Discharge Elimination System (NPDES), General Permits including GP 5, 7, and 8, Joint Permit, Highway Occupancy Permit, and zoning permits. Eric's work includes designing/preparing Stormwater Management Plans, Erosion and Sediment Plans, Land Development Plans, Spill Prevention Control and Countermeasure (SPCC) Plans, utility coordination, and easement plats and descriptions.

Notable Assignments

Hemlock Township

Performed municipal engineering consulting including the design, permitting, and construction management of Hazard Mitigation General Permits including the demolition and restoration of sites located within the floodplains of Fishing Creek and Little Fishing Creek.

Muncy Bank and Trust, Linden Branch

Eric performed duties of design and overseeing entry level engineers in the design and permitting of a commercial bank office building on a 2-acre parcel along State Route 220 in Woodward Township, Lycoming County. Responsibilities included coordinating with client and local and state agencies, overseeing the creation of Land Development Plans, Zoning Plans, Erosion and Sedimentation Control Plans, Post Construction Stormwater Management Plans, and acquired permits including National Pollutant Discharge Elimination System, Land Development, Zoning, and Highway Occupancy Permits. Eric attended Planning Commission meetings to present the proposed project. Responsibilities also included on-site inspections during construction to ensure proper installation of proposed Best Management Practices.

Bloomsburg Area School District

Performed duties of design and overseeing engineers in the design and permitting for a \$6 million upgrade to their athletic facilities and site including new parking areas, pedestrian walkways, an artificial turf football/soccer/field hockey stadium, synthetic running track, athletic turf baseball field and athletic turf softball field.

Natural Gas Pipelines – PVR Partners, LP

Eric has or is in the process of designing/permitting numerous natural gas pipelines throughout Bradford, Luzerne, Lycoming, Sullivan, Susquehanna, and Wyoming Counties, Pennsylvania. Duties include preparing proposed pipeline alignments to best suit the client, state and municipal agencies, as well as preparing Erosion and Sediment Control Plans, Stormwater Plans, ESCGP-1/2 permit applications and the associated narratives with the above applications.

Meter, Valve Site & Compressor Stations – PVR Partners, L.P.

Eric has or is in the process of designing/permitting meter sites, valve sites and compressor stations in Bradford, Lycoming, Susquehanna, and Wyoming Counties, Pennsylvania. These projects range from the design/permitting of meter site and compressor station expansions to the design/permitting of multiple valve site access roads. Responsibilities include the preparation of Land Development, Zoning, Erosion and Sedimentation Control and Stormwater Plans. Other duties included the preparation/review of ESCGP-1/2 Permits, General Permits, Joint Permits, Zoning, Land Development, and Stormwater Applications, as well as the associated narratives and calculations for the above applications. He has also prepared as-built plans for the use in Spill Prevention Control and Countermeasure (SPCC) Plans.

McGregor Interconnect Facility, Regency Marcellus Gas Gathering, LLC

Eric performed duties of design and permitting for a 0.5-acre meter facility located in Lemon Township, Wyoming County. The responsibilities included planning, design engineering, site grading, roadways, stormwater management system, erosion and sedimentation control, and land development.

Lock Haven Catholic School Expansion, Lock Haven Catholic School, Holy Spirit Parish

Eric performed duties of design and planning to acquire land development, zoning/planning, design engineering, and permitting for an on-site parking lot and a multipurpose building adjacent to the existing school building on the 2.9-acre campus tract. The site grading, stormwater management system, and erosion and sedimentation control for proposed development abuts Lock Haven's Area Flood Protection Authority's Levee System and is within the City of Lock Haven's Class II Historic District. Analyzed the existing storm sewer system to ensure no increases in runoff volumes or rates were created by the increase in impervious area.

Wrighter Energy Facility, IMG Midstream

Eric performed duties of design and overseeing entry level engineers in the design and permitting of a 6.25-acre electric generation facility including two natural gas pipelines, one aboveground electric line, and two permanent tap sites within Thompson Township, Susquehanna County. Responsibilities included coordinating with client and local agencies, overseeing the creation of Land Development Plans, Erosion and Sedimentation Control Plans, Post Construction Stormwater Management Plans, and acquired permits including National Pollutant Discharge Elimination System, Land Development, Zoning, and Highway Occupancy Permits.

Hop Bottom Energy Facility, IMG Midstream

Performed duties of design and overseeing entry level engineers in the design and permitting of a 4-acre electric generation facility including a natural gas pipeline and an aboveground electric line within Lenox Township, Susquehanna County. Responsibilities included coordinating with client and local agencies, overseeing the creation of Land Development Plans, Erosion and Sedimentation Control Plans, Post Construction Stormwater Management Plans, and acquired permits including National Pollutant Discharge Elimination System, Land Development, Zoning, and Highway Occupancy Permits.

Education

Pennsylvania College of Technology

2012

Bachelor Degree

Civil Engineering Technology

Certifications

Professional Engineer, PA - PE085622

Safe Land PEC - PEC100144728

Additional Training

MKA Safety Manual

XTO Energy - EHS Site Orientation

Energy Transfer Contractor Orientation

Professional / Community Affiliations

American Society of Highway Engineers - Director, Williamsport Chapter

Williamsport/Lycoming Chamber of Commerce Leadership Lycoming Program - Class of 2019



Josh Barry, P.E., P.L.S.

Survey Projects Coordinator



P: 570.368.3040

jbarry@mctish.com



1500 Sycamore Rd., Suite 320
Montoursville, PA 17754



josh-barry
690736110

Profile

Josh has more than eight years of experience and serves as a Survey Projects Coordinator, directing field and office staff within MKA's survey department for projects in PA, OH, and WV. He has completed detailed plans, survey plats and other assignments commensurate with ability and experience.

Josh is also proficient in the use of specialty software which is utilized in particular areas of practice such as hydrology and hydraulics, municipal and land development. He prepares plans, specifications, permit documents, applications and quantities for municipal and land development projects. These projects have been comprised of natural gas meter stations, compressor stations, well pads, surface water withdrawals, and land development projects.

Notable Assignments

Natural Gas Pipelines various locations PA and WV

Provided base mapping for the conceptual layout of pipelines prior to field survey. Performed pipeline projects from the conceptual stakeout through the as-built/post construction survey. Coordinated directly with client's staff for the scheduling of work, design of alignments and flow of data. Provided layout plans of the proposed routes showing data from the field surveys, available GIS information and orthographic photographs. Processed title information and survey data to determine lines of possession and/or property boundaries. Prepared property plats (including legal descriptions) for use by client's land department for the recording of easements. Generated various specialized plans and exhibits as required by the client including, but not limited to Forestry Exhibits, Stationing Plans, overview maps, etc. Coordinated the flow of base survey data and design information with engineering staff to insure proper continuity of work.

Sheets and Carey Surveys Lycoming County, PA

Performed 2 separate boundary surveys; coordinated two crews to provide survey of a 40-acre parcel and to provide assistance with the 100-acre parcel. Conducted deed research, field work, description, boundary report and calculations. Prepared comprehensive plans showing property holdings. Coordinated project with and presented final findings to client.

PPL Wastewater Basin Bedrock Profiling Project Montour County, PA

Performed wastewater basin bedrock profiling survey. Performed a hydrographic survey of 2 wastewater basins, drove probes to bedrock for mapping purposes created plan showing a profile of basins and surrounding area and the bedrock profile. Coordinated project with plant safety supervisor for plant orientation, safety training, dates working on site, and times in and out of facility.

Larrysville Mitigation Project Lycoming County, PA

Performed topographic survey for design purposes for the restoration of a stream. Set pins for mitigation easement area, performed construction staking for the contractor and performed a post construction survey as a benchmark for future use to determine changes in the creek. Performed subsequent post construction monitoring surveys scheduled every six months for 2 years then once per year for 3 years. Coordinated project with survey, engineering and hydrology experts reviewing project.

Oil and Gas Infrastructure Western ND

Provided base maps for the conceptual layout of well site locations and access roads prior to field survey. Performed well site, access road and pipeline projects from the conceptual stakeout thru the as-built/post construction survey. Provided layout plans of the proposed sites and routes showing data from the field surveys and available GIS information. Acquired Government Field Office field notes, research of all recorded corner certifications and research of any previous wells that were platted in the section or surrounding sections for the previous 30 years. Located all monumented section corners along with accessory evidence for all unmonumented section corners to evaluate for calculations for monumentation for plat requirements. Prepared property plats (including legal descriptions) for use by client's land department for the recording of easements. Generated various specialized plans and exhibits as required by the client including, but not limited to well pad plats and grading plans, stationing plans, overview maps, etc. Coordinated the flow of base survey data and design information with engineering staff to insure proper continuity of work.

Multiple ALTA/ACSM Surveys Western ND

Performed multiple ALTA/ACSM surveys. Acquired title research, conducted field work, and calculations as a Surveyor-in-Training. Consulted with a Professional Licensed Surveyor with calculations during the process. Assisted Professional Licensed Surveyor with plat preparation.

Multiple Small Tract Surveys Western ND

Performed multiple boundary surveys. Conducted deed research, field work, and calculations as a Surveyor-in-Training. Consulted with a Professional Licensed Surveyor with calculations during the process. Prepared plats showing the property boundary and prepared legal descriptions. Coordinated project with Professional Licensed Surveyor and client, presented final findings to client.

Education

Ferris State University

2011

Bachelor Degree

Surveying Engineering

Certifications

Professional Surveyor	WV-2290
Professional Surveyor	OH-8685
Professional Land Surveyor	PA-SU075472
Professional Engineer	PA-PE090648
Remote Pilot Certificate (Unmanned Aerial Vehicle)	
Safeland Training PEC #100204805	

Additional Training

MKA - Safety Manual
XTO Energy - EHS Site Orientation
Energy Transfer Contractor Orientation

Affiliations

PSLS



Stephen K. Shaw, P.W.S.

Environmental Manager



P: 570.368.3040



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1500 Sycamore Rd, Suite 320
Montoursville, PA 17754

Profile

Steve is a Professional Wetland Scientist with 34 years of private sector experience in Pennsylvania, West Virginia, Ohio, Florida, Alabama, Georgia, Mississippi, and Texas. Primary responsibilities include environmental assessment, permitting and project management for land development, transportation, and natural gas projects. His primary areas of expertise include wetlands ecology, water quality assessment, USACE Section 10/404 regulatory permitting, USFWS Section 7 Endangered Species Act permitting, and state-level regulatory permitting. He has substantial experience in the natural gas industry, including well and pipeline siting evaluations and permitting in the Marcellus, Utica and Eagle Ford Shale plays. Steve's duties with MKA include serving as Environmental Manager for all projects and overseeing State and Federal wetland and stream permitting and threatened/endangered species coordination/authorizations for projects in Pennsylvania, West Virginia and Ohio. He supervises a staff of environmental scientists and is responsible for their daily assignments and professional development.

Notable Assignments

Marcellus Shale Well and Pipeline Permitting, Pennsylvania

Responsible for obtaining State of PA Water Obstruction and Encroachment Permits, Federal Section 10/104 Permits, State of PA and Federal threatened/endangered species clearances, submitting Act 14 and cultural resource notifications, and coordinating environmental contractors for numerous natural gas midstream projects in northcentral and southwestern Pennsylvania.

Marcellus Shale Well and Pipeline Permitting, West Virginia

Responsible for obtaining State of WV isolated wetland/Section 401 water quality certification, State of WV stream activity permits, and Federal Section 404 wetland/stream authorizations for natural gas midstream projects. Work also included obtaining "after-the-fact" State and Federal approvals for non-authorized activities in streams and wetlands.

Marcellus and Utica Shale Well and Pipeline Permitting, Ohio

Responsible for obtaining State of OH isolated wetland and stream permits and Section 401 water quality certification and Federal Section 404 wetland authorizations for natural gas midstream projects.

Eagle Ford Shale Well and Pipeline Assessments, South Texas

Responsible for well pad and pipeline corridor assessments, identification of stream/wetland/listed species resources, and State/Federal environmental permitting. Duties included field inspection of project alignments, preparing permit applications, and processing of permits through USACE and the State of Texas.

Natural Gas Fired Electrical Generation Facility, Susquehanna Co., Pennsylvania

Environmental project manager for conducting aquatic resource delineations/permitting and a Phase 1 Environmental Site Assessment for a project involving the generation of electricity using natural gas and delivering it to the grid via existing transmission networks. Project consisted of a 1.2-acre electrical generation facility, a 2.1-mile long natural gas source pipeline, a 0.4-mile electrical transmission line, and a 0.1-mile permanent access road to the generation facility.

Manufacturing Facility – USACE Jurisdictional Determination, Clinton Co., Pennsylvania
Environmental project manager responsible for obtaining an Approved Jurisdictional Determination from the USACE to establish that an on-site isolated wetland was Federally non-jurisdictional. The wetland impeded the construction of a 279,000± square foot facility. MKA prepared a Jurisdictional Assessment Report detailing the analysis/rationale used to successfully determine the wetland did not have a significant nexus to a Traditional Navigable Water, and, therefore, did not require a Section 404 permit or associated mitigation.

Pine Creek Aerial Communications Cable Crossing, Lycoming County, Pennsylvania
Responsible for water resource delineation and permitting for a 754-foot long aerial communications cable crossing of Pine Creek, an Exceptional Value Water. Access to one side of Pine Creek was limited, necessitating permitting of a ford crossing of the creek to allow access by construction equipment. As part of the project, MKA obtained both a Chapter 105 Small Projects Joint Permit and a Submerged Lands Lease Agreement from PADEP

Education

Pennsylvania State University	1980
Associate Degree	Wildlife and Fisheries Management
Edinboro University	1983
Bachelor Degree	Geology
University of South Florida	1989
Master Degree	Geology, emphasis in geochemistry and hydrogeology

Certifications

Professional Wetland Scientist – #619
Safeland PEC Training – PEC100387345
Certified Wetland Delineator, USACOE

Affiliations

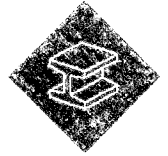
Society of Wetland Scientists
Pennsylvania Association of Environmental Professionals; Board of Directors – 2016-2019; Treasurer – 2016-2019

Additional Training

MKA Safety Manual
XTO - EHS Site Orientation
Energy Transfer Contractor General Safety Orientation

JEROME GUY

BRANCH MANAGER/SENIOR PROJECT MANAGER



EDUCATION

B.S. in Biology
Towson Univeristy

PROFESSIONAL CERTIFICATIONS/ REGISTRATIONS

- Nuclear Density/Moisture Gauge Operator
(Troxler)

PROFESSIONAL SUMMARY

Mr. Guy has over 30 years of experience in Project Management, Construction Materials Testing and Inspections, Geotechnical Engineering, and Environmental Consulting. He has managed and coordinated the quality control and materials testing services on hundreds of construction projects throughout the Mid-Atlantic region. Project scopes have included shallow/deep foundations, structural fill, reinforcing steel, concrete, paving, masonry and structural steel.

SPECIAL PROJECT EXPERIENCE

Penn State University, Education Activities Building - Middletown, PA: Mr. Guy served as the Senior Project Manager for this 51,500 SF addition, connecting the existing two-story building, which was also renovated. The completed building features civil, mechanical and electrical engineering labs; tiered classrooms accommodating up to 120 students; a multi-purpose room; faculty research labs; support offices; and a computer laboratory. The project consisted of fill placements, conventional spread footings, reinforcing steel, structural steel, masonry and asphalt components. Mr. Guy worked closely with Penn State representatives, the Construction Manager, and all of the subcontractors towards a successful completion of the project. Specific duties included performing some site inspections, all of the project management as it related to testing and inspections, report preparation, site meetings, invoicing, and recommendations as needed. Mr. Guy was also the Senior Project Manager for the Capital Union Building, Olmstead Drive Rehab and Demey Elementary School projects at Penn State University, Harrisburg.

George Washington Carver High School - Towson, MD: Mr. Guy served as the Senior Project Manager for this new stat- of-the-art 100 Million dollar high school, located in the heart of Towson, Maryland. Mr. Guy was responsible for implementing the testing and inspection services for this project site, which was located on poor soil conditions that warranted a long term soil cementing operation. Our services included site work, footings, reinforcing steel, and concrete. All foundations were conventional spread footings which required documentation of bearing capacity, dimensions etc. Additional duties included monitoring a soil nail operation on an existing embankment.

Alex Grass Medical Center - Harrisburg, PA: Mr. Guy served as the Senior Project Manager for the 75,000 SF vertical addition to the Alex Grass Medical Center. The work included caisson inspections, decking inspections, reinforcing steel inspections, concrete inspections, and sprayed on fireproofing thickness, density, and bond strength testing. Mr. Guy reviewed all the reports and managed numerous technicians that reported to the site. He also performed lab work which consisted of concrete strength tests, fireproofing density tests, and soil analysis including proctors, sieves and atterberg limits.

York College Business Administration Project - York, PA: Mr. Guy served as the Senior Project Manager for this 38,000 SF addition that included 65 micropiles. Mr. Guy managed the testing and inspections program, which included the testing and inspections of soils, concrete, rebar, structural steel, and micropiles. The micropile inspections consisted of grout sampling, depth of pile, confirmation of rock depth, and elevation.

NATHANIEL J. LAUVER, PE

GEOTECHNICAL ENGINEER



EDUCATION

B.S. in Civil Engineering,
Lehigh University, 2002

PROFESSIONAL CERTIFICATIONS/ REGISTRATIONS

- Pennsylvania PE #074285
- PennDOT Certified Level II Drilling Inspector #04-2-002
- Nuclear Density/Moisture Gauge Operator (Troxler)

PROFESSIONAL SUMMARY

Mr. Lauver has over 16 years of experience in all aspects of Geotechnical Engineering as well as a Professional Engineer throughout Pennsylvania. Major responsibilities include managing geotechnical design staff and efforts for both public and private projects of various scopes and complexities, and coordinating geotechnical staff to efficiently and effectively complete design efforts of multiple projects at a time. In addition, Mr. Lauver has experience in analyzing various retaining wall types from a geotechnical and constructability standpoint to justify wall type during the conceptual planning stage of a project, coordinating and performing all geotechnical related efforts for design/build projects in both preliminary design/project specification development and final design as part of the contractor's design/build team. Mr. Lauver has developed and managed Geotechnical Engineering programs covering shallow/deep foundations, slope stability design/assessments, geophysical techniques including resistivity and conductivity surveys, as well as ground improvement methods.

SPECIAL PROJECT EXPERIENCE

Harrisburg International Airport Parking Garage/Terminal Expansion - Dauphin County, PA: Mr. Lauver served as the Project Engineer performing geotechnical and drilling services for the terminal expansion and parking garage located at the Harrisburg International Airport. The services performed consisted of boring and test pit inspections, preparation of field boring and test pit logs, the coordination of the laboratory testing program, and assisting in the preparation of foundation reports for both the terminal expansion and parking garage. Due to the scope of the program, the field testing was extensive with the geotechnical drilling spanning to an eight month time frame.

Derry Township Wastewater Treatment Plant Upgrade - Dauphin County, PA: Mr. Lauver served as the Project Engineer performing geotechnical services for the Wastewater Treatment Plant upgrade project. The services performed consisted of the coordination of the drilling efforts, boring inspections, the preparation of field boring logs, the coordination of the laboratory testing program, and preparation of the foundation report and earthwork recommendations for the wastewater treatment plant upgrade. Specialty provisions and recommendations were incorporated due to the underlying Karst geology.

I-83/PA 581 Bottleneck Safety Interchange - Cumberland County, PA: Mr. Lauver served as the Lead Geotechnical Engineer on this project in which he developed and coordinated both the geotechnical drilling and laboratory testing program for the Lowther Street over I-83 Bridge, and associated new ramp geometry. As an early action phase of the project, the boring and laboratory testing work for the Lowther Street Bridge were performed ahead of the ramp work. After the borings and laboratory testing was complete, Mr. Lauver performed accelerated foundation design for the proposed Lowther Street structure to accommodate construction schedule and phasing.

Emergency Bridge Replacement Projects - Susquehanna County, PA: Mr. Lauver served as the Project Engineer for the emergency bridge replacement project consisting of three bridge structure locations. After extensive flooding in the area, geotechnical engineering services for this PennDOT emergency contract involved the replacement of three bridge structure locations on State Route (S.R.) 0029, S.R. 2026, and S.R. 3025. Due to the bridge closures caused by the flooding, the project required an accelerated schedule with all work to be completed in six weeks. The geotechnical services included the coordination of geotechnical drilling and laboratory testing programs, boring inspections, and preparation of foundation reports for the design/build bid package.

SETH E. NAREHOOD

Geoscientist, Environmental Manager



Education

B.S. Geosciences
The Pennsylvania State University
University Park, Pennsylvania

Professional Certifications

- OSHA 29 CFR 1910.126 10-Hour Construction Health & Safety Training.
- OSHA 29 CFR 1910.120 40-Hour Hazardous Waste Operations Training.
 - OSHA 29 CFR 1910.20(e)(4) Site Management/Supervisory Health and Safety Training.
- OSHA 29 CFR 1926 Construction Safety Training (OSHA 10).
 - OSHA 29 CFR 1910.147(a)(1)(i) Lockout/Tagout Training.
- MSHA 30 CFR 46.5 Surface Mining Safety Training.
 - MSHA 30 CFR 46.8 Annual Refresher Training.
- U.S. DOT 49 CFR 172 Portable Nuclear Density/Moisture Gauge and Use Training.

Professional Experience

Geoscientist, Environmental Manager
Hillis-Carnes Engineering Associates, Inc.
State College, PA
2014-Present

Sr. Staff Geoscientist/Field Manager
Converse Consultants
State College, PA
1997-2014

Site Manager
Groundwater Technology, Inc.
Amherst, NH and Cary, NC
1992-1996

Field Geologist
NORANDA Exploration
Cary, NC
1990-2015

HILLIS-CARNES

Environmental Consulting Experience

Phase I Environmental Site Assessments (Numerous Sites in Indiana, New Hampshire, Maryland, Massachusetts, New Jersey, North Carolina, Pennsylvania): Project Manager. Over 22 years of experience conducting Phase I Environmental Site Assessments for individuals, businesses, corporations, land developers, insurance companies, lending institutions, and academic institutions in conformance with ASTM Designation E 1527 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. These projects were conducted for due diligence purposes to identify potential and/or existing environmental liability associated with a property prior to site development, redevelopment, and property foreclosures.

Phase II Environmental Site Assessments (Numerous Locations in Indiana, Massachusetts, New Hampshire, North Carolina, Pennsylvania, South Carolina, Virginia, Tennessee): Site Manager/Field Operations Manager. Oversight of field activities, project health and safety compliance and monitoring, soil/groundwater/soil vapor sample collection, field data collection and analysis, associated with the assessment of impacts to subsurface media from the release of hazardous substances and/or petroleum products. Projects entailed the delineation of soil and groundwater contamination using soil borings, installation of shallow and deep groundwater monitoring well arrays, soil gas surveys, and the evaluation of remediation alternatives in accordance the appropriate state agencies

Public Water Supply Development (Numerous Locations in Pennsylvania): Field Operations Manager; Drilling oversight, borehole logging, and assist with aquifer characterization testing to supplement development of drilled wells into viable potable water supplies in accordance with State compliance requirements. Conducted installation and operation of groundwater quality field instrumentation, oversight and completion of field monitoring, and requisite regulatory compliance (PADEP) field sampling.

Management of Fill Due Diligence and Waste Management (Numerous Locations in Pennsylvania): Project Manager; Conduct evaluation of excavated fill material that is during construction activities in conformance with the criteria stipulated in PADEP Document Number 258-2182-773PO: Management of Fill Policy to assess if material can be managed as "clean fill" or conduct waste characterization (if applicable) and direct disposal of waste material in conformance with the regulatory requirements of PADEP and the disposal requirements of the facility receiving the waste.

ROBERT SCANDLE

Laboratory Manager



□ EDUCATION

B.S. Earth Sciences
The Pennsylvania State University
University Park, PA
2016

□ PROFESSIONAL CERTIFICATIONS

- Nuclear Safety Training Certification
 - ACI Concrete Field Technician, Grade I
 - Radiation Safety Officer

□ PROFESSIONAL EXPERIENCE

Laboratory Manager
Hillis-Carnes Engineering Associates, Inc.
State College, PA
2010 – Present

Pennsylvania State University
University Park, PA
2009-2010

Deluxe Building Systems
Berwick, PA
2007-2008

Fleetwood Motor Homes
Elysburg, PA
2004

□ PROFESSIONAL SUMMARY

Mr. Scandle has over 10 years' experience in the construction services field. He is currently the Laboratory Manager at Hillis-Carnes, holding full responsibility for keeping the lab current and up to date for all ASTM, AMRL, CCRL, and Army Corps of Engineers certifications. Mr. Scandle performs all laboratory testing of soils, asphalt, concrete, grout, and mortar specimens according to ASTM Standards and is responsible for dissemination of testing results to clients. During his tenure with Hillis-Carnes, he has also performed materials testing and inspection field services to include soils, bituminous concrete, asphalt, reinforcing steel, concrete coring, and masonry inspection services.

SPECIAL PROJECT EXPERIENCE

Millennium Science Complex, University Park, PA - This ambitious project, located on the University Park Campus of the Pennsylvania State University, and included the construction of a four-story, L-shaped structural steel framed building with precast concrete and brick veneers. Architectural features included a cantilevered canopy area with an ornamental garden situated beneath. Additionally, much of the roof-space is vegetated in order to reduce the heating and cooling costs associated with the building. Hillis-Carnes was contracted by The Whiting Turner Contracting Company to perform specific tests with respect to earthwork/mass-grading, cast-in-place concrete, precast concrete, reinforcing steel and structural steel.

Weis Markets, Multiple Locations in Pennsylvania: Mr. Scandle provided field testing of construction materials and construction documentation during the construction of various new stores and during the construction of additions to existing structures. Responsibilities included monitoring utility installation, excavation, backfill, concrete/reinforcement placement, masonry, soil sampling/compaction, concrete testing and structural steel inspections.

The Pennsylvania State University - Shavers Creek Dam Rehabilitation: The Project consisted of the construction of a multi-row grout column curtain installed into rock, construction of a granular seepage interceptor trench, with toe of dam and downstream berm stabilization. The project budget was \$3.5 Million. Hillis-Carnes was contracted by the Pennsylvania State University to provide materials testing and inspections services.

River Valley Transit CNG Station & Garage, Williamsport, PA:

Hillis-Carnes Engineering Associates Inc. provided the Construction Materials Testing Services for the project. The Project consisted of the construction of a total of four (4) CNG fueling stations, reinforced concrete pads and accompanying parking and access

Lock Haven Sewage Treatment Plant Upgrade, Lock Haven, Pennsylvania: Hillis-Carnes Engineering Associates Inc. performed construction materials and testing services for the Lock Haven Sewage Treatment Plant Upgrade in Lock Haven, Pennsylvania. Project consisted of upgrades and additions to the existing Waste Water Treatment plant in order to increase treatment capacity. Additions consisted of SBR tanks, UV disinfection facilities, aerobic digesters and additional sanitary sewer and storm drains.

MIKE WILLIAMS

Drilling Manager



□ EDUCATION

Portage Area High School

□ PROFESSIONAL CERTIFICATIONS/ REGISTRATIONS

OSHA 40 hr. Hazwhoper

Flagger Certification
2015

CPR Certification

□ PROFESSIONAL EXPERIENCE

Drilling Manager

Hillis-Carnes Engineering
Associates, Inc.
2015 - Present

Eichelbergers Inc.
2011-2015

TRC Environmental
2000-2011

□ PROFESSIONAL SUMMARY

Mr. Williams has experience in operating drill rigs and Managed a drilling crew utilized various forms of subsurface exploration for over 15 years.

Mr. Williams experience in operating
Simco TR 4 Track CME 45 Track,
CME 45 Skid Drill, CME 75 Truck Mount,
Mobile B-59 Truck Mount, Mobile B-57 AVT,
Acker KLS Track, Acker, Soil Scout Track,
Acker Soil Max on Maroola

PROJECT EXPERIENCE:

PA Turnpike Widening Project Open end contract: Provided drilling services various site.
2000-2014

Mine Exploration for Amfire:
2010-2011

PPL New Line from Wilkes Barre to Scranton and Scranton to Mount Pocono, Pennsylvania:
2012-2014

Install Inclinometer for slides Dushore, Pennsylvania: Provide drilling for soil borings.
2013

Private Property Claysburg, PA: Drill to depth of 1,240 ft. for future Quarry site.

Packer Testing In West Virginia:
2014

Williams Pipeline from Towanda, Pennsylvania to Lancaster, Pennsylvania
2014- 2015

PPL Wilkes Barre, Pennsylvania: Drill approximately 110 soil boring for New Poles on the existing line.
2015

CATA Bus Terminal, State College, Pennsylvania: Drilling soil borings for new bus terminal building.
2015

RUE ENVIRONMENTAL LLC

DAVID J. RUE, Ph.D.

Project Manager, Cultural Resources

Education:

Ph.D. Anthropology, Geology Minor, 1986, The Pennsylvania State University.

M.A. Anthropology, 1982, The Pennsylvania State University.

B.A. Sociology/Anthropology, History, 1978, Clarion State College.

Experience:

Dr. Rue has over 30 years experience as a participant in cultural resource projects. He has supervised preparation of over 300 technical reports, and has provided management for large, multi-disciplinary environmental projects. His background has been multi-regional, and his client base has been diverse (gas pipelines, highways, fiber optics, federal facilities, power, and more). Rue has managed projects for over 150 natural gas transmission, production, and storage facilities in twenty states from New York to Illinois to Texas. He has also worked on numerous electric transmission line projects in Pennsylvania and Maryland.

Representative Project Experience:

Project Manager, Phase I Archaeological Studies for Lycoming Water Withdrawal Project, Lycoming County, Pennsylvania, for Beech Resources.

Project Manager, Phase I and II Archaeological Studies NFE LNG Project Supply Pipeline, Bradford County, Pennsylvania, for Williams.

Project Manager, Phase I Archaeological Studies Alta Pipeline, Lycoming County, Pennsylvania, for National Fuel.

Project Manager, Phase I and II Archaeological Studies for East Washington Gathering System, Gas Pipelines and Compressor Station, Washington County, Pennsylvania, for Columbia and WHM Consulting.

Project Manager, Cultural resource survey of 97 miles of proposed gas pipeline (Lebanon-Leidy) and 10 stations in Pennsylvania, Ohio, Virginia, and West Virginia; CNG Transmission Corporation (Dominion System).

Project Manager, Phase I Archaeological and Above Ground Resource Studies for Zediker Pipeline Project, Washington County, Pennsylvania, for Columbia and WHM Consulting.

Project Manager/Sr. P.I., Cultural Resource Surveys of 52 Miles of Proposed Pipeline Corridor in Northern New York for CNG Transmission Corporation (Dominion System)

Project Manager, Wetlands Delineation for Strobe Well Line, Greene County, Pennsylvania, for EQT and HRG.

Project Manager, Historic Structures Determination for Three 100 Year Old Compressor Stations in Northern Pennsylvania for National Fuel.

Project Manager, Phase I Archaeological Survey and Above-Ground Resources Overview, Electric/Gas Facilities in Susquehanna County, Pennsylvania for Hop Bottom Energy.

Project Manager, Phase I Survey for 115-mile Lebanon-Leidy Loop PHASE 3 Gas Pipeline in Ohio and Pennsylvania for CNG Transmission Corporation (Dominion System).

Project Manager, Phase I Archaeological Survey for Proposed East Branch Well Line Pipeline Relocations, McKean County, Pennsylvania, for National Fuel.

Project Manager, Phase I Archaeological Survey and Above-Ground Resources Overview, Electric and Gas Transmission Facilities for Good Spring Gas Power Plant in Schuylkill County, Pennsylvania for FuturePower LLC.

Project Manager, Phase I Archaeological Survey and Above-Ground Resources Overview, Campbell Gas Pipeline Clearfield County, Pennsylvania.

Project Manager, Phase I Archaeological and Above Ground Resource Studies for Bier Latera Pipeline Project, Washington County, Pennsylvania, for Range Resources and WHM.

Project Manager, Reconnaissance Survey of 14 Miles of Gas Pipeline Corridor in Putnam County, Ohio for West Ohio Gas (Dominion Subsidiary)

Project Manager, Phase I Survey Team (with Gray & Pape, inc.) for 300-Mile Pennsylvania Segment of El Paso Natural Gas' (Kinder Morgan System) Northeast Passage Project in Pennsylvania, for ENSR.

Project Manager/Sr. P.I., Cultural resource survey of 150 miles of corridor and related facilities in West Virginia, Pennsylvania, New Jersey, and Ohio for Vepco, Piedmont, PSE&G, Panhandle, Majorsville-Heard, and other projects; Columbia.

Principal Investigator, Cultural Resource Survey of 103 Miles of Proposed Natural Gas Pipeline and Related Facilities in Kentucky, Indiana, and Ohio; Texas Gas Transmission Corporation (Boardwalk Subsidiary).

Project Manager/Sr. P.I., Cultural resource survey of 116-acre Compressor station lot in Columbia County, Pennsylvania; Transco Gas Pipeline Company (Williams).



Firm Profile

Since 1976, McTish, Kunkel and Associates has provided professional engineering, planning, environmental and construction management services to a wide range of clients including PennDOT, the natural gas industry, electric utility companies, municipal governments, public water and sanitary authorities, airports, railroads, parks and recreation agencies, residential and commercial land developers, and various public and private utilities.

From our offices in Allentown, Montoursville and Pittsburgh, our experienced staff of over 250 professional civil, structural and transportation engineers, designers, environmental scientists, planners, land surveyors and construction managers utilize the latest technology to provide cost-effective solutions for our clients. Customer satisfaction is achieved through the application of innovative planning and design procedures. Our focus on quality and customer service is the reason we continue to maintain customer loyalty and a diverse client base.

Offices

Allentown

Tim S. Benner, P.E.

Vice President

3500 Winchester Road, Suite 300

Allentown, PA 18104

610-841-2700

tbenner@mctish.com

Montoursville

Andrew D. Keister, P.E., P.L.S.

Vice President

1500 Sycamore Road, Suite 320

Montoursville, PA 17754

570-368-3040

akeister@mctish.com

Pittsburgh

Steven D. Baird, P.E.

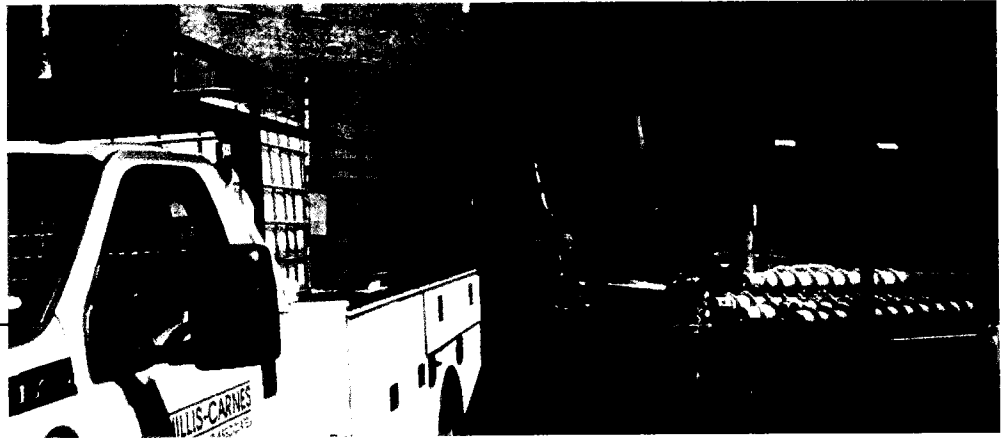
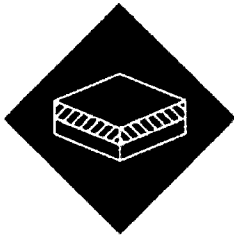
Regional Manager

400 Penn Center Blvd., Suite 600

Pittsburgh, PA 15235

412-824-2910

sbaird@mctish.com



GEOTECHNICAL ENGINEERING

*Comprehensive Geotechnical Engineering Services
Available In-House And On-Site*

Hillis-Carnes provides a level of corporate and individual geotechnical experience that is equaled by few firms in the region. Our team includes a diverse staff of professional engineers, geologists and soil scientists with extensive experience in the Mid-Atlantic region, covering all aspects of geotechnical engineering, from deep foundation construction to design-build construction contracts of roadways and bridges.

Our goal on every project is to maximize design properties and recommend practical geotechnical design alternatives that save time and minimize cost. Our proactive value-engineering approach, combined with industry certified facilities, equipment, experience, and a broad range of in-house drilling and subsurface exploration capabilities are what sets Hillis-Carnes apart from other consulting firms.

Design

- Bearing Capacity Evaluations
- Settlement Analysis
- Pavement Design
- Shallow & Deep Foundation Analysis
- Slope Stability Analysis
- Embankment Designs
- Machine Foundation Analysis/Design
- Soil Stabilization Design
- Dewatering System Analysis
- Plate Dilatometer
- Retaining Wall Design

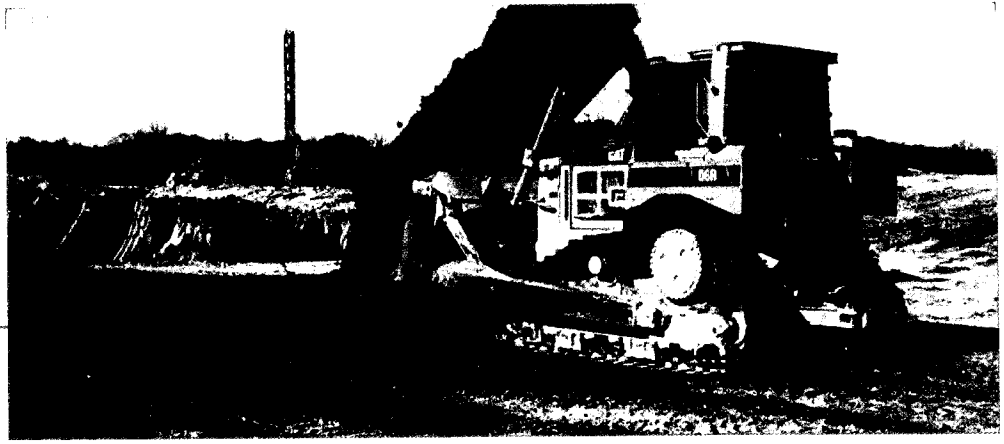
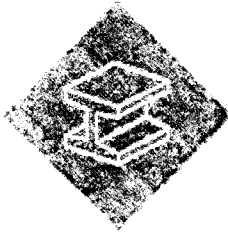
Field Analysis

- Seismic Refraction Surveys
- Evaluation of Karst Formations
- Fracture Trace Analysis
- Load Test Evaluations
- Instrumentation & Monitoring
- In-Situ Infiltration Studies
- Slope Remediation Studies
- Rock Quality Studies
- Menard Pressuremeter Studies
- Electrical Resistivity & Earth Imaging
- Ground Penetrating Radar (GPR)
- CPT & DMT Testing
- Pile Testing

Forensic

- Failure Investigations
- Foundation Underpinning Design





CONSTRUCTION MATERIALS TESTING AND INSPECTIONS

*Construction Materials Testing And Inspections
For Quality Assurance And Compliance*

Hillis-Carnes offers complete quality control inspection and materials testing for soils, structural concrete, structural and reinforcing steel, post-tensioned slabs, masonry, waterproofing, roofing, architectural pre-cast, curtain walls, flexible pavements, spread footings, and deep foundation systems.

In addition, Hillis-Carnes provides nondestructive testing for composite concrete and masonry systems and welding of structural steel members including; ultrasonic, magnetic particle, and liquid dye penetrant methods.

Loss-prevention consulting and monitoring services are offered for projects involving blasting, dewatering, and large excavations or other activities which may cause damage to structures and property adjacent to construction sites. These include; pre- and post-construction surveys (photographs and/or video), survey monitoring, instrumentation, and seismographic vibration monitoring.

Construction QA/QC Testing & Inspections

- Earthwork Monitoring
- Reinforcing Steel Inspection
- Concrete Testing
- Structural Steel Testing
- Foundation Soils Bearing Capacity Verification
- Deep Foundation Inspections
- Waterproofing Inspections
- Masonry
- Roofing Services
- Curtain Walls
- Ground Improvement Monitoring
- Helical Deep Foundation System Monitoring
- SOE Monitoring
- Fireproofing

Shop Inspections

- Architectural & Structural Pre-Cast Inspections
- Asphalt Plant Inspections
- Concrete Plant Inspections
- Structural Steel Fabrication Shop Inspections
- Paint Coating Shop Inspections

NDT Testing & Inspections

- Ultrasonic Testing (UT)
- Magnetic Particle (MT)
- Dye Penetrant (PT)
- NACE Certified Coatings Inspections
- Bolt Fastener Tension
- Rebar Location

Floor Flatness Surveys

Failure Investigations & Analysis

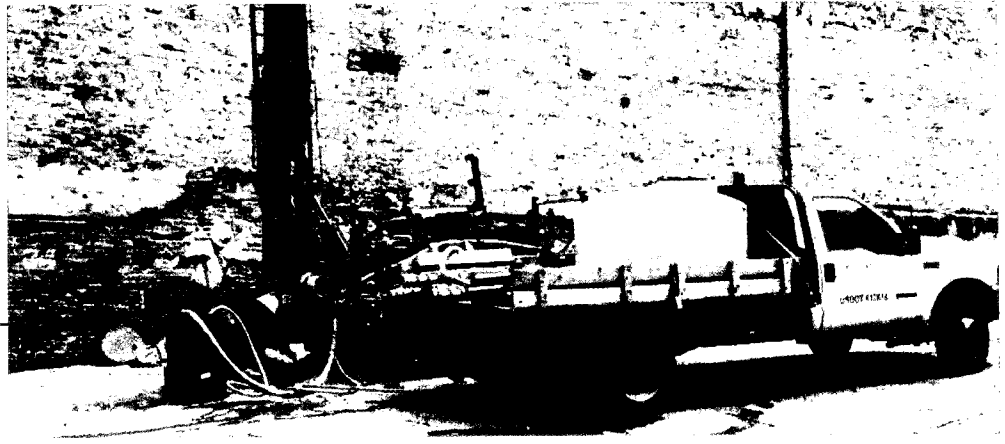
Load Test Monitoring

Vibration & Blast Monitoring

Ground Penetrating Radar (GPR)

Accredited Laboratories





DRILLING/SUBSURFACE EXPLORATION

Full-Scale Drilling And Subsurface Explorations From A Single Company

Hillis-Carnes maintains a diverse fleet of variably mounted drill rigs to perform subsurface sampling, testing and monitoring well installation. The drill rigs vary in carrier type, size, mast height, and torque allowing us to offer the flexibility to drill with a variety of power given the subsurface conditions. This flexibility allows us to perform all types of geotechnical exploration and instrumentation installation in all environments. We specialize in difficult access drilling and have vast experience performing explorations under the most difficult circumstances.

With our own hauling capabilities, a faster turnaround time can be achieved when performing test pits, identifying conditions of existing foundations and performing environmental subsurface explorations. Hillis-Carnes can provide standard soil borings, rock coring, pressuremeter testing, piston sampling, packer testing, monitoring well installation, geotechnical instrumentation installation (piezometers, inclinometers, extensometers), core drilling of concrete caissons, as well as air track explorations for rock profiling and identification of solution activity/voids in karst geology. All crews have completed the OSHA 40-hour training and are FHWA subsurface investigation qualified.

Drilling Equipment

- Diedrich D-50 Track-Mounted Drill
- Diedrich D-50 ATV-Rubber Tire Drills
- CME 45 Radio Remote Control Track-Mounted Drill
- CME 45 ATV-Rubber Tire Drills
- CME 45 Skid Mounted Drills
- MOBILE B-30 Truck Mounted Drills
- Acker Soil Scout Radio Remote Control Track-Mounted Drill
- Tripod Drills with Motorized/Electrical Catheads
- Gill Beetle Hydraulic Air Track Drills
- RAM Extendable Boom Air Track Drill
- Gardner Denver GDHC Air Track Drill
- Geoprobe/CPT Radio Remote Control Track Mounted Drill
- Steel Barge (26' x 19') with Push Boat
- Rev Drill Model 50 HD with 14,000 lb Winch
- Low-Overhead Feed Assembly Drills (13'-2" Clearance)
- Hilti Concrete/Asphalt Coring Systems
- ATV Water Buggy





ENVIRONMENTAL CONSULTING

*Complete Environmental Consulting Services Delivered
By A Cross-Trained Team*

Hillis-Carnes provides a wide variety of environmental services, including investigation, testing, monitoring, and remediation. These services include environmental due diligence (Phase I), sampling (Phase II), hazardous building materials surveys (asbestos and lead), and the design and monitoring of soil and groundwater remediation programs. Many of these services can be performed in conjunction with geotechnical explorations to provide turn-key services, eliminating the need for clients to engage multiple consultants and ensuring continuity throughout the project.

The environmental services offered by Hillis-Carnes meet the needs of a diverse client base, including those purchasing or insuring real estate, providing loans on real estate, required to perform remediation of environmental contaminants, etc. These services provide clients with the information necessary to make informed management and financial decisions.

Due Diligence Services for Real Estate Transactions

- Phase I & Phase II Environmental Site Assessments
- Asbestos Surveys
- Lead Services
- Radon Testing
- Drinking Water Sampling
- Regulatory File Reviews
- Peer Reviews of Environmental Reports
- Property Condition Assessments (PCAs)
- Environmental Transaction Screens (ETSs)

Hazardous Building Materials Surveys for Renovation/ Demolition

- Asbestos Surveys & Lead Paint Services
- Waste Profiling
- Inventory of Light Ballasts, Light Tubes, Chemicals & Tanks

Regulatory Driven Investigations

- Soil & Surface Water Sampling & Analysis
- Groundwater Monitoring Well Installations, Gauging & Sampling
- Remediation Projects

Storage Tank Services

- Removals/Closures
- Subsurface Evaluations
- Interface with Regulatory Agencies

Environmental Monitoring During Construction

- Construction Quality Control (CQC) Environmental Management
- Excavation Monitoring for Impacted Soils
- Monitoring of Dewatering System
- Air Monitoring





ENVIRONMENTAL CONSULTING

(CONTINUED)

Ecological Studies

- Wetland Determinations, Delineations & Permitting
- Forest Stand Delineations
- Identification of Waters of the U.S., Stream Restoration & Monitoring

Redevelopment of Impacted Properties Via Voluntary Cleanup Program (VCP)

- Evaluate Prior Investigations
- Attend Pre-Application Meeting with MDE & Preparation of VCP Applications
- Develop Scope of Work & Conduct Supplemental Investigations
- Implement Response Action Plans
- Interface with Clients' Legal Counsel

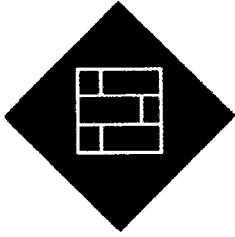
Remediation of Metals at Orchards, Golf Courses

- Delineation of Contamination
- Pilot Testing to Determine Remedial Options
- Interface with Legal Counsel
- Interface with Regulatory Authorities
- Assistance with Preparation of Real Estate Disclosures
- Oversight of Remedial Activities
- Waste Characterization
- Post-Remediation Verification Sampling

Methane Gas Studies

- Indoor Air Quality Services
- Testing of Subsurface Soils
- Determination of Mitigation Measures





GEOSTRUCTURAL ENGINEERING

Structurally Sound And Cost-Smart Geotechnical Solutions

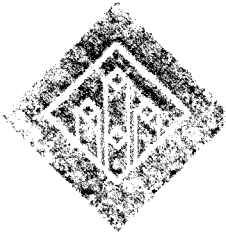
We provide a wide range of structural and geotechnical engineering services that address the elements of a project that can benefit from the unique combination of these two disciplines. Bringing these specialties together under the management of a single consultant opens the lines of communication and fosters a closer working relationship among all the stakeholders in a project.

With the combined knowledge base of our geotechnical engineers and structural engineers, we can more effectively analyze the mutual effect of the structural elements against soil and rock. For instance, the design of earth-retaining structures and supported excavations where the type of structure, size of a structure, and method of anchoring or tieback are primarily driven by the conditions of the retained soils and proper construction control and recommendations.

In the case of existing structures, we manage the forensic evaluation, rehabilitation, and repair where the complex interaction between existing structural elements such as foundations and the in-situ materials requires detailed analysis and understanding of both the structural and geotechnical engineering disciplines.

- Support of Excavation Design
- Foundation Underpinning Design
- MSE & Concrete Retaining Wall Design
- Foundation Design
- Structural Investigations
- MSE (Modular Block) & Concrete Retaining Wall Design
- Bridge Abutment Design
- SWM Structure Design
- Weir Wall Design
- Noise Wall Design
- Ground Penetrating Radar (GPR)
- Pre-Construction/Post-Construction Surveys
- Property Condition Assessments (PCAs)
- Deep Foundation (Micropile, Helical Anchors) Design
- Residential Design
- Wood & Light-Gauge Metal Framing Inspections





DEEP FOUNDATIONS

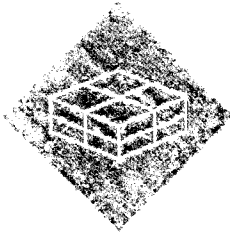
Site-Specific Deep Foundation Solutions For Safety And Performance

Deep Foundations Services at Hillis-Carnes include engineering, subsurface exploration and the associated consulting services related to the geotechnical aspects of a project. These are combined with our in-house drilling and subsurface exploration capabilities. During the construction/installation of deep foundations, we provide on-site inspection and monitoring.

The foremost goal is to create practical, cost-effective solutions. We fully explore the alternatives to determine the best foundation type to meet the project owner's technical, budgetary and scheduling needs.

Our projects have included deep foundation systems for state transportation departments and large municipal projects across the country, as well as for private clients and contractors.





GEOSCIENCE

Our Geoscience Division Is On The Forefront Of Geophysical Investigations And Evaluations

We're your team member and a true consultant by always looking out for your best interest. Whether you need information today or during several stages of the construction phase of the project, we're there to predict — and solve — the challenges that can lead to delays and cost overruns.

We take away the uncertainty of unknown subsurface conditions, including utility locations, rock profiling, groundwater source locating, sinkhole locating, reinforcing steel profiling, underground storage tank (USTs) locating, former mine operations, historic landfill zones, historic cemeteries or old foundations. We have the in-house expertise to be your single source for the most sophisticated geophysical services available.

Vibration & Noise/Sound Monitoring

- Remote & On-Site Monitoring
- Monitoring of Existing Machinery within Operating Facilities
- Background Surveys Prior to Additional Construction Activities (i.e., Demolition, Deep Foundation Installations or Blasting)
- Pre-Inspection & Documentation of Surrounding Structures (As a part of the Pre-Construction Site Surveying)

2-D & 3-D Earth Resistivity (ER) Imaging Ground Penetrating Radar (GPR) in 2-D & 3-D Electromagnetic (EM) Surveys Micro-Gravity (MG) Surveys





LABORATORY TESTING

Our laboratories are accredited by AASHTO for soils, aggregate, and concrete. We are one of the few labs in Maryland recognized by the Landscape Operations Division of the Maryland State Highway Administration. Our laboratory personnel are certified by NICET and ACI.

Soil Tests

- Sieve Analysis
- Hydrometer Analysis
- Atterberg Limits
- Classification as per USCS, AASHTO & USDA
- Modified & Standard Proctors
- Specific Gravity
- Direct Shear
- Hydraulic Conductivity (Permeability)
- California Bearing Ratio
- Organic Content (Loss on Ignition)
- pH
- Soluble Salts
- Electrical Resistivity
- Consolidation
- Unconfined Compression Strength
- UU Triaxial Shear Test
- Calcium Carbonate

Concrete Tests

- Compressive Strength of Concrete Grout & Mortar
- Split Tensile Strength of Concrete
- Flexural Strength of Beams
- Preparation & Compressive Strength of Concrete Core Samples
- Chloride Permeability
- Chloride Ion Content
- Length Change of Cement Mortar & Concrete

Asphalt Tests

- Bulk Specific Gravity of Core Sample & Maximum Theoretical Density
- Extraction/Gradation

Concrete Masonry Units Tests

- Compressive Strength on Masonry Units & Masonry Prisms
- Moisture, Absorption & Density

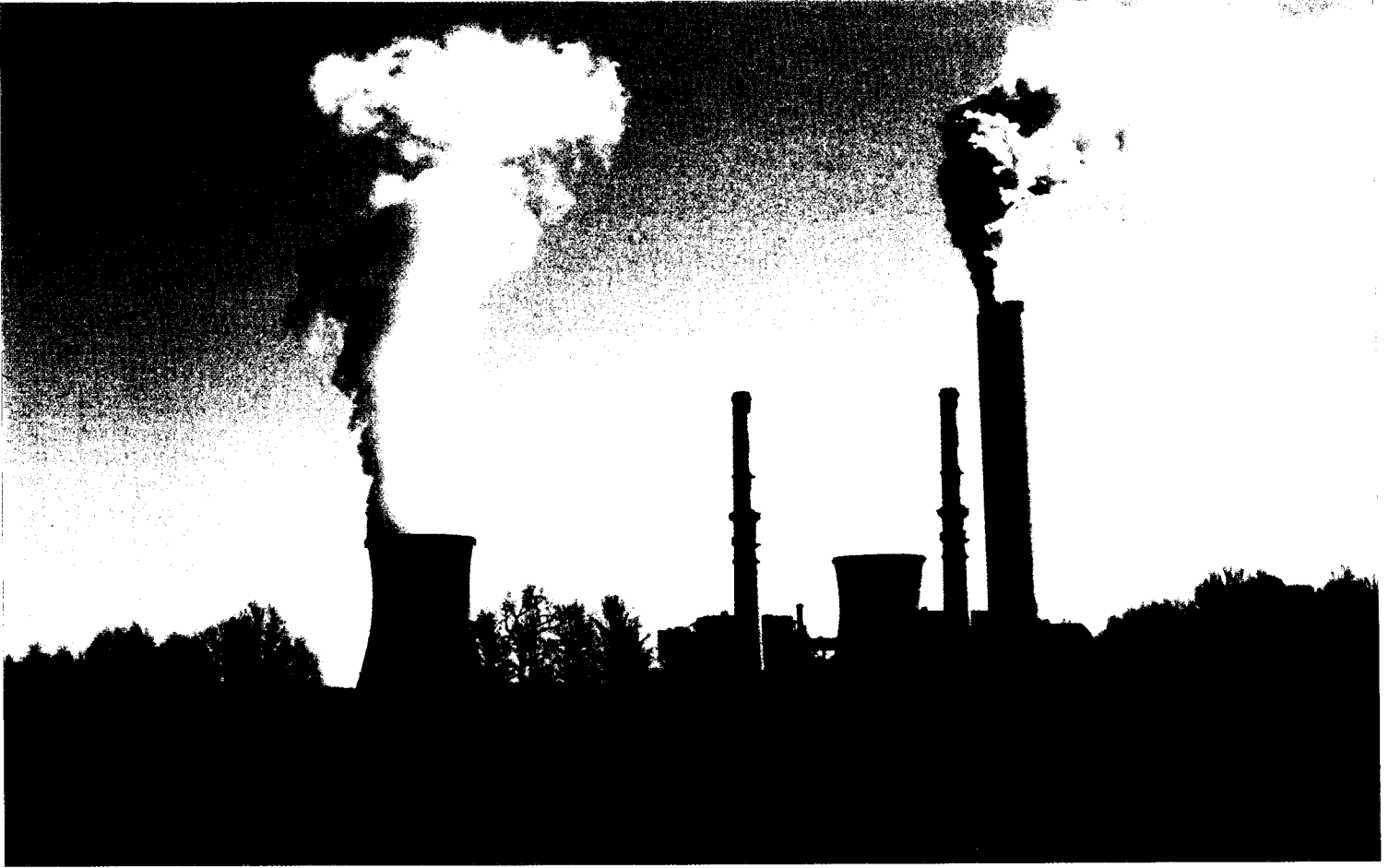
Cement Tests Include

- Fineness of Cement
- Time of Setting

Aggregate Tests

- Gradations
- Specific Gravity of Fine & Coarse Aggregate
- Organic Impurities
- Sand Equivalent
- LA Abrasion
- Sulfate Soundness
- Flat & Elongated Particles
- Aggregate Angularity





Montour Power Plant Flue Gas Desulphurization Engineering & Environmental - Energy

Site Location: Washingtonville, Montour and Northumberland Counties, PA

Client: PPL Electric Utilities (now Talen Energy)

Facility Type: Power Generation

Project Description: MKA provided land development services which included wetland delineation, securing environmental permits, erosion and sedimentation control plan, construction inspection, design and construction surveying, and building code administration services. We also provided similar services for PPL's (now Talen Energy) Brunner Island Desulphurization Project. MKA also coordinated all archaeological and cultural resource surveys for the project.

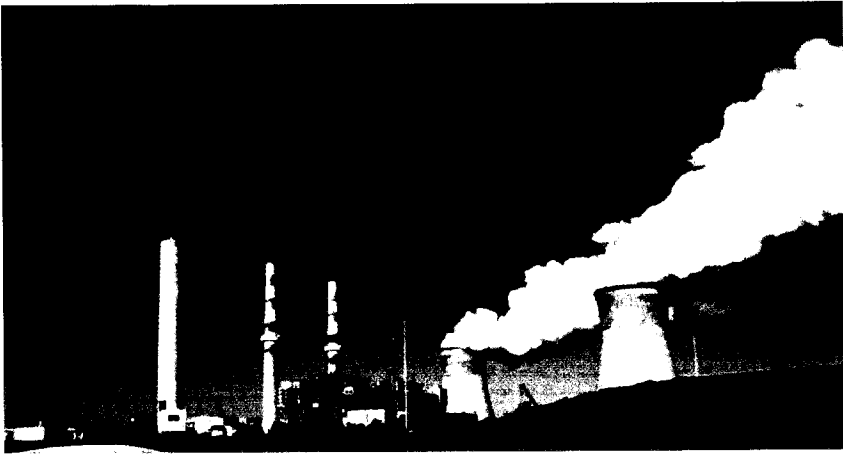


Allentown Office
3500 Winchester Rd.,
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Allentown, PA 18104
610.841.2700

Montoursville Office
1500 Sycamore Rd.,
Suite 320
Montoursville, PA 17754
570.368.3040

Pittsburgh Office
4091 Saltsburg Rd.,
Suite K
Murrysville, PA 15668
412.824.2910

Visit us at www.mctish.com



Project Attributes:

- 700-foot high flue structure
- 12-mile waste water discharge pipeline
- NPDES permit
- Section 404/Chapter 105 Joint Permit
- 6 acre wetland mitigation design



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Wayne Township Landfill

Multi-Phase Expansion

Site Location: McElhattan, Clinton County, PA

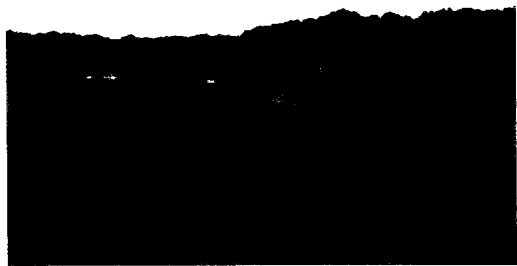
Client: Clinton County Commissioners, Clinton County Solid Waste Authority,
d/b/a/ Wayne Township Landfill

MKA Service Type: Municipal- Resource Recovery

Facility Type: Resource Recovery and Landfill

Project Description: McTish, Kunkel & Associates (MKA) continues to support the Wayne Township Landfill as they expand to fill the waste management and resource recovery needs of a multi-county region of north central Pennsylvania. Wayne Township Landfill has taken a progressive and proactive approach by offering a broad array of services to its region, contiguous industrial neighbors, and community while streamlining for operational efficiencies. MKA Projects in support of Wayne Township Landfill:

1. Four (4) track Norfolk Southern railroad spur
2. Compressed natural gas vehicle fueling station



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3. New administrative building land development and permitting
4. New vehicle and equipment maintenance building design
5. Conversion of landfill properties to the PA State Plane North Coordinate System
6. Access road bridge construction and replacement
7. Stormwater conveyance upgrades
8. Roadway construction
9. Industrial discharge pretreatment program

Project Attributes

1. Land development and zoning approvals
2. Environmental permitting
3. Land survey and construction layout
4. Stormwater conveyance and management design
5. Geo technical investigation
6. Foundation design
7. Roadway and pavement design
8. Bridge design
9. Construction services
10. Sanitary sewer and water utility relocations
11. Assistance with leachate treatment and permitting

Reference for professional services and performance:

Mr. Jay Alexander, General Manager

Wayne Township Landfill

570.769.6977

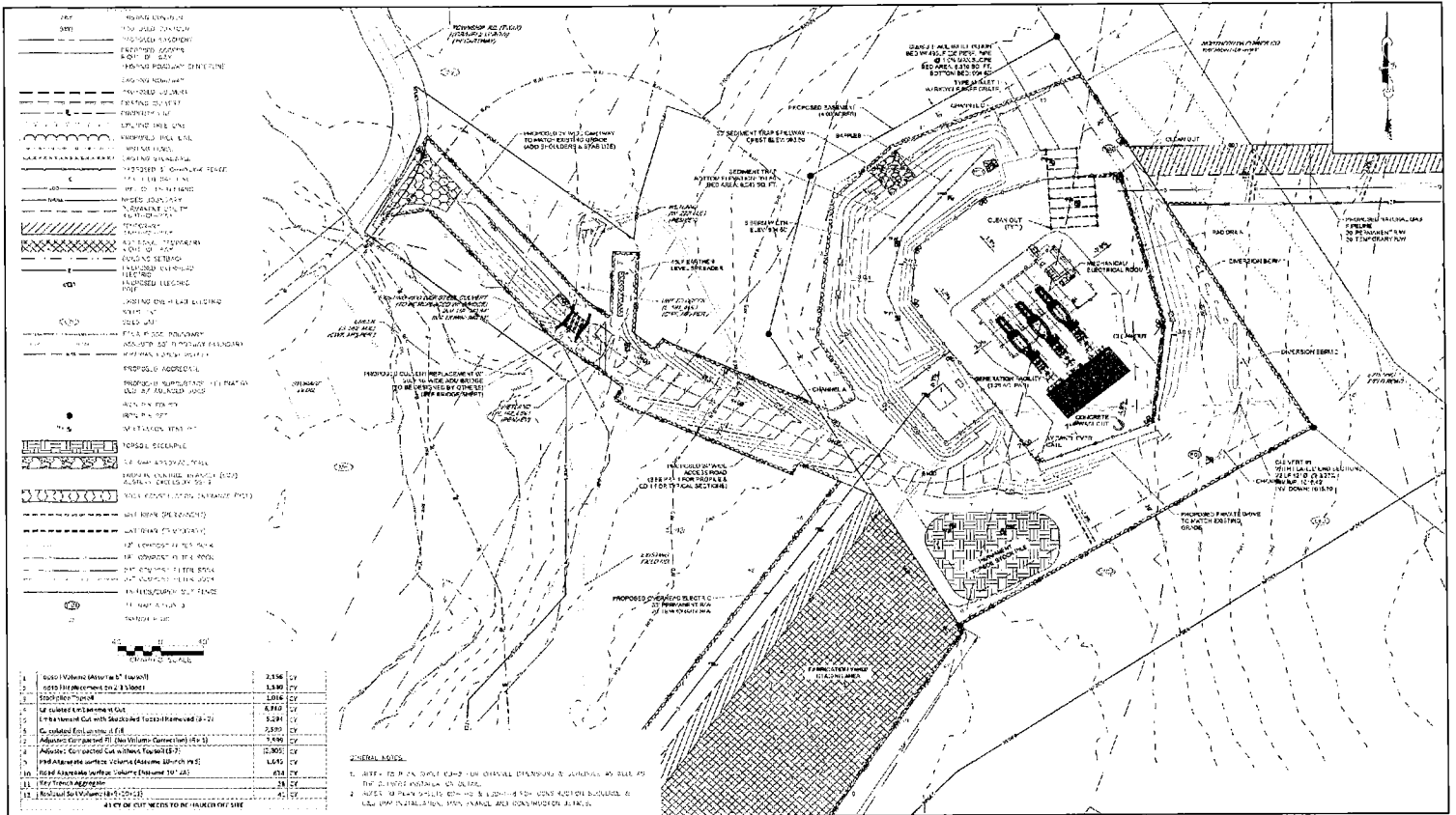


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IMG - Hop Bottom

Engineering and Environmental

Site Location: Northeastern, PA

Client: IMG Midstream LLC

Facility Type: Power Generation

Project Description: MKA has performed services on several projects owned by IMG Midstream LLC. These projects involve the construction and operation of 20 megawatt natural gas power generation facilities. In addition to engineering services, MKA conducted aquatic resource delineations relating to wild trout streams as determined by the PA Fish and Boat Commission.



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Project Attributes:

- Conducted a Phase I Environmental Site Assessment
- Obtained a Water Obstruction and Encroachment Permit from PADEP
- Obtained NPDES permit from PADEP
- PASPGP-4 permit from USACE
- 1.2-acre generation facility footprint
- 2.1-mile natural gas pipeline
- 0.4-mile electrical transmission line
- 0.1-mile access road



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Visit us at www.mctish.com



REFERENCES

- Ronald Welch
Chairman, Supervisors
Castanea Township
(570) 748-9070
- Katherine DeSilva
Director of Planning
Clinton County Commissioners
(570) 893-4080
- Jeff Sutton
Manager
Hemlock Township Supervisors
(570) 784-6178

PROPOSAL FORM

ORIGINAL

Important note to Bidders: It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to: Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 21, 2020. **This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: Larson Design Group

Company Address: 1000 Commerce Park Drive, Suite 201

Williamsport, PA 17701

Main Telephone: 570-323-6603 Main Fax: 570-323-9902

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Coleman Gregory, PE - Project Manager

Contact Telephone: 570-244-2068 Fax: 570-323-6603

Contact Email: cgregory@larsondesigngroup.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Coleman Gregory, PE - Project Manager

Office Address: 1000 Commerce Park Drive, Suite 201

Williamsport, PA 17701

Telephone: 570-244-2068 Fax: 570-323-6603

Email: cgregory@larsondesigngroup.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	<u>1 and Q&A #1</u>	Date	<u>8/6/2020</u>
Addendum No	<u>Q&A #2</u>	Date	<u>8/6/2020</u>
Addendum No	<u>Q&A #3</u>	Date	<u>8/11/2020</u>
Addendum No	<u>Q&A #4</u>	Date	<u>8/17/2020</u>

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

See Project Implementation Schedule.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

Company Type (check one):

- Sole Proprietorship Partnership Corporation Joint Venture

Bidder attests that:

1. He/she has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements;

2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor and material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

Larson Design Group
Company Name

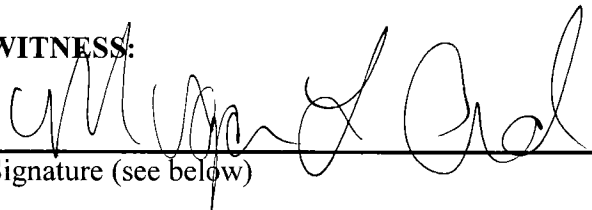
23-2615527
Federal ID#

<u>1000 Commerce Park Drive, Suite 201</u>	<u>WillamSPORT</u>	<u>PA</u>	<u>17701</u>	
Street Address	PO Box	City	State	Zip

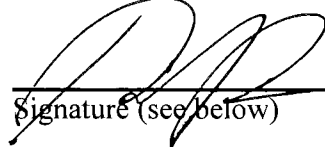
570-323-6603
Telephone #

570-323-9902
Fax #

WITNESS:


Signature (see below)

COMPANY:


Signature (see below)

Megan Conrad
Name (print)

Robert Gehr, AIA, NCARB
Name (print)

Corporate Secretary
Title (print)

Vice President
Title (print)

PRICE PROPOSAL

6.1 Cost Elements. Services not specifically mentioned in this RFP, but are necessary to provide the functional capabilities described, shall be included as part of the cost elements. Bidders should utilize this table below to justify costs.

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	\$ 3,812.50
Stormwater Drainage Design	\$ 2,020.00
Erosion/Sediment Control	\$ 945.00
Civil Permitting*	\$ 6,655.00
Geotechnical	\$ 14,585.00
Geotechnical Boring Stakeout	\$ 500.00
Construction Stakeout	Not in RFP (\$0)
Soil Resistivity	\$ 2,882.50
Preliminary and Final Construction Drawings (CDs)	\$ 950.00
Utility Coordination	\$ 8,850.00
Zoning Information	\$ 1,925.00
FAA/FCC	\$ 615.00
Field Surveying/Courthouse Research	\$ 3,812.50
Survey Plans	\$ 1,000.00
Environmental Investigation	\$ 90.00
Infiltration Testing	\$ 1,625.00
Wetlands/Stream Delineation	\$ 3,340.00
Phase 1 Investigation and Report	\$ 3,660.00
Hearing Attendance (If Needed)	\$ 1,325.00
Phase 2 Investigation and Report (If Needed)	Not in Scope (\$5,000)
NEPA/SHPO Services	\$ 3,800.00
Deliveries, Copies, Etc.	\$ 5,337.50
SUBTOTAL FOR HUGHESVILLE	\$ 67,730.00

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	\$ 3,002.50
Stormwater Drainage Design	\$ 1,665.00
Erosion/Sediment Control	\$ 940.00
Civil Permitting*	\$ 5,285.00
Geotechnical	\$ 11,955.00
Geotechnical Boring Stakeout	\$ 500.00
Construction Stakeout	Not in RFP (\$0)
Soil Resistivity	\$ 2,882.50
Preliminary and Final Construction Drawings (CDs)	\$ 950.00
Utility Coordination	\$ 8,850.00
Zoning Information	\$ 825.00
FAA/FCC	\$ 315.00
Field Surveying/Courthouse Research	\$ 3,812.50
Survey Plans	\$ 1,000.00
Environmental Investigation	\$ 45.00
Infiltration Testing	\$ 1,625.00
Wetlands/Stream Delineation	\$ 2,010.00
Phase 1 Investigation and Report	\$ 2,190.00
Hearing Attendance (If Needed)	\$ 885.00
Phase 2 Investigation and Report (If Needed)	Not in Scope (\$5,000)
NEPA/SHPO Services	\$ 3,600.00
Deliveries, Copies, Etc.	\$ 5,337.50
SUBTOTAL FOR HESKER HILL	\$ 57,675.00
GRAND TOTAL FOR BOTH SITES	\$ 125,405.00

The undersigned, as Bidder, hereby declares that the total project costs as indicated above, includes all necessary work to complete this project in full according to the general specifications contained in the RFP. Products and services not specifically mentioned, but are necessary to provide the functional capabilities shall be listed and included as part of the cost elements.

The undersigned further understands and agrees that if the County accepts the bid, no additional funds will be allowed beyond the stated total project costs.

Company Name: Larson Design Group

Address: 1000 Commerce Park Drive, Suite 201, Williamsport, PA 17701

Point of Contact: Coleman Gregory, PE Phone Number: 570-323-6603

Fax Number: 570-323-6602 Email address: cgregory@larsondesigngroup.com

Name of person submitting proposal: Bradley Aurand, PE

Signature:  Date: August 21, 2020

When submitting a bid, place the bid form sheet as the top page of the bid package and the bid price schedule as the second page of the bid package.

August 21, 2020

Lycoming County Controller's Office
Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

Re: Request for Proposals
Hughesville Water Authority Tower Site and the Hesker Hill Tower Site

Dear Commissioners:

Larson Design Group (LDG) has long enjoyed the good working relationship that we have shared with Lycoming County, and we thank you for your past patronage. It is in this spirit of continued successful collaboration that we submit this proposal to provide engineering and surveying services for the Hughesville Water Authority Tower Site and the Hesker Hill Tower Site.

LDG is intimately familiar with providing technical assistance in environmental review, civil design, and permitting, especially here in Lycoming County where our team holds seats on several county and municipal governing/review bodies. We recognize the importance of the 911 emergency response system to the health and wellbeing of Lycoming County's residents – to our neighbors. We want to be a part of the betterment of our community by working with the County to complete this extremely important project which will continue to benefit our community for years to come.

If you have any questions regarding this proposal, or if you want to schedule an interview, please contact Coleman Gregory at (570) 244-2068 or Bradley Aurand at (570) 600-9034.

Sincerely,

LARSON DESIGN GROUP

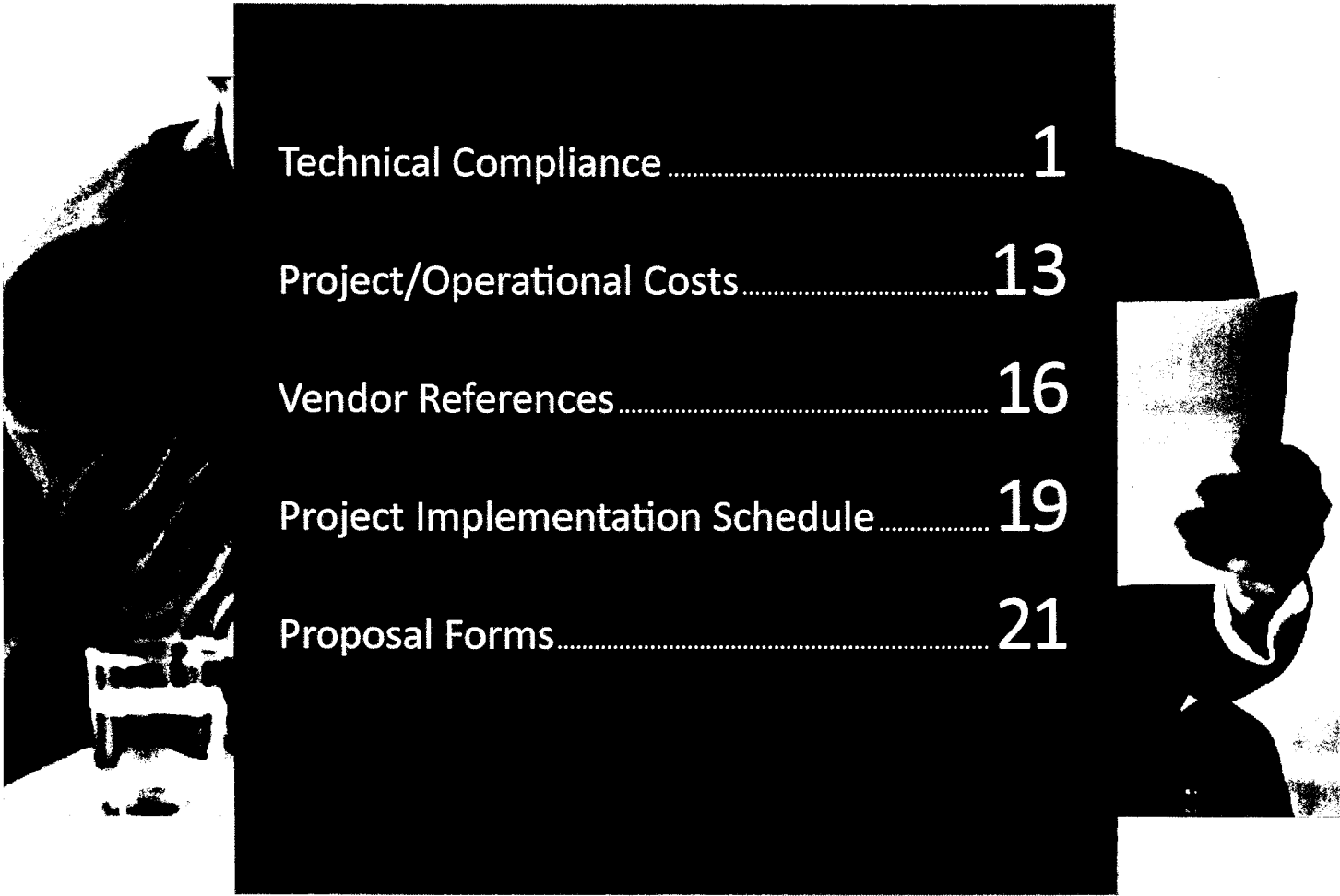


Coleman Gregory, PE
Project Manager



Bradley Aurand, PE
Director of Site Engineering

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TECHNICAL COMPLIANCE

TECHNICAL COMPLIANCE



Larson Design Group®

Larson Design Group (LDG) is an award winning, employee-owned, full-service, multi-disciplined engineering, architectural, planning, and survey firm. With over \$47 million in annual revenue, LDG currently employs over 360 personnel in 12 offices throughout New York, Pennsylvania, Ohio, West Virginia, and Arizona.

The firm provides the entire spectrum of consulting, planning, and design services nationally for municipal, state, and federal government clients as well as private sector clients. The markets LDG serves include building engineering including site development as well as civil, mechanical, electrical, plumbing, and structural engineering; transportation engineering such as highways, bridges, bridge inspection, and construction inspection; infrastructure projects such as water/wastewater, geospatial, survey, and energy; and retail design.

Project Understanding

The Hughesville Water Authority Tower Site and Hesker Hill Tower Site Project consists of the development of a 250-foot tall communications tower and water storage tank pad at the Hughesville Water Authority property at 279 Reservoir Road, Hughesville, PA. Additionally, a second equally-large tower will be constructed at 1324 Hesker Hill Road, Jersey Shore, PA currently owned by Mr. Dean Edwards. These two towers will be used to bolster the 911 emergency response communications network, while the tank pad will be used to install a second water storage tank for the Hughesville Water Authority in the future.

This project will take place in several phases:

1. Schematic design & due diligence
2. Final design
3. Permitting
4. Construction drawings

In the first phase, schematic design & due diligence, LDG will obtain publicly-available GIS contour and property boundary information to prepare schematic design plans. These plans will show the approximate property boundary, contour information, preliminary site layout, preliminary grading, and preliminary stormwater management measures (i.e. basins, berms, etc.). Because a communications tower is not a permitted use in the Residential Suburban (R-S) zoning district of Wolf Township and only permitted as a special exception in the Countryside (CS) zoning district of Piatt Township, the schematic plans will be utilized as tools to solidify consensus from Lycoming County and Lycoming County 911. The plans will also be used as exhibits in order to begin zoning variance and special exception applications from Wolf Township and Lycoming County, respectively.

Per Mr. Victor Marquardt, Zoning Officer of Wolf Township and Mr. David Hubbard, Zoning Administrator for Lycoming County; the Wolf Township site development will require a zoning variance and the Piatt Township site development will require a special exception. Both of these processes are expected to take approximately 12 weeks to complete. Due to the need to acquire the special exception and variance, we do not anticipate meeting the required 2/28/2021 end date specified in the RFP.

Following the approval of the Wolf Township zoning use variance and Lycoming County special exception, additional due diligence will proceed. This will consist of environmental, archaeological, and habitat investigation along with geotechnical, soil resistivity, and infiltration testing. In addition, a topographic survey will be performed of the immediate project areas. As directed in the "Question and Answers #4" document released August 14, 2020; no boundary survey is included in this proposal for either site.

TECHNICAL COMPLIANCE

After the Schematic Design & Due Diligence phase is complete, the Final Design phase will commence. Final Design will consist of horizontal site layout, vertical grading design, utility coordination and design, erosion and sediment control (E&S) design, and post-construction stormwater management (PCSM).

Once complete, permitting through various agencies such as the Federal Communications Commission (FCC), Federal Aviation Administration (FAA), Pennsylvania Department of Environmental Protection (PADEP), the Lycoming County Conservation District, Wolf Township, and Piatt Township will take place.

Following approval of the permitting, construction plans will be drafted which will further detail the approved plans in order to facilitate construction.

Scope of Work

TASK 1 -- SCHEMATIC DESIGN & DUE DILIGENCE

1.1. Schematic Planning: In order to maximize communication between the County, Water Authority, homeowner, and LDG, schematic exhibits of both sites will be prepared using publicly available GIS contour and property information. This GIS contour information will not be used during final design as a topographic field survey will be conducted.

LDG will utilize Google aerial mapping, GIS LIDAR contour data, and GIS property information to create schematic design plans for the Wolf Township and Piatt Township Sites. These schematic plans will be electronically submitted to the County, Hughesville Water Authority, and homeowner for review and comment. Additionally, a field meeting will be conducted where the design will be reviewed.

1.2. Wolf Township Zoning Variance: Per Wolf Township Zoning Ordinance section §27-304 R-S Residential-Suburban District, commercial communications transmitting and receiving towers and antennas are not a permitted use. Therefore, a zoning use variance is required. Components of the zoning variance application are as follows:

- Submit a zoning application & fee (\$25.00 assumed)
 - \$0.07/square foot, \$25 minimum
- Zoning application to be denied. Zoning officer to verify violated ordinance sections
- Zoning variance application & fee (\$600.00)
- Township Zoning Hearing Board (ZHB) hearing within 45 days (30 days assumed)
- ZHB hearing attendance
- ZHB decision to take 90 days maximum (30 days assumed)

1.3. Lycoming County Special Exception: The project site in Piatt Township is located on a farm owned by Mr. Dean Edwards. This farm is zoned (C-S) Countryside. Per Table 3120 of the Lycoming County Zoning Ordinance, communications towers are permitted only by special exception in the Countryside zoning district. Component of a special exception proceedings are as follows:

- Submit special exception application & fee (\$300.00)
- ZHB sets hearing within 60 days (30 days assumed)
- ZHB meeting attendance
- ZHB renders decision within 45 days (30 days assumed)

1.4. Soil Resistivity: LDG will utilize the specialized services of THG Geophysics to perform the required soil resistivity test. THG will visit each site to conduct in-situ soil resistivity tests in accordance with ASTM Standard Method G-57 and IEEE Standard 81. Each set of tests will be acquired utilizing a 10D Wenner array with "a"-spacings of 30, 60, 90, 120, 150, 180, 210, 240, 270, and 300 feet to obtain grounding properties. A letter reporting their findings will be provided.

TECHNICAL COMPLIANCE

1.5. Phase 1 Environmental Site Assessment (ESA): LDG will conduct Phase I Environmental Site Assessments (ESA) at both project sites. These ESAs will consist of three primary activities: Background Research; Site Reconnaissance; and Conclusions and Summary. This Scope of Work has been generally developed based on the various ASTM Standards for site investigations.

- **Background Research:** LDG will utilize a database service to perform an agency database search and to obtain Sanborn maps and aerial photographs. Relevant PADEP files, including Waste Management Program (WMP), Water Quality Management Program (WQMP), General Correspondence, and Notice of Violation files, will be reviewed for information relating to the environmental states of properties located within the project area. Pennsylvania State solid and municipal waste listings, Pennsylvania Priority List (PPL), Municipal Landfills List, Solid Waste Inventory, and Underground Storage Tank (UST) Listings will also be reviewed. Contact will be made with persons who may have knowledge of historical land uses and local activities. Aerial photographs, Sanborn maps, and city directories will be reviewed, when available, to document any changes in land use throughout the project area.
- **Site Reconnaissance:** Non-intrusive site reconnaissance throughout the study area will be undertaken. Site reconnaissance will be performed to observe, by visual means, indicators of existing or potential site contamination. Site reconnaissance activities will specifically search for evidence of waste products, such as wells, tanks, fill ports or vent pipes, drums, ponds, fills, exposed asbestos, air stacks, soil discoloration, odors, sumps, absence of vegetation, distressed vegetation, seeps and leachate, and other indications of potential contamination. Existing land use at the site and in the immediate area will be observed and documented, as well as site improvements and structures. All potential waste sites will be located and mapped using GPS. A map will be produced to show all areas of potential contamination.
- **Conclusions and Summary:** At the conclusion of the Phase I ESA, LDG will prepare a report, providing a summary of the study methodology, findings of background research, site reconnaissance activities, and finally conclusions. The report will specify the number, type, and general location of waste sites and potential waste-related liabilities discovered. Based on the evaluation of data and utilization of the appropriate ASTM classifications, the Phase I ESA report will provide conclusions regarding the condition of the property and any potential environmental concerns.

1.6. Wetlands and Streams Identification: LDG will conduct a stream and wetland delineation for both project sites. LDG will assess the proposed limits-of-disturbance (LOD) to determine if there are any streams and/or wetlands present within the survey area. The delineation will be comprised of background data review, a field investigation and the report-of-findings.

LDG will perform a stream/wetland delineation and will be conducted in accordance with the 1987 U.S. Army Corps of Engineers Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual. Regulated streams will be identified and classified in accordance with PADEP Chapter 87 regulations as well as U.S. Army Corps of Engineering resource definitions.

The wetland investigation will identify any regulated wetland resources and determine the boundaries of each wetland area by identifying wetland soils, vegetation, and hydrology that meet the criteria outlined in the manual. Wetlands will be classified according to Classification of Wetlands and Deepwater Habitats of the United States (Cowardin, et al., 1979). Data forms will be completed for each identified wetland as well as for representative upland areas.

The stream investigation will begin with a review of existing project mapping to identify existing data. Field data will be collected on the streams including width, depth, bank condition, substrate and instream habitat description, and surrounding land cover as well as visual observation of aquatic life. A field data form will be completed for each stream.

An Aquatic Resource Report will be prepared to document the aquatic resources investigations. The report will include a project description, methodology, mapping of the project study area and identified resources, NWI boundaries, a soils map, and a description of the wetlands and regulated waterways. The report will be prepared sufficient for use in any permitting required for the project.

1.7. NEPA/SHPO Services: LDG will conduct the necessary studies and complete the necessary documentation to satisfy the FCC NEPA clearance. It is anticipated that the project will qualify for an FCC Categorical Exclusion (CE) based on a checklist of criteria. LDG will collect the background data to confirm a lack of critical resources on the project area and review the site as part of the other studies under this proposal.

The PA Historic and Museum Commission (as the state SHPO) will be consulted to obtain the necessary cultural and archaeological clearances. Based on review of the project site, no historic resources are present that may be affected. Additionally, no significant archaeological resources are anticipated, and it is assumed that PHMC will provide clearance without detailed archaeological investigations.

TECHNICAL COMPLIANCE

LDG will prepare a summary of the environmental investigations to document the compliance with the CE criteria. The documentation will be prepared in a report format that can be submitted to the FCC for environmental clearance purposes.

The FCC Form 854 will be completed and submitted with the certification that there are no significant impacts to the environment. Prior to submission of Form 854, the FAA Form 7460-1 will be submitted for the tower to obtain FAA clearance for the tower.

Notice will also be made to the local community through publication of a Public Notice in a local newspaper. The notice will provide the local community with the opportunity to comment on the project to satisfy the public coordination portion of the NEPA clearance.

1.8. Infiltration Testing: LDG will conduct infiltration testing on the proposed project location. Testing sites will be determined by the Project Engineer prior to testing. An excavator will be required to dig the Deep Probe soils pits and Infiltration Test pits. A PA One Call will be required to be completed by the excavator prior to the tests being completed. All testing will be completed in accordance with the Pennsylvania Stormwater Best Management Practices Manual. After completion of all testing, a Summary of Finding Report and Data Sheets will be completed.

1.9. Field Survey: LDG will survey the project areas as clarified by the schematic plans created. Components of the Field Survey task are as follows:

- **PA One Call:** As required by Pennsylvania State Law, the PA One Call system will be contacted. Field-marked utilities will be located during field survey. Mapping information received will be shown approximately along with the field-located utility information on the civil plans.
- **Courthouse Research:** LDG will visit the Lycoming County Courthouse to obtain copies of the deeds of the two properties in question. A portion of each property must be set in order to set lease parcels for the tower sites.
- **Boundary Survey:** Per the direction of the 4th Q&A document issued, no costs for a complete boundary survey are included in this proposal. This is contrary to the requirements of the RFP and direction given in the field. LDG will only set a portion of the property as necessary to create and describe the lease parcels for the tower sites.
- **Topographic Survey:** LDG will perform a topographic survey of both the Wolf Township site and the Piatt Township site. The area of topographic survey is approximately four acres for the Wolf Township site and approximately 2 acres for the Piatt Township site. All existing natural or man-made features will be located. Marked utilities will be located. Traverse points and a minimum of two benchmarks will be set for use during construction at each site. Survey will be based on PA State Plan North and North American Vertical Datum of 1988 (NAVD88).
- **Lease Parcel Documentation:** LDG will create exhibits and legal descriptions defining the lease parcels for each tower site.
- **Geotechnical Boring Stakeout:** LDG will install wooden stakes at points to be geotechnical bore locations.
- **FAA Accuracy Letters:** Stamped and signed letters will be generated certifying compliance with FAA Horizontal Accuracy Code 2 and FAA Vertical Accuracy Code C.

1.10. Geotechnical:

- Project Initiation, Document Review, and Site Reconnaissance
 - This task includes a review of readily available geologic literature along with readily available historic topographic maps and aerial photos. LDG will stake borings under a separate task.
- Geotechnical Subsurface Investigation
 - Drilling for the project will include three test borings at each tower site. Locations will be selected based on location of the proposed structures and drill rig access. The borings will be extended to a depth of 35 feet each. If bedrock is encountered prior to this depth, the borings will be advanced utilizing rock coring techniques to achieve the termination depth. It is estimated that approximately 30 feet of soil drilling and approximately 75 feet of rock coring will be required for the Hughesville project and approximately 60 feet of soil and approximately 45 feet of rock core will be required for Hesker Hill.
 1. For the purposes of this proposal, we based our price on the number and depths of the borings noted above. If the inspection time and drilling quantities change for the various items or the boring lengths change the subsequent final costs will be adjusted accordingly based on unit rates.

TECHNICAL COMPLIANCE

2. Standard penetration test (SPT) samples will be obtained at 3-foot intervals to the top of rock in general accordance with ASTM International (ASTM) Designation D-1586 "Standard Method for Penetration Test and Split Barrel Sampling of Soils." Soils will be logged and classified according to the Unified Soil Classification System (USCS) and following ASTM D-2488 "Practice for Description and Identification of Soils Visual-Manual Procedure." All soil samples will be placed in glass jars and properly labeled. Bag samples of soil from auger cuttings may also be collected for laboratory testing.
 3. Continuous rock core samples will be obtained from the borings in general accordance with ASTM D-2113, "Standard practice for Diamond Core Drilling for Site Investigation." Each individual core run will be made to a maximum length of 10 feet. All rock cores will be placed in properly labeled core boxes. The rock core will be logged for the rock quality designation (RQD), percent rock recovery, relative degree of rock hardness, weathering characteristics, spacing of discontinuities and bedding, and lithology. It is LDG's understanding that core water is readily available nearby.
 4. Groundwater level measurements will be obtained from test borings after completion of each boring and 24 or more hours thereafter when possible.
 5. LDG will contact the Client during the work to discuss appropriate adjustments to the subsurface exploration program in the event that unforeseen conditions are encountered. LDG will also provide notification if the borings need to be significantly extended beyond the proposed depth and will provide a revised estimated cost if requested.
 6. The borings will be drilled by a qualified drilling firm, under subcontract to LDG. It is anticipated that bulldozing and/or clearing will be required to access the boring locations at the Hughesville Water Authority Tower Site.
 7. Upon completion, the test boring(s) will be backfilled with cuttings. No other site restoration is assumed to be necessary.
 8. LDG will provide an experienced field representative onsite to monitor the drilling and sampling, classify the samples, prepare logs of the borings, measure groundwater levels, and adjust the exploration program as it proceeds.
- Laboratory Testing - Soil Samples/Rock Samples
- LDG proposes the following laboratory testing program on soil samples from the project site:
 1. Classification – Soil Samples:
 - a. ASTM D2216 - 10 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass – up to two samples per site.
 - b. ASTM D4318 - 10 Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils – up to two samples per site.
 - c. ASTM D422 - 63(2007) Standard Test Method for Particle-Size Analysis of Soils – up to two samples per site.
 2. Strength Testing – Rock Samples:
 - a. ASTM D7012 "C" - Standard Test Methods for Compressive Strength and Elastic Moduli of Intact Core Specimens under Varying States of Stress and Temperatures – up to two samples per site.
- Engineering Analyses and Reporting
- Following completion of the field exploration and laboratory testing, a detailed report of geotechnical exploration will be prepared. It will include a boring location plan, test boring logs, laboratory test results, and any other data developed during the course of the exploration. The findings of the exploration will be discussed in detail, including our conclusions regarding the development of the site and foundation design. In addition, detailed design and construction recommendations will be provided. Recommendations will discuss allowable bearing capacities of the soils/rock encountered, lateral earth pressure, seismic site classification, and geotechnical construction related aspects of the project.

TECHNICAL COMPLIANCE

1.11. General Due Diligence: General due diligence research including the following will also be conducted:

- **FEMA Flood:** LDG will utilize the Federal Emergency Management Agency's (FEMA) website to create a FIRMette showing the floodway, floodplain, and 100-year flood water surface elevation.
- **PNDI Review:** LDG will utilize the Pennsylvania Natural Heritage Program's (PNHP) website to create a Pennsylvania Natural Diversity Inventory (PNDI) review of the project area in order to verify whether any endangered or threatened animals or vegetation will be impacted through the development of this project.
- **Web Soil Survey:** The US Dept. of Agriculture and the Natural Resources Conservation Service's Web Soil Survey website will be utilized to generate a report of the soils in the project area.
- **Receiving Waters:** Downstream receiving waters will be identified and classified per PA Chapter 93 via the PA Dept. of Environmental Protection's (PADEP) eMapPA website.

TASK 2 – FINAL DESIGN

Following the approval of the Wolf Township zoning variance, the Lycoming County special exception, and the completion of all inspection/testing, the final design phase will commence. The approved schematic plans will be further detailed to provide enough detail for permitting and construction. This final design phase will consist of the following:

2.1 Horizontal Site Layout:

- Pad, access drive, channel, tower, radio shelter, generator, etc.

2.2 Grading: Vertical design such as:

- Roadway/channel centerline profiles
- Tower/tank pad grading

2.3 Stormwater: Post-Construction Stormwater Management (PCSM) design

- To be in accordance with PADEP Best Management Practice (BMPs) Manual
- BMPs expected to be detention/infiltration basins and native meadow seed mixes. No underground detention/infiltration systems are expected
- A PCSM Narrative will be created demonstrating compliance with Wolf Township, Lycoming County, and PADEP NPDES regulations. This report will be required for permitting in the following phase
- Storm sewer design

2.4 Erosion and Sediment Control (E&S) Design:

- To be in accordance with PADEP Erosion and Sediment (E&S) Control Manual
- An E&S Narrative will be generated and submitted to Lycoming County, Wolf Township, and the Lycoming County Conservation District during land development, E&S, and PAG-02 NPDES permitting

2.5 Electrical Design: as follows:

- Electric/Communication coordination
 - Will serve letter acquisition
 - Work order number acquisition
 - LDG will meet with each utility provider on each site once for a total of two site visits. LDG will coordinate with each utility and owner a specific date and time for the on-site utility meetings. Additional fees will be required to schedule and attend addition onsite utility meetings if the utility companies do not show.
- Provide an electrical site plan showing the routing and details of the power and communications based on specific utility requirements.
- Provide an electrical service design and kiosk to provide up to four 200-amp services at each tower site. It is assumed one 200 amp service will be utilized by the county and the three remaining meters will be for future vendors.

TECHNICAL COMPLIANCE

- Provide design and plans for the power and communication connections to the shelter and one generator.
- Provide an electrical grounding plan and details for the grounding of the fence.
- Provide generator sizing and design for one generator based on loads provided from shelter drawings.
- Electrical specifications will be listed in note form on the drawings.

2.6 Miscellaneous detailing for site features:

- Fencing/gate design

TASK 3 – CIVIL PERMITTING

Civil permitting involved in this project includes the following permitting procedures for each site:

3.1 Wolf Township Land Development (LD): Following approval of the zoning variance and completion of due diligence and design elements of the project, the LD application process will begin. This will proceed as follows:

- Seven copies of the LD plans. These plans will be stamped by the Township to document date of submission. Four of these seven plans will then be taken to the Lycoming County Planning Commission for review.
- Three copies of all reports (i.e. PCSM, E&S, geotechnical, infiltration, environmental, utility will serve letters, etc.)
- Three copies of a cost estimate
- Improvement guarantee (110% of estimated project cost)
- PADEP Sanitary Sewage Mailer
- Application Fee \$2,700.00
 - \$200.00 with an additional \$2,500.00 escrow fee
 - This must maintain a minimum of \$1,000.00 throughout the project
- Lycoming County LD Review Submission: LDG will make a LD review submission to Lycoming County Planning Commission for the Wolf Township tower site. This submission will consist of the following:
 - Completed LD review application
 - Four sets of LD plans
 - Application Fee: \$25.00 + \$5.00/non-residential building
- Approximately \$30.00 (exempting generator and tower area)
 - County Planning Commission to return comments within 30 days of submission
- Wolf Township to return comments to LDG within 45 days of Township submission
- LDG to issue formal comment response letter and revised plans to Township
- LDG to attend Planning Commission Meeting where recommendation of award is made
- LDG to attend Township Supervisor Meeting where LD approval is awarded
- LDG to facilitate plan signatures by Owner, Township, County, Twp. review engineer, and LDG
- LDG to record plans at the Lycoming County Courthouse

3.2 Piatt Township LD Submission through Lycoming County Planning: Concurrent with the Wolf Township LD process, a LD application will be made to the Lycoming County Planning Commission for the Piatt Township tower site. This process consists of the following components:

- Six copies of the LD Plans
- Application Fee: \$155.00 + \$0.05/building square footage
 - Approximately \$180.00 (exempting generator and tower area)

TECHNICAL COMPLIANCE

- ❑ One copy of all reports (i.e. PCSM, E&S, geotechnical, infiltration, environmental, utility will serve letters, etc.)
- ❑ PADEP Sanitary Sewage Mailer
- ❑ Lycoming County to return comments to LDG within 30 days of submission
- ❑ LDG to issue formal comment response letter and revised plans to Township addressing
- ❑ LDG to attend County Planning Commission Meeting where recommendation of award is made
- ❑ LDG to attend Lycoming County Commissioners Meeting where LD approval is awarded
- ❑ LDG to facilitate plan signatures by Owner, County, County review engineer, and LDG
- ❑ LDG to record plans at the Lycoming County Courthouse

3.3 FCC & FAA Permitting: Per the FCC website, Tower and Antenna Siting requires the following components:

- ❑ Approval from the state or local governing authority for the proposed site. This will be addressed through LD and NPDES permitting
- ❑ ESA & NHPA: Tasks 1.5 – 1.7 (detailed above) will address requirements of the Endangered Species Act (ESA) and National Endangered Policy Act (NHPA)
- ❑ FAA Notification:
 - LDG will utilize the Notice Criteria Tool on the Federal Aviation Administration (FAA) website
 - If required, a FAA Form 7460 -1 will then be submitted to secure a “No Hazard Determination”
- ❑ Antenna Structure Registration (ASR) to be completed by MCM

3.4 PADEP PAG-02 NPDES Permit: It is assumed that improvements at the Wolf Township site will exceed one acre, therefore a PADEP PAG-02 NPDES permit is required. This permit will be administered by the Lycoming County Conservation District. Per preliminary investigation of the downstream receiving waters, it is assumed that a general NPDES permit will be required. This permitting process will run concurrently with the LD applications and will consist of the following components:

- ❑ Act 14 Letters and proof of receipt by Piatt Township and Lycoming County
- ❑ Notice of Intent (NOI) – Application
- ❑ Three copies of PCSM and E&S narratives
- ❑ Three copies of PCSM and E&S plans
- ❑ PNDI receipt
- ❑ Location map (U.S.G.S. quadrangle map)
- ❑ Permit Filing Fee: \$500.00
- ❑ Land Disturbance Fee: \$100/disturbed acre (\$500.00 assumed)

3.5 Lycoming County E&S Application: Both the Wolf Township and Piatt Township are expected to disturb over 5,000 square feet and will therefore require separate E&S permits through the Lycoming County Conservation District. The Wolf Township E&S permit application will only involve an application and fee as the PAG-02 NPDES permit application contains all of the necessary information. However, the Piatt Township site will require E&S plans and narratives. The two E&S permit application components are detailed below:

- ❑ Wolf Township E&S Application
 - E&S Permit Application
 - E&S Fee: \$400 (Assumed fee based on earth disturbance)
- ❑ Piatt Township E&S Application
 - E&S Permit Application
 - E&S Permit Application Fee: \$400.00 (Assumed fee based on earth disturbance)
 - E&S Plans
 - E&S Narrative

TECHNICAL COMPLIANCE

TASK 4 – CONSTRUCTION DRAWINGS:

Following permit approval, LDG will create construction plans which will detail construction on both sites. We will provide three physical and one PDF copy of these plans to Lycoming County for distribution. These plans will consist of the following:

- Coversheet
- General Information
- Notes
- Existing Conditions Plan
- Demolition Plan
- Site Plan
- Grading Plan
- Utility Plan
- Channel/Pipe Profiles
- Details
- Approved Wolf Township E&S Plans
- Approved Piatt Township E&S Plans

ASSUMPTIONS/QUALIFICATIONS:

General:

- Structural/retaining wall design is not included as a part of this proposal. If, during the course of design, it becomes apparent that a wall will be necessary, it will be handled as a delegated design.
- LDG will meet all documented submission timelines, however LDG cannot be held responsible for issues relative to the responsiveness or efficiency of the reviewing agencies.
- It is assumed that this project will not be phased.
- It is assumed that one submission will be required for LD by the municipality/county, and that two separate submissions (preliminary and final) will not be required.
- Meetings requested by the client, other than those contained herein, will be documented and addressed as additional services.
- No fees are included for the preparation of applications for funding requests.
- At this point, the source of funding and the requirements associated with that funding is unknown. It is possible that the source of funding may carry with it certain requirements with regard to design and studies. These cannot be defined at this time.
- No fees are included for design of a site lighting plan or landscaping plan. On some occasions, the municipality has requested these items as a part of their plan review.
- It is assumed that no traffic impact studies or offsite improvements will be required.
- Tower must be designed to fall on itself.
- Tower will be designed to hold other's antenna.

Survey:

- It is assumed that field personnel will have access to site, and that the County will work with the landowner to coordinate entry.
- It is assumed that LIDAR contour data will be used to show topography outside of the project area.
- Per the direction provided in the bidding process, GIS property boundary information will be used in the permitting processes. If a traditional boundary survey becomes required, we can provide this service as an additional expense.

TECHNICAL COMPLIANCE

Geotechnical:

- The owner will provide LDG right of access to the drilling locations. LDG will have full and ready access to the project area.
- The Drilling Subcontractor will initiate the safe dig notification. If requested, LDG will subcontract a subsurface underground utility engineering (SUE) firm, prior to commencing any operations, to locate and mark all existing underground pipelines and utilities that are in close proximity to the proposed test borings. LDG will prepare a cost estimate for these services, if necessary. These additional services will be provided upon authorization from the Client. LDG and our drilling subcontractor are not responsible for damage to private underground facilities not identified by the owner at each boring location or for losses and repairs resulting from the drilling operations at those locations.
- It is LDG's understanding that we have been informed of any environmental conditions and there are no environmental concerns that would require any special PPE or monitoring or procedures.

Soil Resistivity Testing:

- THG personnel will have legal access to the property under investigation.
- The site shall be accessible by vehicle or foot. If the survey area is dense with vegetation and cannot be cleared with a machete, it may be inaccessible.
- To ensure safety throughout the duration of the project, THG personnel may implement minimal traffic control measures (i.e. cones) on private property. Client assistance may be necessary. Areas located in high traffic may not be accessible and thus not available for geophysical investigation.
- If work area conditions become unsafe, THG has the authority to stop work.
- A seven day work week during daylight hours.
- The removal of vehicles and other surface debris interfering with THG's field activities will be the responsibility of the Client prior to arrival.
- Metallic utilities and those carrying a 60 Hz frequency can negatively impact the collection of geophysical data if they are not the target of investigation.
- Two-week notification for airline travel to a project.
- Assuming level D PPE. Extra costs will be billed for additional personal protective equipment.
- Required health and safety meetings over one hour will be billed as extra at time and materials.
- Weather delays are not included in the proposal cost and will be billed at our hourly rates.
- Additional billing at standby rates and/or a mobilization fee when the site is not prepared for the proposed work at the time and date designated as the agreed upon starting date.
- Prices are valid for 90 days after the date of the proposal.
- Payment is due 30 days after the invoice date and independent of third-party payment.
- Any modifications to this contract must be made in writing.
- Additional work that is beyond the work scope requested by the client may result in additional project costs.

Phase 1 ESA:

- No entrance to buildings on the site will be made. Evaluations related to onsite buildings will be made based on outside visual observations as to the age, condition, and use of the building.
- The above scope does not include any subsurface exploratory activities.
- The above scope does not include any costs associated with the handling or transportation of hazardous materials.
- Field observations are limited to what is visible at the time of the investigation.

TECHNICAL COMPLIANCE

Wetland and Stream Identification:

- This proposal does not include costs associated with a Jurisdictional Determination.
- The above scope does not include any costs associated with any additional meetings that regulatory agencies may request following this field investigation.
- The scope of work does not include a detailed functional assessment of any aquatic resources.

NEPA/SHPO Services:

- This proposal does not include costs associated with preparation of an Environmental Assessment.
- This proposal does not include scope or costs for any detailed environmental studies including cultural resources.

Infiltration Testing

- This proposal assumes that there will be 1 field day of testing.
- This proposal includes cost for an excavator for day to complete the excavation of the Tests Pits and for the excavator to complete the PA One Call.

EXCLUSIONS:

The following items are not included in this scope of work, but can be provided for an additional fee:

- Lighting design
- Landscaping design
- Revisions to the plans after the Client has approved layout and authorized design of the project



**PROJECT/OPERATIONAL
COSTS**

PROJECT/OPERATIONAL COSTS

Project/Operational Costs

The project/operational costs detailed below differ from the tables provided in the RFP, because these tables detail the individual tasks and associated fees required to complete this project in chronological order.

TASK	COST
Task 1. Schematic Design & Due Diligence	\$68,000.00
1.1. Schematic Planning	\$5,875.00
1.2. Wolf Twp Zoning Variance	\$1,925.00
1.3. Lycoming County Special Exception	\$825.00
1.4. Soil Resistivity (Outside Consultant. See Below)	(See Below)
1.5. Phase 1 Environmental Site Assessment	\$5,850.00
1.6. Wetlands and Streams Identification	\$5,350.00
1.7. NEPA/SCPO Services	\$7,400.00
1.8. Infiltration Testing	\$3,250.00
1.9. Field Survey	\$10,625.00
1.10. Geotechnical	\$26,540.00
1.11. General Due Diligence	\$360.00
Task 2. Final Design:	\$27,200.00
2.1. Horizontal Site Layout	\$850.00
2.2. Grading	\$2,740.00
2.3. Stormwater (PCSM)	\$3,685.00
2.4. Erosion and Sediment (E&S) Control	\$1,885.00
2.5. Electrical Design	\$17,700.00
2.6. Misc. Detailing	\$360.00
Task 3. Civil Permitting	\$11,965.00
3.1. Wolf Twp Land Development	\$4,750.00
3.2. Lycoming County (Piatt Twp) Land Development	\$3,685.00
3.3. FCC & FAA Permitting	\$630.00
3.4. PADEP PAG02 NPDES Permit	\$1,800.00
3.5. Lycoming County E&S Applications (Wolf Twp Site)	\$125.00
3.6. Lycoming County E&S Applications (Wolf Twp Site)	\$975.00
Task 4. Construction Drawings	\$1,900.00
LABOR SUBTOTAL	\$109,085.00

PROJECT/OPERATIONAL COSTS

TASK	COST
Mileage	\$315
Wolf Twp Zoning Application Fee	\$25.00
Wolf Twp Zoning Variance Application Fee	\$600.00
Wolf Twp Land Development Application Fee	\$2,700.00
PNDI Receipt	\$80.00
Handheld Geo Fee	\$120.00
Survey Equipment Fee	\$255.00
Environmental Data Resources Research Fee	\$1,200.00
Local Newspaper Public Notice	\$1,000.00
Infiltration Test Pits – Excavator Cost	\$1,500.00
Lycoming County Special Exception Application Fee	\$300.00
Lycoming County Land Development Review Fee	\$30.00
PADEP PAG-02 NPDES Fees	\$1,000.00
Lycoming County E&S Fee (Wolf Twp)	\$400.00
Lycoming County E&S Fee (Piatt Twp)	\$400.00
Prints/Copies/Exhibits	\$750.00
EXPENSES SUBTOTAL	\$10,675.00
Resistivity Testing – THG Geophysics, Ltd.	\$5,645.00
SUBCONSULTANT SUBTOTAL	\$5,645.00
TOTAL	\$125,405.00



VENDOR REFERENCES

VENDOR REFERENCES

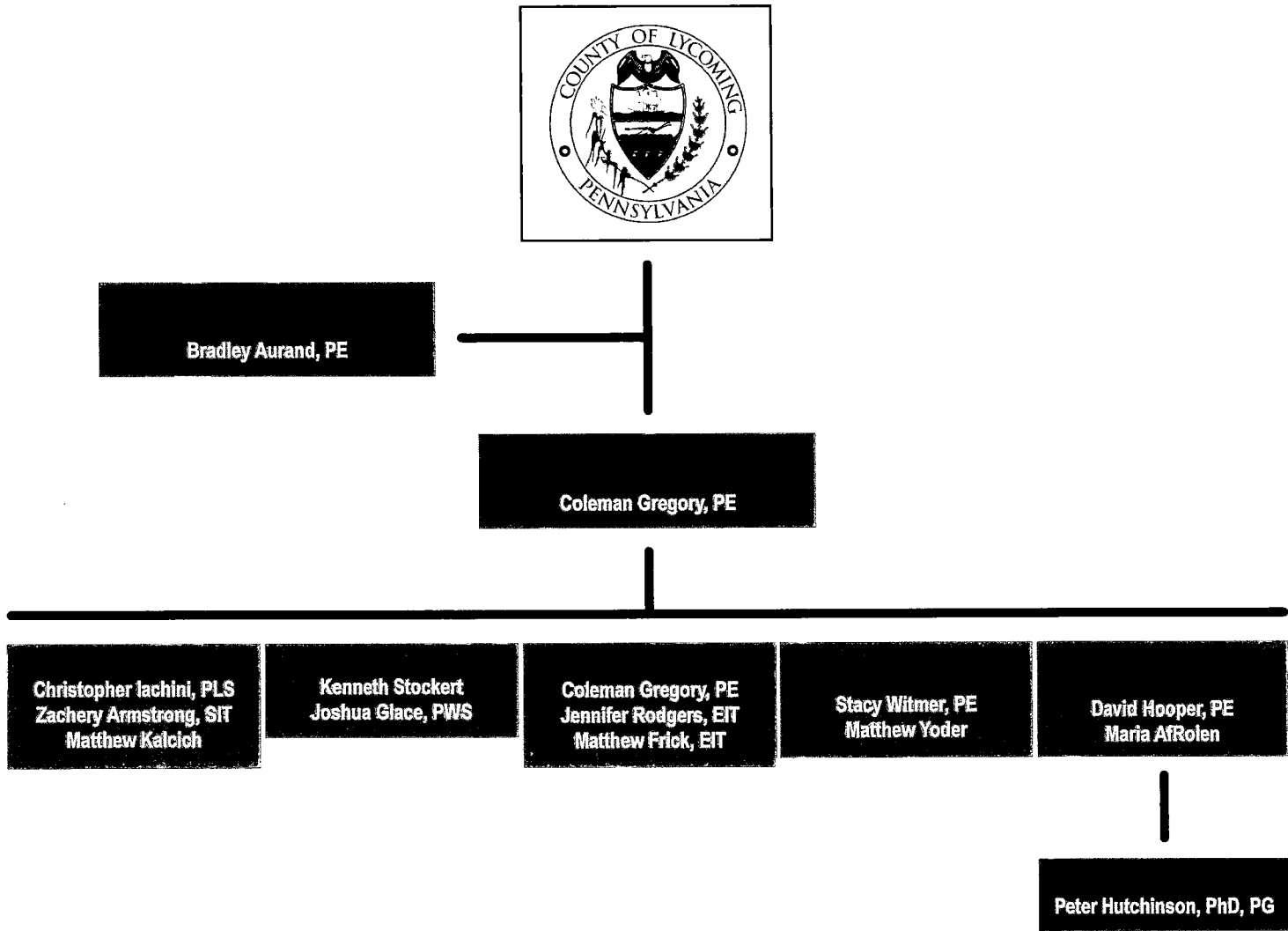
The project list below includes large-scale projects completed for counties similar in size to Lycoming County. The Project Team encourages you to contact the references listed below.

PROJECT NAME	COUNTY	REFERENCE
Great Stream Commons Survey, Pad Site Development and Environmental Permitting	Union County	Shawn McLaughlin Union County Government Center 155 North 15th Street Lewisburg, PA 17837 570-524-3840
County Farm Road Rehabilitation	Lycoming County	John Lavelle, AICP, CFM Lycoming County Planning and Community Development 48 West Third Street Williamsport, PA 17701 570-320-2139
Pittsburgh International Airport Terminal Modernization Program	Allegheny County	Paul Hoback, Jr. Allegheny County Airport Authority Pittsburgh International Airport Landside Terminal, 4th Floor Mezz. Pittsburgh, PA 15231 412-472-3667
County Prison Planning and Redevelopment	Columbia County	David Witchey PO Box 380 26 West First Street Bloomsburg, PA 17815 570-389-5613
Briar Creek Park - Park Access and Parking Lot Paving	Columbia County	David Witchey PO Box 380 26 West First Street Bloomsburg, PA 17815 570-389-5613
Land Development for New County Prison	Northumberland County	Steve Wilt 445 West Philadelphia Street York, PA 17401 717-852-1400


VENDOR REFERENCES

Organizational Chart

Below is an organizational chart that shows how the LDG Team will function. The main point-of-contact for the day-to-day project management tasks is Project Manager, Coleman Gregory, PE. He will be your trusted advisor, ensuring that our entire team delivers our services on time, on budget, and with the highest quality. We have included resumes for the key staff. Beyond these resources, our team has an additional 360+ technical professionals ready to support you and provide any other services on an as-needed basis.



THG Geophysics, Ltd.



**PROJECT
IMPLEMENTATION
SCHEDULE**

PROJECT IMPLEMENTATION SCHEDULE

Proposed Project Schedule

We are prepared to begin work immediately upon receipt of the authorization to proceed. LDG survey crews are expected to be onsite within two (2) weeks pending scheduling.

ACTIVITY	COMPLETION DATE*	NUMBER OF DAYS
Notice to proceed issued	10/24/2020	0
Both sites - schematic designs submitted for Lyco County review and on-site meeting	11/3/2020	10
Both sites - Schematic design review comments issued	11/10/2020	7
Both sites - Site investigation/testing commence	11/16/2020	6
Both sites - Schematic designs revised	11/17/2020	1
Wolf Twp site - Zoning application submitted	11/20/2020	3
Piatt Twp site - Lyco County special exception application submitted	11/20/2020	0
Both sites - Final site design and FAA/FCC permitting commences	11/20/2020	0
Wolf Twp site - Zoning application denied	11/27/2020	7
Wolf Twp site - Zoning variance application submitted	11/30/2020	3
Both sites - Site investigations/testing complete	12/7/2020	7
Piatt Twp site - Lyco County special exception hearing	12/23/2020	16
Wolf Twp site - Zoning Hearing Board meeting	1/4/2021	12
Piatt Twp site - Lyco County special exception decision	1/22/2021	18
Piatt Twp site - LD & NPDES submissions to County and Lyco Cons. Dist.	1/29/2021	7
Wolf Twp site - Zoning Hearing Board decision	2/3/2021	5
Wolf Twp site - LD & NPDES submissions to Twp, County, and Lyco Cons Dist	2/10/2021	7
Piatt Twp site - LD & NPDES comments received	3/1/2021	19
Piatt Twp site - LD & NPDES resubmission	3/8/2021	7
Wolf Twp site - LD & NPDES comments received	3/12/2021	4
Wolf Twp site - LD & NPDES resubmission	3/19/2021	7
Wolf Twp site - Wolf Township Planning Commission meeting	4/5/2021	17
Piatt Twp site - NPDES approved	4/7/2021	2
Wolf Twp site - Wolf Township Supervisors Meeting - LD plan approval	4/12/2021	5
Piatt Twp site - Lyco County Planning Commission - LD approval	4/15/2021	3
Wolf Twp site - NPDES approved	4/19/2021	4
Both sites - Construction plans issued	5/3/2021	14

Notes:

- *This schedule is an estimate only and may vary depending upon specific actions taken by review agencies or the project Owner.
- The schedule shown above is conservative.
- Historically, Land Development applications have not been accepted by review bodies before zoning variances and special exceptions are granted.
- Per Victor Marquardt, Zoning Officer of Wolf Township and David Hubbard, Zoning Administrator for Lycoming County; the Wolf Township site development will require a zoning variance and the Piatt Township site development will require a special exception. Both of these processes are expected to take approximately 12 weeks to complete. Due to the need to acquire the special exception and variance, we do not anticipate meeting the required 2/28/2021 end date specified in the RFP.
- We have shown no design, survey, or field investigation during the zoning variance and special exception processes as a conservative measure. Costs for this design, survey, and field investigation would be wasted if the zoning variance or special exception are denied.



PROPOSAL FORMS

PROPOSAL FORMS

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal Hughesville Water Authority Tower Site
and Hesker Hill Tower Site

State of Pennsylvania

County of Lycoming

I state that I am Project Manager (Title) of Larson Design Group (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. Larson Design Group (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

I state that Larson Design Group (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

PROPOSAL FORMS

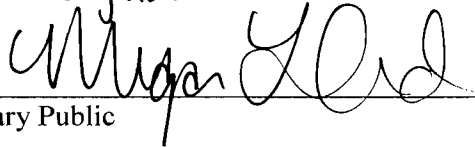
A statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: Coleman Gregory, PE

Signature: 

Title Project Manager

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 21st DAY
OF August, 20 20



Notary Public

My Commission Expires: Nov. 21, 2023

Commonwealth of Pennsylvania - Notary Seal
Megan L. Conrad, Notary Public
Lycoming County
My commission expires November 21, 2023
Commission number 1237945
Member, Pennsylvania Association of Notaries

PROPOSAL FORMS

Legal Ad
Sun Gazette
To Be Run: July 30th and August 3rd

NOTICE TO BIDDERS

ADDENDUM NO. 1 RFP FOR ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE

The additions and/or deletions contained in this Addendum shall be made a part of the plans and specifications and contract documents for the above-referenced solicitation, and shall be subject to all applicable requirements thereunder, as if originally shown and/or specified. In case of any conflict between the specifications, and this Addendum, this Addendum shall govern.

This Addendum must be returned with your bid as acknowledgment of its receipt. Bidders may obtain the Addendum on the County website at www.lyco.org and Request for Bids.

The following modification is made to the text for the referenced solicitation:

The scope of the project has changed from one (1) tower site to two (2) tower sites, resulting in a number of changes to the RFP issued. Please see the following changes for the Lycoming County RFP for E&S services.

1. Change from "Hughesville Water Authority Tower Site" to "Hughesville Water Authority Tower Site and Hesker Hill Tower Site: (1) on the cover page, (2) on Notice to Bidders page 1-1, second paragraph, and (3) on Section 2, page 2-2, paragraph 2.9, third line.

2. Change to Scope of Work & Technical Specifications, Introduction, page 5-1 is as follows:

Lycoming County is currently upgrading our existing radio system to better serve the residents, businesses, tourists and public safety agencies of the county. In order to achieve the overall plan, Lycoming County will be contracting for the construction of two (2) raw lands to finish tower sites to improve RF coverage for our first responders. Additionally, on the one site, a second plot of land is to be cleared for the water authority to use (no further development of the second plot is required).

3. Changes to Scope of Work & Technical Specifications, General Requirements, item 1, page 5-1 are as follows:

1. The names and locations of the two (2) new proposed tower sites are:

PROPOSAL FORMS

- a. Hughesville Water Authority tower site
 - i. Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
 - ii. Street address: 279 Reservoir Road, Hughesville, PA
 - iii. Township: Wolf
 - iv. County: Lycoming
 - v. Size of site plot: 100'x100'
 - vi. Height of tower: 250'

Hughesville Water Authority land which is to be cleared (not developed) for water authority use is:

- i. Street address: 279 Reservoir Road, Hughesville, PA
- ii. Township: Wolf
- iii. County: Lycoming
- iv. Approximate size of plot to be cleared for the water authority: 100'x100'

b. Hesker Hill tower site

- i. Latitude: 41-14-19.1 N, longitude: 77-14-35.1 W
- ii. Street address: 1324 Heskler Hill Road, Jersey Shore, PA
- iii. Township: Piatt
- iv. County: Lycoming
- v. Size of site plot: 75'x75'
- vi. Height of tower: 250'

The County will be responsible for procurement of site and leasing of property.

4. Change to Mandatory Site Walk on Notice to Bidders, page 1-1, paragraph 4 is as follows:

A mandatory site walk will be held on Wednesday, August 5, 2020, at 10:00 AM for the two (2) tower sites, starting at the Hughesville Water Authority site located at 279 Reservoir Road, Hughesville, PA.

5. Change to Price Proposal, section 6.1 Cost Elements is as follows:

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final	

PROPOSAL FORMS

Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	
Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HUGHESVILLE	

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	

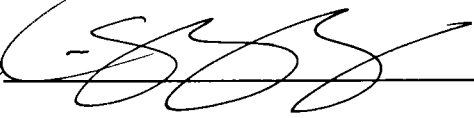
PROPOSAL FORMS

Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HESKER HILL	

GRAND TOTAL FOR BOTH SITES	
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ACKNOWLEDGEMENT

I hereby acknowledge receipt of this Addendum for the above noted project.

Signature 

Date 08/06/2020

August 21, 2020

County of Lycoming
Lycoming County Executive Plaza
330 Pine Street Suite 404
Williamsport, PA 17701

Re: Proposal for Lycoming County Emergency Radio Towers

Dear County Commissioners:

Bassett Engineering is pleased to submit one (1) original and five (5) copies of our proposal to provide professional consultant engineering services as described in the Request for Proposals. We guarantee to provide the highest quality engineering services for the county and look forward to working with you on the design and implementation of this important project.

Management: This project is interesting because it requires a multi-disciplined team of civil/environmental, geotechnical and electrical engineers, surveyors, archaeologists, wetlands scientists, and a logger. Bassett Engineering leads multidisciplinary teams every day on wastewater, bridge and land development projects. Few central PA civil engineers develop this specific skill set. I have been doing this for 32 years starting back when I worked in Maryland which had extensive MBE/DBE requirements and every project had 3-8 subconsultants. I will use my experience to serve as Project Manager because controlling subcontractors' efforts will be critical to follow this project's ambitious timeline. We all are busy working on multiple projects so a project manager needs to get his team to focus on his projects at the specific times when their efforts are needed. I know that both subs and my employees need to be notified well in advance of when they are needed and reminded shortly before they are needed so they are available when they actually are needed. I also know how to push them to prioritize my project so they complete their work on my timeline so we fulfill our responsibilities to you. Most of our partners on this project have already worked with us on multiple projects and we all have learned how to work efficiently together.

Bassett Engineering is one of the oldest established consulting firms in Lycoming County. We have grown into a team of highly skilled, committed professionals who take great pride in their work and are passionate about serving our County. Our mission is to provide cost effective and unique solutions to our client's problems by applying proven technology in innovative arrangements. We customize our recommendations and designs to address our client's specific needs, desires, and concerns. Our goal is to provide the highest quality municipal and environmental engineering in all locations where we practice. Our customers are townships, boroughs, municipal authorities, businesses and individuals throughout Central and Northern Pennsylvania. We provide guidance, support, and expertise in a wide variety of engineering issues that confront our clients. We are an equal opportunity employer.

Qualifications: Bassett Engineering's land development and subdivision engineering experience has grown exponentially since we last served as Planning and Community Development's Engineer. We have designed multiple large and complex commercial, industrial, wastewater, residential and institutional land developments, as well as parks, and this wealth of experience makes us infinitely better qualified.

Bassett Engineering provides design, administration, public bidding, project management, funding assistance and construction inspection services for numerous townships, boroughs and municipal authorities throughout Northcentral PA. Our work assignments in this capacity have been numerous and varied, including land development designs and reviews, environmental and PennDOT permitting, bridge replacement and repair; NBIS bridge inspections, roadway reconstruction and resurfacing, curb, driveway and sidewalk design, stormwater improvement projects, pedestrian safety improvements, wastewater treatment plants, waste-to-energy, water and sewer systems, and recreational planning.

Performance: Bassett Engineering has engineered a unique series of projects that demonstrate the highest qualities of civil and environmental engineering, projects not only that no other engineer in Pennsylvania has conceived of, but these same projects have proven to be reliable and simple to operate. We constantly search for ways to optimize everything we engineer, looking for better materials, ways to save operating or construction costs without reducing quality.

- The American Academy of Environmental Engineers and Scientists gave Bassett Engineering and its partner GDF its Superior Achievement Award, its highest honor, in 2013 for the BNR Upgrade and Expansion of the 10.8 MGD Altoona Westerly WWTP.
- PSAB named Renovo Borough in Clinton County as the Winner of the 37th Annual Road and Bridge Safety Improvement Award.
- PSATS named Penn Township in Lycoming County as the Bridge Winner of the 33rd Annual Road and Bridge Safety Improvement Awards.

Land Development: Bassett Engineering has extensive land development engineering experience. We work to represent a municipality's interests by reviewing subdivisions and land development plans for compliance with SLDOs. We coordinate our reviews with PennDOT, DEP, County Planning Commissions and Conservation Districts, US Army Corps of Engineers, and other governing jurisdictions, depending on the project's nature.

Timeliness: When we served as Planning and Community Development's Engineer a few years ago the reviews were small short-fuse projects that we fit into our ongoing workload. Now that our engineering staff has increased, we see how accommodating the County's needs will be a welcome supplement to our ongoing workload.

Conflict Management: As a municipal engineer, managing conflict occupies a large part of our time and energy. We serve as the sole technical expert for many of our projects, and we provide a fair and balanced representation of the facts. We provide the role of technical expert and facilitator. This starts with having an open mind and a willingness to listen to the all parties' concerns, and we believe we are very good at listening to a developer and his engineer.

Bassett Engineering's staff is highly qualified to design and permit the radio tower projects and we guarantee we will provide quality engineering services and smooth and efficient management. Bassett Engineering is an ideal fit for Lycoming County, because our size combined with our experienced staff's capabilities and talents perfectly match your needs. We expect that you will find our rate schedule to be very cost-competitive.

Our website is available at www.bassetteng.com if you seek further information on our firm. Please feel free to contact us anytime with any questions or to discuss this proposal in greater detail.

Sincerely,

Bassett Engineering, Inc.



Britt D. Bassett, PE BCEE

President

Section 1: Adequacy of Proposal

Project Understanding

The project involves providing complete engineering, surveying, permitting, and related site design to construct the towers and site improvements at the locations noted in the RFP. The land development effort for these projects is relatively simple. The complexity lies in all of the other project aspects including geotechnical, electrical, archeological, wetlands, FAA and FCC.

Land Development services for each site includes preparing a Land Development Plan to conform with local and/or County ordinance requirements, erosion control and DEP Ch. 102 NPDES permit documentation (Hughesville site), access road profile (Hughesville site), and topographic survey within at least 100 ft of the project construction area. We will mark the limits of the proposed lease parcel corners with 1" steel pins, and we will prepare access easement exhibits. We note that the Piatt Township site will not require an NPDES permit due the small lease parcel footprint (60' x 60') and utilization of the existing farm road for access.

We will prepare a site clearing plan for the Hughesville Water Authority for the new tank site adjacent to the existing tank. BE will coordinate electric and phone service to the proposed tower locations. Zoning approvals are not included per Answer 6 from Q&A #3.

We will provide geotechnical testing including three (3) tests to a minimum depth of 35 ft and soil resistivity tests at both tower sites. We have reviewed required documentation and will prepare and submit applications to FAA and FCC for the proposed development.

We understand that no tower design services or coordination with a tower manufacturer are required of us. However, we note that the Special Exception application will require significant input from the tower designer related to materials, electronic impact on adjacent areas, and structural certifications.

Project Approach

GENERAL REQUIREMENTS

1. The names and locations of the proposed tower and water tank sites are:
 - a. Hughesville Water Authority tower site
 - i. Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
 - ii. Street address: 279 Reservoir Road, Hughesville, PA
 - iii. Township: Wolf
 - iv. County: Lycoming
 - v. Size of site plot: 50' x 60' per Q&A #3 Question 2.
 - vi. Height of tower: 250'
 - b. Hughesville Water Authority land which is to be cleared (not developed) for water authority use is:
 - i. Street address: 279 Reservoir Road, Hughesville, PA
 - ii. Township: Wolf
 - iii. County: Lycoming
 - iv. Approximate size of plot to be cleared for the water authority: 100' x 100'
 - v. Design grading of area to approximate elevation of the existing water tank

- c. Hesker Hill tower site
 - i. Latitude: 41-14-19.1 N, longitude: 77-14-35.1W (We note the actual tower site differs slightly from this location per the mandatory site meeting)
 - ii. Street address: 11259 Hesker Hill Road, Jersey Shore, PA
 - iii. Township: Piatt
 - iv. County: Lycoming
 - v. Size of site plot: 60' x 60' per Q&A #3 Question 2.
 - vi. Height of tower: 250'
2. The County will be responsible for procurement of site and leasing of the property.
3. The County will pay all plan review fees.
4. All drawings will be produced in AutoCAD 2013 or compatible. We will submit final AutoCAD files to the County.
5. BE will be 100% responsible for all necessary disciplines in order to meet all code requirements and will revise drawings to meet County/Municipal plan review comments at no additional cost to the County.
6. BE is fully authorized and licensed to provide professional engineering services and surveying in the State of Pennsylvania, is in good standing with our state boards and is not under investigation for unethical practice or standards.
7. We will produce all drawings in 24" x 36" sheet size for both digital and printing format. We will also provide the drawing package in PDF form for reproduction purposes.
8. BE will attend the initial site visit at the proposed site to review the project for an initial design review.
9. BE will complete and submit all required FAA and FCC filings including information provided by our project team

ENGINEERING SERVICES

A. Civil Site Engineering

BE has provided a 'turn-key' proposal for civil engineering services with lump sum prices. Our proposal includes line item costs for the following services:

1. Site Grading/Site Layout – provide access road (typically gravel, typically 10-12 feet wide), to parking area, and tower pad (previously as noted). We will provide dimensions for planning purposes and we understand that they are subject to change based on site and layout.
2. Stormwater drainage design – meet all applicable local and state design and permitting requirements for Post Construction Stormwater Management.
3. Erosion and Sediment (E&S) control design – meet all applicable local and state design and permitting requirements for permit acquisition and construction purposes.
4. BE will prepare and submit all applicable Permitting documents including but not limited to; DEP and County E&S and PCSM permits, Site Specific E&S Applications, NPDES Permit Submittals including Notice of Intent (NOI) and Local Grading Permits.
5. Our subconsultant will conduct Geotechnical Testing consisting of the three (3) bores at each site, each a minimum depth of 35' below grade and provide a report for tower design by tower manufacturer.
6. Our subconsultant will conduct soil resistivity Testing and provide a Report to be used in development of site electrical grounding design. The length and spacing of the resistivity intervals will be every 30' out to 300'. We will conduct two (2) line tests at each tower site.

B. Site Design

We will complete all work in compliance with existing regulatory codes, industry standards and FAA/FCC regulations.

1. BE will provide a preliminary drawing of the proposed site that will include:
 - a. Compound layout with all applicable facilities, shelter, propane tank, generator, construction details, and tower footprint drawings.
 - b. Lease area of site.
 - c. Fencing, grounding, and electrical plan and details.
2. BE will coordinate with utilities: submit one-calls, schedule site walks with the appropriate utility providers for routing. It is understood that no on-site ROW will be required for utility corridors.
3. BE will prepare Construction Drawings based on all information collected and agreed upon during the site walk phase. Plans will also incorporate results based on geotechnical and soil resistivity reports, tower drawings, foundations, shelter, propane tank and generator, FAA Notice, permitting and site survey (included as separate section below).
4. Facilities required at each of the tower sites are power and communications.

C. Shelter and Tower Designs

We understand that the tower manufacturer will complete shelter and tower designs under a separate Scope of Work. BE plans will show the tower base as four leg, 26 foot diagonal spacing.

SURVEYING SERVICES

BE will show and describe easements and/or rights of ways graphically, as well as the proposed lease parcel and proposed and existing easements. We will show all legal names and widths of any adjoining streets or dedicated public rights of way. The survey map will include a North Arrow showing deed bearing north, magnetic north and geographic true north. We understand that no boundary survey is required per Q&A #3 Question 6.

We will verify and show all tax maps, blocks and lot numbers and the deed book and page numbers for the parent parcels and adjoining parcels within 100 feet.

We will show the location and description of all structures within 50 feet of the proposed site, including any abandoned structures.

We will locate and describe all above ground utilities including power and telephone poles, overhead wires and other relevant items. We will also show and note underground utilities within 25 feet of proposed construction area. Any and all utility firms or other owners will be labeled and shown. Note that none are expected.

We will permanently mark all corners of proposed lease parcels, easements and other boundaries with iron pins or pipes not less than 18 inches in length and 1" in diameter. We will field measure and show elevations to within 1.0 feet of the U.S.G.S. datum or NGVD 88 datum. Where a particular benchmark is used as the starting point, we will note its description, location and elevation on the drawing. Topographic coverage will include at a minimum the area within 100 feet of new construction including all access and utility easements. We will provide a profile of the access easement centerline where the terrain has a slope of 6% or more. We will show contours over the full construction area at 2-foot intervals. We will set a permanent benchmark in the immediate vicinity of the proposed new construction. BE will provide a 2C letter accurate within the FAA Horizontal Accuracy Code 2, (+/- 50 feet) and the elevation provided is accurate within FAA Vertical Accuracy Code C, (+/- 20 feet).

A. Survey Plan

BE will insert its own name and other identifying data in the appropriate blocks. The survey plan scale will be 1"=20' or 1"=30' if necessary and 24 inches in depth by 36 inches in width. We will include a key map at a scale of 1"=2000' in the area designated on the standard drawing format sheet (upper right-hand corner) which will consist of a reproduction of the U.S.G.S. 7.5-minute quadrangle map with the site location noted in heavy outline and circled for clarity.

The original drawings will bear the signature of Stephen Higgins, P.L.S. our Supervising Professional Land Surveyor.

ENVIRONMENTAL SURVEYING

A. Wetland and Stream Delineation and Permitting

BE will provide a site-specific Wetland, Stream and Natural Resources investigation complying with local, state, and national procedures. BE will convey wetland, stream, and natural resource findings to the County and advise of a viable permitting solution for any field finding that will require mitigation, permitting, or site redesign. BE will prepare all applicable environmental permit submittals for construction of the proposed project.

ADDITIONAL SERVICES:

We understand that additional services may be required based on site specific issues and we will advise the County as issues and unforeseen circumstances arise.

A. SHPO Compliance Permitting

BE will prepare State Historic Preservation Office compliance (SHPO) permitting and submittals and will comply with the Pennsylvania State Historic Code, PHMC Submissions, and FCC Form 620.

B. Coordinate/Prepare Phase I and II Site Assessments

BE will provide Environmental Site Assessments (ESA) of the proposed sites. We understand that a Phase I ESA is required and that a Phase II ESA could be required based on the findings of the Phase I ESA.

C. Zoning Permitting

Based on Q&A #3, Question 6 places responsibility for zoning approvals on Lycoming County.

MISCELLANEOUS

A. Expenses: BE will list all reimbursable expenses and rates as part of the proposal, in addition to the lump sum. BE will document and bill all reimbursable costs with a 0% mark-up.

B. Change in Scope of Work

1. BE has provided an hourly fee rate sheet for work which may arise due to a change in the proposed scope of work.
2. We understand that all additional services arising from a change in the scope of work will not commence without a fully executed contract amendment. BE will indicate to the County if we believe that services to be rendered are outside of the scope of work. We understand that Lycoming County will not be required to honor any requests for compensation for additional services that begin or are completed before the County issues a fully executed contract amendment.

Project Design Schedule

We understand that the County intends to award a contract for engineering services in October and terminate the agreement by February. The following project design schedule indicates key milestones and dates of completion. We understand that changes in the project scope or nature may affect this schedule. We will submit all final plans and specifications for approval by the County. Upon completion of the preliminary design and again when requesting approval of the final design, BE will prepare and provide to the County an opinion of probable construction costs, utilizing the itemized bid format.

Bassett Engineering will start our services promptly upon signing a Professional Services Agreement and follow this project schedule:

Key Milestones	Month Year
Proposals Opened	August 2020
Award Engineering Contract	October 2020
Project Kick-Off Meeting	October 2020
Finalize Design	December 2020
Submit Land Development Plan	December 2020
Submit NPDES	December 2020
Land Development Plan Review	January 2021
NPDES Review	February 2021
Agreement Termination	February 2021

Additional Services of Engineer

Where participating state and/or federal agencies require reports relating to construction, BE will prepare and submit such reports and will assist in any negotiations with these or other agencies as is necessary for final approval.

Section 2: Relevant Experience and Past Performance

Land Development Engineering Experience

Bassett Engineering has extensive land development engineering experience. We work to represent a municipality's interests by reviewing subdivisions and land development plans for compliance with SLDOs. We coordinate our reviews with PennDOT, DEP, County Planning Commissions and Conservation Districts, US Army Corps of Engineers, and other governing jurisdictions, depending on the project's nature.

We work extensively for private developers preparing subdivision and land development plans including sewage facilities planning modules and permits, Chapter 102 NPDES Permits, stormwater management plans, E&S Plans, highway occupancy permit applications, and whatever else is needed. While working on a private development we do not work for the municipality in any capacity. Many municipalities we now represent met us through our work for private developers.

Representative Land Development Experience

Project	Municipality	County	Notes
Renovo Park/Boat Launch	Renovo Borough	Clinton	Park, boat launch, parking, sidewalk, pavilion, landscaping
DTMA Energy Enhancements	Derry Twp	Dauphin	WWTP Expansion including new tanks, building, SWM.
Nicholas Meats	Greene Twp	Clinton	Meat packing plant expansion.
Petroleum Products	Fairfield Twp	Lycoming	Industrial warehouse and trucking.
Waltz Subdivision	Old Lycoming Twp	Lycoming	7 Lot Residential Subdivision & Land Development Plan.
Altoona Water Authority Residuals Management	Alleghany Twp	Blair	WWTP Expansion including new tanks, building, SWM.
Walnut Street Christian School	Avis Borough	Clinton	School Addition, gymnasium, and soccer field.
Comfort Inn Addition	Loyalsock Twp	Lycoming	Addition to existing motel.
Fellowship Church	Dallas Twp	Luzerne	Church Expansion: Lot Consolidation.
Benton Park	Benton Borough	Columbia	ADA-compliant upgrade to municipal park.
Dubois Country Club & Comfort Suites	City of Dubois	Clearfield	Hotel located at country club
Grit Commercial Printing	Fairfield Twp	Lycoming	Expansion to industrial print shop.
Brady Township Building	Brady Twp	Lycoming	New township building.
Pneu-Dart	Plunkett's Creek Twp	Lycoming	Addition to pneumatic-dart manufacturing facility.
Terry Township Garage	Terry Twp	Bradford	New Garage for Township Building.
Spitler RV Site	Fairfield	Lycoming	Commercial and/or industrial building(s).
Choate Lot 16	Fairfield Twp	Lycoming	Commercial office building.

Highlighted Experience

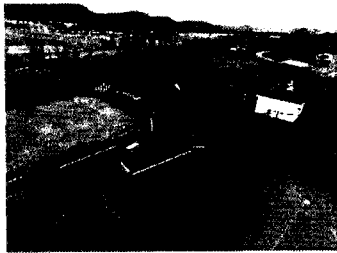
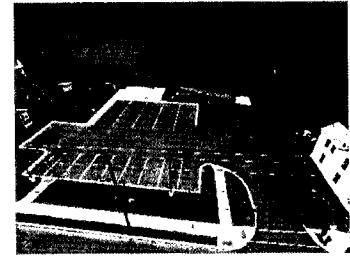
We have designed multiple large and complex commercial, industrial, wastewater, residential and institutional land developments, as well as parks, and this wealth of experience makes us infinitely better qualified.

Commercial: Bassett Engineering has engineered a number of large successful commercial projects, and others that never were built even though Land Development Plans were approved, variances granted, and all permits obtained. The following highlights representative projects:

Fairfield Township: We engineered the development of a wide variety of properties: conversion of the former Spittler RV into a commercial development, properties on Brushy Ridge Road, Fairfield Church Road and Lycoming Mall Drive, and a feasibility study for a large apartment/townhome complex in the Tules Run area. On Choate Circle we engineered the development of Petroleum Products, a major expansion of Grit Commercial Printing, a warehouse leased to PepsiCo and a large office building at 16 Choate Circle (the last was never built).

Comfort Inns: We completed land development plans and environmental permitting for the expansion of the Comfort Inn on East Third Street, a new Comfort Inn off 3rd Street (never built) and a new Comfort Inn at the Dubois PA Country Club.

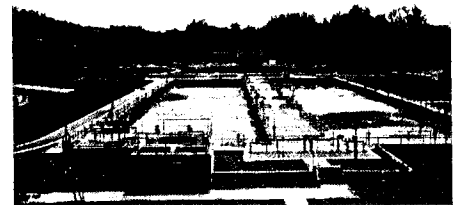
Parks and Recreation: We designed an all-new Riverfront Park and Boat launch in Renovo, paving and other improvements at Limestone Township Park in Oval, along with major renovations and improvements to Benton Borough Park. We designed a new Soccer field for Walnut Street Baptist Church, completed land development planning for lights at Loyalsock Little League's new softball field, and developed a plan to add football, baseball and softball fields at Montoursville's Indian Park.



Residential: We engineered two land developments for Tim Waltz in Old Lycoming Township including a seven-lot subdivision. We designed several land developments in Plunketts Creek Township.

Industrial: We engineered multiple phases of the development of major expansions to Nicholas Meats. Work included multiple DEP Permits, mass grading, contentious land development planning with the Township, extensive drives and parking, new buildings, water and sewer extensions, fencing, landscaping, lighting, retaining walls, a truck scale, a guard house.

Wastewater Treatment Plants: Land development is very similar to an industrial site. Construction is about to begin at Derry Township Municipal Authority's Clearwater WWTF and at Altoona Water Authority's Westerly WWTF on two renewable energy projects that Bassett completed Land Development engineering and environmental permitting for. Modifications of large treatment plants are among the most complex land development projects because of multiple existing treatment tanks, buildings, drives, and the subsurface is extremely crowded with tanks and pipes. Land development work included mass grading, stormwater management (SWM), multiple DEP Permits, land development planning with the Township, extensive drives and parking, new buildings, public utilities, plus numerous pipes - new and extensions to existing. These bioenergy energy projects will digest waste anaerobically to generate biogas which will be beneficially reused to create energy that will reduce the plants' carbon footprint and greenhouse gas emissions. At Derry cogeneration will generate electricity, dramatically reducing the plant's consumption with the ultimate goal of becoming a net zero energy facility.



Section 3: Quality of Previous Work

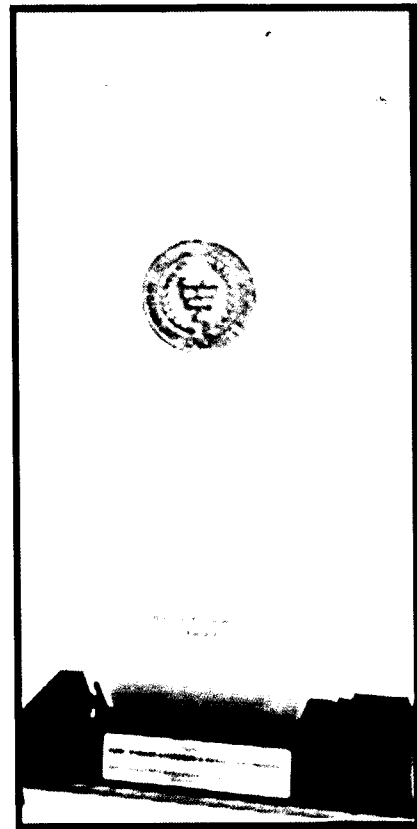
Bassett Engineering has engineered a unique series of projects that demonstrate the highest qualities of civil and environmental engineering, projects not only that no other engineer in Pennsylvania has conceived of, but these same projects have proven to be reliable and simple to operate. We constantly search for ways to optimize everything we engineer, looking for better materials, ways to save operating costs or construction costs without reducing quality. We use proven technology in innovative arrangements to provide unique solutions to our clients' problems.

- We have utilized prefabricated metal and precast concrete bridges extensively, which have the same quality as traditional cast-in-place concrete bridge, but cost one-quarter to one-third as much.
- We have developed an approach for raising and/or relocating roads out of the floodplain, a life-saving concept vital to flood-prone Northcentral Pennsylvania.

American Academy of Engineers and Scientists Superior Achievement Award Altoona Water Authority Westerly Wastewater Treatment Plant

The American Academy of Environmental Engineers and Scientists gave Bassett Engineering and its partner GDF its Superior Achievement Award, its highest honor, in 2013 for the BNR Upgrade and Expansion of the 10.8 MGD Altoona Westerly WWTP. We received the Award at the National Press Club in Washington DC. Westerly employs an innovative and unique process, the Hybrid Bardenpho with Step Feed to achieve near-ENR levels of Treatment without the use of any chemicals. Due to older, leaking sewers, Westerly receives severe peak weather peak flows. The Step-Feed enhancement of the Hybrid Bardenpho bypasses peak flows to the downstream end of the activated sludge process, allowing Westerly to treat extended peak flows over 50 MGD without upsetting the nitrification process. Hydraulic peak capacity is 60 MGD. Since Start-up during Tropical Storm Lee in 2011, the Combined Sewer Overflows and Storage Tanks in the collection system have not operated.

Pennsylvania sets annual cap load limits on effluent Total Nitrogen and Total Phosphorus loads; plants that discharge below this cap can trade credits with underachieving plants. In just three years Westerly and its Sister Plant Easterly have sold hundreds of thousands of dollars of Nutrient Credits. By maximizing the reuse of existing facilities, the two plants, with combined design capacities of nearly 20 MGD, cost less than \$60,000,000 to upgrade to nutrient removal.



37th Annual Road and Bridge Safety Improvement Award

The **Pennsylvania State Association of Boroughs** named **Renovo Borough in Clinton County** as the Winner of the 37th Annual Road and Bridge Safety Improvement Award. In 2017, Renovo Borough obtained much needed funding from the DCED, CDBG, DCNR, and C2P2 grant programs to address several projects within the borough including the Ontario Avenue Reconstruction and 5th Street River Access. Renovo Borough bundled the two (2) projects together, under separate contracts. Ontario Avenue went from 4th to 11th Streets, this project involved an almost complete rebuild of the roads. The 5th Street River Access involved demolishing several derelict residential properties and converting into a new community park and boat launch.



34th Annual Road and Bridge Safety Improvement Award

The **Pennsylvania State Association of Township Supervisors** named **Upper Fairfield Township** in **Lycoming County** as an honorable mention Bridge Winner of the 34th Annual Road and Bridge Safety Improvement Awards, Upper Fairfield Township bundled the road repairs and bridge replacement together as one project under two separate contracts to take advantage of ACT 89 and use Act 13 impact fees. An aluminum box culvert replaced a pipe arch culvert. The embankment was cleared and stabilized with new rip-rap and the roadway was full-depth reconstructed for approximately 550 feet. Installed new guiderail.



34th Annual Road and Bridge Safety Improvement Award



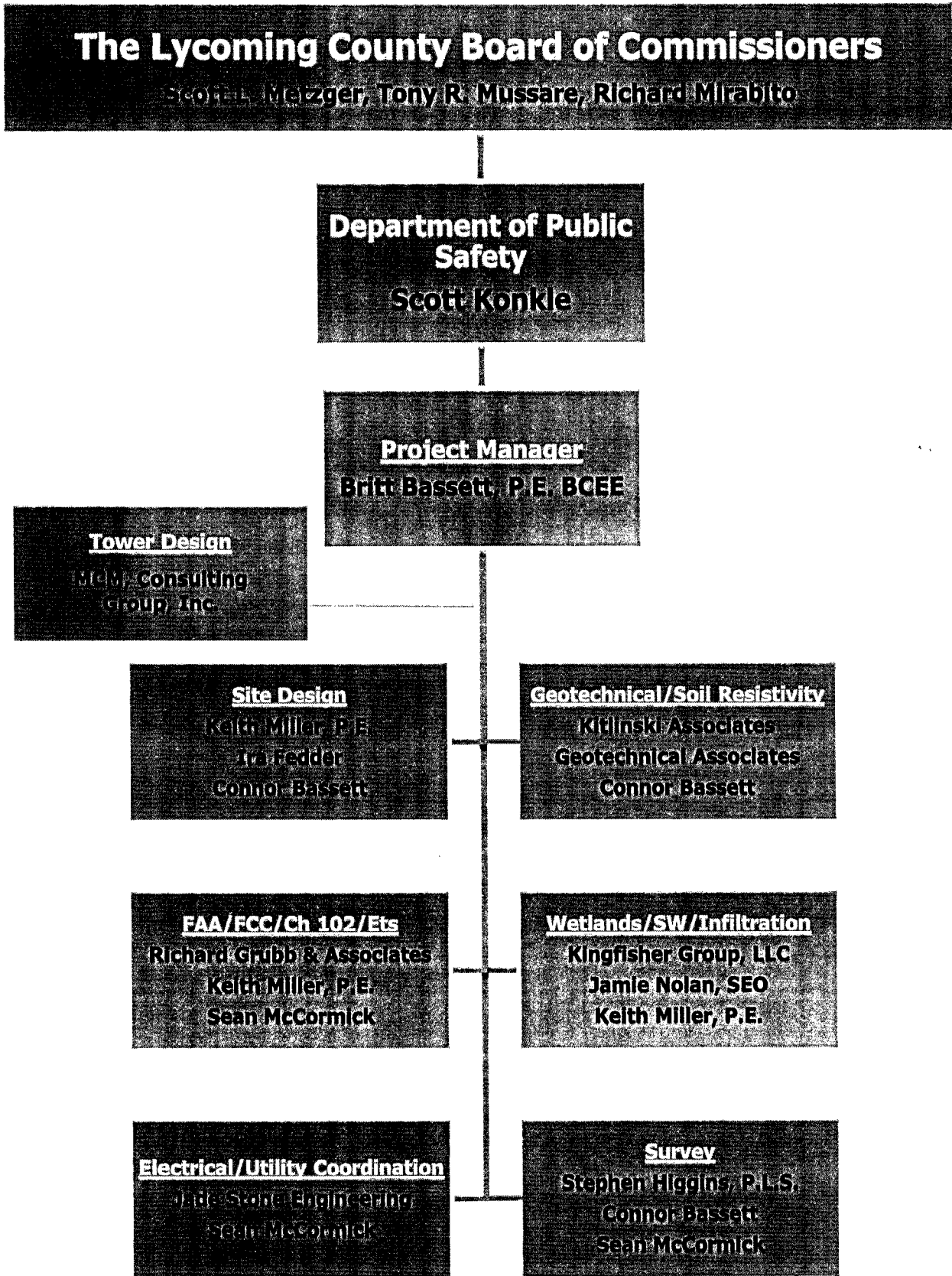
The **Pennsylvania State Association of Boroughs** named **Renovo Borough** in **Clinton County** as the Winner of the 34th Annual Road and Bridge Safety Improvement Awards presented at its 2016 annual convention held in Hershey in June 2016. In 2015, Renovo Borough obtained much needed funding from both the CDBG and USDA grant programs to address deteriorated roadway pavement on Erie Avenue and Third Street. Renovo Borough bundled the two (2) road projects together, under separate contracts. Erie Avenue went from 8th to 13th Streets for 1,555 LF and Third Street went from Huron to Erie Avenues for 422 LF.

33rd Annual Road and Bridge Safety Improvement Award

The **Pennsylvania State Association of Township Supervisors** named **Penn Township** in **Lycoming County** as the Bridge Winner of the 33rd Annual Road and Bridge Safety Improvement Awards. Penn Township identified four bridges that were structurally deficient and decided to bundle the bridges together under three separate contracts to take advantage of ACT 89 and use Act 13 impact fees in the summer of 2014. Prefabricated structures were used: a precast concrete arch bridge and two with aluminum box culverts on Logue Hill, Temple and Derr Roads respectively. A reinforced concrete slab bridge on Rishel Hollow underwent concrete repairs.



Bassett Engineering Employee Organization Chart



Employee Resumes & Certifications**Britt Bassett, PE BCEE****President/Principal Engineer****SUMMARY OF EXPERIENCE**

Working in the civil and environmental engineering field for 35 years, Mr. Bassett has studied, designed, bid, and provided construction phase engineering for scores of water and wastewater projects. Completed projects cover feasibility studies including Act 537 Plans, wastewater collection systems, pump stations, treatment plants and sludge disposal systems, as well as water supplies, treatment facilities, storage tanks, pump stations and distribution systems. He has designed numerous innovative and alternative systems, including one that won the 2013 American Academy of Environmental Engineers and Scientists Superior Achievement Award. On most of those systems he also supervised the bidding, construction, and start-up phases. He helped write three Water Environment Foundation Manuals of Practice including Nutrient Removal, Design of Municipal WWTPs, and Process Modeling.

**EDUCATION**

Bachelor of Science	Civil Engineering	Bucknell University, Lewisburg, PA	1983
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PROFESSIONAL CERTIFICATION

Professional Engineer, Pennsylvania, License No. PE-037258-E, 1989-Present

Professional Engineer, Maryland, License No. 16855, 1990-Present

Diplomat, American Academy of Environmental Engineers, 2004-Present

AWARD WINNING

2013 American Academy of Environmental Engineers Superior Achievement Award (top award)

Altoona Westerly WWTP Biological Nutrient Removal Upgrade (partner - Gwin Dobson & Foreman)

DETAILED PROJECT EXPERIENCE**BASSETT ENGINEERING, Inc.****Lycoming County Planning Commission Land Development Plan Reviews** *Lycoming Co., PA*

Three-year Appointment. Served as Alternate Engineer first two years and as Prime Engineer in final year. Reviewed Stormwater Management Plans plus driveways and on-site roads for projects in any of 24 municipalities under the purview of the Lycoming County SALDO. Examples: reviewed Penn Commercial Vehicles, Larry's Creek Pump Station, Wasson Subdivision.

Loyalsock Township Little League Softball Field Lighting *Lycoming County, PA*

Land Development Plan to add overhead lighting at the Loyalsock Township Little League softball field in Short Park. Obtained approval from Loyalsock Township Planning Commission and Board of Supervisors.

Renovo Borough Ontario Avenue/River Access *Clinton County, PA*

Reconstructed 2,100 LF of Ontario Avenue using 62,000 SF of new bituminous pavement, 29,000 SF of bituminous pavement overlay and 17,500 SF of concrete paving including sidewalks and the boat launch. Regraded Ontario Avenue and replaced storm inlets. Provided ADA compliant ramps at all intersections. New river access park with parking lot, lighting, landscaping and a pavilion. River access included grading, a boat launch extending into the West Branch of the Susquehanna, stormwater runoff water quality pond. River access required a PA DEP Joint Permit (Chapter 105) for Small Projects.

Limestone Township Recreational Park *Lycoming County, PA*

Improvements included: a handicap accessible parking lot, a paved walking trail from the parking lot to the concession stand and two ballfields, new playground equipment, associated lawn and site restoration.

Walnut Street Baptist Church Christian School*Clinton County, PA*

Land Development Plan, design and construction phase engineering for a church and school expansion including a new soccer field and a new gymnasium, construction NPDES permit, grading, SWM Plan including subsurface detention basin. Borough, Township, County approvals.

Derry Township Municipal Authority Clearwater WWTF*Dauphin County, PA*

Cogeneration (combined heat and power) project will expand electricity generation by burning digester gas. Added flexible membrane cover on secondary digester to expand gas storage. New gas conditioning system, CHP engine generators, waste gas flares. Prepared Site/Civil & Yard Piping Designs. Prepared and applied for DEP environmental Permits: DEP AQM Plan Approval and Ch. 102 General Permit incl. SWM plus E&S Plans. Twp. LD and SWM Planning.

Fellowship Church Addition*Luzerne County, PA*

USACOE/DEP Joint Permit, Land Development Plan, DEP Ch 102 Permit w/ SWM and E&S Plan. Sewage Facilities Planning Module, OLDS using flow equalization, and micromound with subsurface drip irrigation. Obtained necessary special exceptions and variances from Dallas Township.

Altoona Water Authority Westerly WWTF Codigestion Conservation Measures*Blair County, PA*

New anaerobic digesters, HSOW receiving, sludge dryer, boilers. Converted aerobic digesters, sludge holding tanks. Prepared Site/Civil & Yard Piping Designs. Prepared and applied for DEP Permits: Chapter 102 General, Water Quality Management Part II, and Air Quality Management Plan Approval. Twp. LD, SWM, Floodplain Development Plan approvals.

Nicholas Meats, LLC Northeast Parcel Land Development Plan*Clinton County, PA*

Land Development Plan, Ch. 102 General Permit, DEP/USACOE Joint Permit and PennDOT HOP's for major land development including extensive site grading, 1/2 mile of plant drive, parking for 324 single axle vehicles and 32 tractor trailers, utility tunnel to future development, retaining wall, storm drains and detention basins, site lighting, plant security system, landscaping, riparian buffer, security and decorative fence, guard house and gate, water line, septic tank, pump station, wastewater force main.

Waltz, Residential Subdivision/Land Development Plans*Lycoming County, PA*

Engineered six lot residential subdivision to comply with Old Lycoming Township SALDO, SWM and Zoning ordinances including private drive w/ cul-de-sac, hydrologic & hydraulic computations. Site topographic and boundary survey. Extensive testing for OLDS.

Jersey Shore Borough Curb Cuts/Handicap Ramp*Lycoming County, PA*

New ADA-compliant handicap access concrete curb ramps with detectable warning surfaces at 11 intersections with associated pavement, site clearing, traffic control and lawn restoration.

Petroleum Products Warehouse Land Development Plan*Lycoming County, PA*

Land Development Plan for industrial fluids warehouse. Extensive grading to provide single travel loop for tractor-trailers plus parking. DEP Ch 102 NPDES Permit for Construction Activities, subsurface stormwater detention plus surface pond, wetlands delineation, soil infiltration rate testing.

Lycoming County Bridge Bundling*Lycoming County, PA*

Thirteen municipal-owned bridges will be replaced and four will be rehabilitated under the County's local bridge bundling program. The bridges will be bundled in a series of construction projects, each planned to include 4 to 5 bridges.

Choate Circle Lot 16 Land Development Plan*Lycoming County, PA*

Land Development Plan for commercial office building. Extensive site grading to fit building layout along with access drive and parking. Ch 102 Permit. SWM: surface pond. Wetlands, infiltration rate testing.

Benton Borough Park Improvements*Columbia County, PA*

New children's playground area and equipment, ADA accessible walking/bike paths, electrical distribution to area lighting, water distribution piping with spigots to each pavilion.

Benton Borough Park Street*Columbia County, PA*

Reconstructed roadway: Full-depth road reclamation with new asphalt surface; stormwater drainage inlet and pipe system; concrete curbing, driveway aprons and sidewalk with ADA ramps.

Coastal Mart Route 220 Convenience Store Land Development Plan *Lycoming County, PA*
Land Development Plan for gas station/convenience store addressing US Rt. 220 access, wetlands and floodplain encroachment, oversized sign and sewage disposal. Highway Occupancy Permit, US ACOE Joint Permit, DEP Sewage Facilities Planning Module, NPDES permit for 1,200 gpd SFTF.

Penn Commercial Vehicles Land Development Plan *Lycoming County, PA*
Reviewed Land Development Plan for 5-acre trucking facility and warehouse. Extensive grading, tractor-trailer drive lanes and parking. DEP Ch 102 Construction NPDES Permit, stormwater detention pond.

Buckhorn Plaza Land Development Plan *Columbia County, PA*
Reviewed Land Development Plan including multiple variance applications for 30-acre site with Wal-Mart Supercenter, Lowes, Panera Bread, Comfort Suites, etc. Inspected \$9,000,000 of construction including over 1,000,000 yards of cut and fill, SWM, E&S, landscaping and surface restoration, asphalt and concrete paving.

Comfort Inn Expansion *Lycoming County, PA*
Land Development Plan for motel addition. Demolished existing bank. SWM: 100% subsurface under parking, fit around building columns and footers. Revised parking, increased spaces. Loyalsock Twp. approvals: Sewage Planning Module, Zoning variances, LD Plan, SWM Plan.

Cell Tower Review Madison Township *Columbia County, PA*
Reviewed and commented on site development plans. Required very flexible review because Industrial Park was the closest land development category in the ordinance.

Brady Township Municipal Building *Lycoming County, PA*
New Township Building. Site design included grading for walkout basement, parking lot, E&S Plan.

PneuDart Land Development Plan *Lycoming County, PA*
Land Development Plan for addition to pneumatic-dart manufacturing facility. Project included parking, driveway, detention pond to manage stormwater that drained to open field.

Grit Commercial Printing *Lycoming County, PA*
Land Development Plan for industrial printer. SWM: surface storage pond, infiltration rate testing. Reverse subdivision combined 2 lots.

Montoursville Area School District, High School Value Engineering Study *Lycoming County, PA*
Value Engineering Study developed alternative plan to renovate existing High School. \$22 million alternative compared to \$32 million project already under construction. Evaluated architectural, heating and ventilation, electrical, structural and safety features. Identified multiple ways to repurpose school's existing building space more efficiently, coupled with limited new construction for science wing, to satisfy academic needs and goals for extracurricular activities.

Keith A. Miller, PE **Project Engineer**

SUMMARY OF EXPERIENCE

Mr. Miller has over 25 years' experience in the Civil Engineering industry. He has experience in Land Development including residential subdivisions, commercial, industrial, institutional, road layout, drainage design, and sanitary systems, erosion control design & NPDES permitting.

EDUCATION

Bachelor of Science Civil Engineering Pennsylvania State University, University Park, PA 1989

PROFESSIONAL CERTIFICATION

Professional Engineer, Pennsylvania PE 048311E	1994-Present
Professional Engineer, Minnesota & North Dakota	2015 – 2017
Certified Professional – Erosion & Sedimentation Control	2013 – 2015
ACI Concrete Field Testing Technician – Grade I, American Concrete Institute (ACI)	2017 – 2022
ACI Concrete Field Testing Technician Program, Pennsylvania Department of Transportation	2017 – 2022

DETAILED PROJECT EXPERIENCE

BASSETT ENGINEERING

Nicholas Meats, LLC Northeast Parcel Land Development Plan *Clinton County, PA*

Land Development Plan, Ch. 102 General Permit, DEP/USACOE Joint Permit and PennDOT HOP's for major land development including extensive site grading, ½ mile of plant drive, parking for 324 single axle vehicles and 32 tractor trailers, utility tunnel to future development, retaining wall, storm drains and detention basins, site lighting, plant security system, landscaping, riparian buffer, security and decorative fence, guard house and gate, water line, septic tank, pump station, wastewater force main.

Waltz, Residential Subdivision/Land Development Plans *Lycoming County, PA*

Engineered six lot residential subdivision to comply with Old Lycoming Township SALDO, SWM and Zoning ordinances including private drive w/ cul-de-sac, hydrologic & hydraulic computations. Site topographic and boundary survey. Extensive testing for OLDS.

Terry Township Post-Framed Garage *Bradford County, PA*

Designed building and prepared Land Development Plan for 72 x 44 feet 3-bay truck garage addition with 8 x 8 timber framing and pre-engineered roof trusses. The garage has three 14 ft. x 14 ft. truck doors, exterior and interior siding, roofing, liner panels, and through-door to existing garage.

Renovo Borough Ontario Avenue/River Access *Clinton County, PA*

Reconstructed 2,100 LF of Ontario Avenue using 62,000 SF of new bituminous pavement, 29,000 SF of bituminous pavement overlay and 17,500 SF of concrete paving including sidewalks and the boat launch. Regraded Ontario Avenue and replaced storm inlets. Provided ADA compliant ramps at all intersections. New river access park with parking lot, lighting, landscaping and a pavilion. River access included grading, a boat launch extending into the West Branch of the Susquehanna, stormwater runoff water quality pond. River access required a PA DEP Joint Permit (Chapter 105) for Small Projects.

Derry Township Municipal Authority Clearwater WWTF *Dauphin County, PA*

Cogeneration (combined heat and power) project will expand electricity generation by burning digester gas. Added flexible membrane cover on secondary digester to expand gas storage. New gas conditioning system, CHP engine generators, waste gas flares. Prepared Site/Civil & Yard Piping Designs. Prepared and applied for DEP environmental Permits: DEP AQM Plan Approval and Ch. 102 General Permit incl. SWM plus E&S Plans. Twp. LD and SWM Planning.

Altoona Water Authority Westerly WWTF Codigestion Conservation Measures *Blair County, PA*

New anaerobic digesters, HSOW receiving, sludge dryer, boilers. Converted aerobic digesters, sludge holding tanks. Prepared Site/Civil & Yard Piping Designs. Prepared and applied for DEP Permits: Chapter 102 General, Water Quality Management Part II, and Air Quality Management Plan Approval. Twp. LD, SWM, Floodplain Development Plan approvals.

Hartleton Borough Shirk Road Reconstruction*Union County, PA*

All-new 2,250-foot 2-lane roadway using Superpave Warm Mix Asphalt: 4 inch 19mm Base Course & 1.5 inch 9.5mm surface course. Added a 2 feet wide roadside shoulder to both sides for the entire length plus swale and underdrain to improve drainage.

Fellowship Church Addition*Luzerne County, PA*

USACOE/DEP Joint Permit, Land Development Plan, DEP Ch 102 Permit w/ SWM and E&S Plan. Sewage Facilities Planning Module, OLDS using flow equalization, micromound with subsurface drip irrigation. Obtained necessary special exceptions and variances from Dallas Township.

Danville First Baptist Church*Columbia County, PA*

PennDOT Utility Highway Occupancy Permit for a new lateral connecting to the public sewer in the roadway shoulder. Design was complicated by an existing roadside channel that limited the depth of the existing lateral stub to nearly no cover. Modified the channel to provide cover over the lateral.

Hartleton Borough Park Road Rehabilitation*Union County, PA*

Reconstructed a severely deteriorated road. 1,500 ft of new asphalt roadway, stormwater drainage ditch, inlet and pipe system, plus stone and asphalt driveway aprons.

Lewis Township Shuck Road Culvert Replacement*Union County, PA*

New aluminum box culvert. Larger structure increased hydraulic capacity. Improved stream channel, backfilled, rip-rap, restored gravel roadway. DEP GP-11 permit.

Lycoming County Bridge Bundling*Lycoming County, PA*

Thirteen municipal-owned bridges will be replaced and four will be rehabilitated under the County's local bridge bundling program. The bridges will be bundled in a series of construction projects, each planned to include 4 to 5 bridges.

PRIOR EXPERIENCE**CPS, Ltd: Project Engineer***Grand Forks, ND*

Grand Forks Park District – Prepare construction drawings for six new parking lots and maintenance of six existing facilities. New construction was for both concrete and bituminous surfaces of parking lots ranging from 20 to 1,000 spaces including approximately 320,000 SF of bituminous pavement construction and 35,000 SF of new concrete pavement.

Residential Apartments – Bismarck ND – Prepare permit & construction drawings for 400 unit apartment complex with related grading, stormwater conveyance, and erosion control measures. Design included layout & grading of over 600,000 SF concrete parking lot.

Oslo, MN – Design for reconstruction of the entire public water system and part of the sanitary sewer system for Oslo, MN.

Pennonni Associates, Inc.: Project Engineer*State College, PA*

Prepared commercial land development designs. Prepared documentation for state and federal agency permit applications. Oversee designs of convenience store and residential developments. Assist in preparation of permitting documents for institutional and natural gas facilities

Nittany Engineering & Associates: Project Engineer*Centre Hall, PA*

Prepared commercial and residential land development projects for agency reviews. Specific projects include expansion of a Super 8 Motel in Clearfield, PA, a new bank branch in Centre Hall, PA, a 30 lot residential facility in Centre Hall, PA.

Stephen A. Higgins III, PLS

Land Surveyor

SUMMARY OF EXPERIENCE

Mr. Higgins has over 40 years' experience in every aspect of surveying, mapping and civil engineering, including fieldwork, land development design and calculations.

DETAILED PROJECT EXPERIENCE**BASSETT ENGINEERING****Derry Township Clearwater Wastewater Treatment Facility** *Dauphin County, PA*

Provided surveying services to Derry Township Municipal Authority. Set new benchmarks around the Clearwater WWTF to provide uniform vertical and horizontal control throughout the plant.

Lewis Township Upper Bodines Road Bridge *Lycoming County, PA*

Topographic and bound survey.

Lewis Township, Flood Buyout TOPO *Lycoming County, PA*

Surveyed eight properties along McIntyre Way that Lewis Township acquired through the Flood Buyout program. Reviewed deeds and resolved many discrepancies between adjoining owners. Staked out property corners so Township could maintain the land.

Tunkhannock Township Fox Road Bridge Replacement *Wyoming County, PA*

All new bridge with 106-foot clear-span with cast-in-place concrete abutments and precast concrete spread box beams. Designed both approaches to reduce the hazards for traffic entering and exiting the bridge. Significant realignment of north approach to increase safe driving speed. Eliminated center pier to avoid flow damage and obstruction.

Nicholas Meats LLC Chapter 102 Construction Permit for Stormwater *Clinton County, PA*

Surveyed to stake out for construction of stormwater improvements including two detention basins, stormwater collection system and site grading. Reviewed subdivision plans for accuracy and final surveyor certification.

Robert Musser, Subdivisions and Land Development Plan *Lycoming County, PA*

Reviewed subdivision plans for accuracy and final surveyor certification.

Timothy Waltz, Subdivisions and Land Development Plan *Lycoming County, PA*

Reviewed subdivision plans for accuracy and final surveyor certification.

David Shirn, Subdivision and Land Development Plan *Lycoming County, PA*

Reviewed subdivision plans for accuracy and final surveyor certification.

Fellowship Church Land Development *Luzerne County, PA*

Reviewed subdivision plans for accuracy and final surveyor certification.

PRIOR EXPERIENCE**Ruggiero Plante Land Design, Project Manager/Survey Manager** *Philadelphia, PA*

Assisted the survey department with explosion of residential and commercial development in the City of Philadelphia.

C.H. Fenstermaker & Associates LLC, Project Manager PLS *Lafayette, LA*

Boundary surveys of over 3000 individual tracts surveys in very rural and isolated areas of Susquehanna County, Pa. These tracts were surveyed for areas to determined gas royalty distributions. Along with the boundary surveys, I was also responsible for the creation of pipeline easements and as-builts as well as serving as project manager for all Pennsylvania clients.

Connor Bassett, EIT

Engineer II**SUMMARY OF EXPERIENCE**

Mr. Bassett has experience in permitting, construction inspection, dam and bridge inspections, and culvert design. He has created design drawings and calculations for grading, site layout and stormwater management. He has gained experience with stormwater hydrology and design of bridges, dams, culverts and stormwater systems.

EDUCATION

Bachelor of Science Civil Engineering University of Pittsburgh, Pittsburgh, PA 2018

DETAILED PROJECT EXPERIENCE**BASSETT ENGINEERING, INC****Nicholas Meats LLC, Northeast Parcel Land Development Plan** *Clinton County, PA*

Land Development Plan, Ch. 102 General Permit, DEP/USACOE Joint Permit and PennDOT HOP's for major land development including extensive site grading, 1/2 mile of plant drive, parking for 324 single axle vehicles and 32 tractor trailers, utility tunnel to future development, retaining wall, storm drains and detention basins, site lighting, plant security system, landscaping, riparian buffer, security and decorative fence, guard house and gate, water line, septic tank, pump station, wastewater force main.

Beaver Lake Dam Repairs *Lycoming County, PA*

Complete new concrete cap, Main Spillway with two 9 ft x 9 ft gates. Designed concrete cap, spillway and draw down weir gates to improve existing dam. Sized weir gate and spillway. Extensive hydrology and hydraulics calculations.

Derry Township Municipal Authority Clearwater WWTF *Dauphin County, PA*

Cogeneration (combined heat and power) project will expand electricity generation by burning digester gas. Added flexible membrane cover on secondary digester to expand gas storage. New gas conditioning system, CHP engine generators, waste gas flares. Prepared Site/Civil & Yard Piping Designs. Prepared and applied for DEP environmental Permits: DEP AQM Plan Approval and Ch. 102 General Permit incl. SWM plus E&S Plans. Twp. LD and SWM Planning.

Renovo Borough Ontario Avenue/River Access *Clinton County, PA*

Reconstructed 2,100 LF of Ontario Avenue using 62,000 SF of new bituminous pavement, 29,000 SF of bituminous pavement overlay and 17,500 SF of concrete paving including sidewalks and the boat launch. Regraded Ontario Avenue and replaced storm inlets. Provided ADA compliant ramps at all intersections. New river access park with parking lot, lighting, landscaping and a pavilion. River access included grading, a boat launch extending into the West Branch of the Susquehanna, stormwater runoff water quality pond. River access required a PA DEP Joint Permit (Chapter 105) for Small Projects.

Waltz, Residential Subdivision/Land Development Plans *Lycoming County, PA*

Engineered six lot residential subdivision to comply with Old Lycoming Township SALDO, SWM and Zoning ordinances including private drive w/ cul-de-sac, hydrologic & hydraulic computations. Site topographic and boundary survey. Extensive testing for OLDS.

McIntyre Township Pleasant Stream Embankment Restoration *Lycoming County, PA*

Survey and design of approximately 7,600 sf of stream bank along Pleasant Stream in McIntyre Township using R-6 Rip Rap. The goal of the project is to protect the stream embankments and the adjacent roadway from further degradation. Two temporary stream crossings were utilized, one at the easterly bridge and a second at the westerly bridge, brought material and equipment to the site.

Lycoming County Bridge Bundling *Lycoming County, PA*

Thirteen municipal-owned bridges will be replaced and four will be rehabilitated under the County's local bridge bundling program. The bridges will be bundled in a series of construction projects, each planned to include 4 to 5 bridges.

Lycoming County NBIS Small Bridge Inspections *Lycoming County, PA*

Assisted in inspecting 339 bridges for Lycoming County. Entered data into the PennDOT online database BMS2 and inspection results into PennDOT Iforms. Inspections included photo documentation, load-rating calculations, cost estimates for replacement or major repairs, drawings and report.

Sean McCormick, EIT

Engineer II

SUMMARY OF EXPERIENCE

Mr. McCormick has experience in permitting, bridge inspections, surveying, wastewater, and air quality. He has created design drawings and calculations for site layout, land development and stormwater management. He has familiarity with stormwater hydrology, culverts, stormwater systems, and wastewater facilities.

EDUCATION

Bachelor of Science Civil Engineering Messiah College, Mechanicsburg PA 2018

DETAILED PROJECT EXPERIENCE**BASSETT ENGINEERING, INC****Derry Township Municipal Authority Clearwater WWTF** *Dauphin County, PA*

Cogeneration (combined heat and power) project will expand electricity generation by burning digester gas. Added flexible membrane cover on secondary digester to expand gas storage. New gas conditioning system, CHP engine generators, waste gas flares. Prepared Site/Civil & Yard Piping Designs. Prepared and applied for DEP environmental Permits: DEP AQM Plan Approval and Ch. 102 General Permit incl. SWM plus E&S Plans. Twp. LD and SWM Planning.

Altoona Water Authority Westerly WWTF Codigestion Conservation Measures *Blair County, PA*

New anaerobic digesters, HSOW receiving, sludge dryer, boilers. Converted aerobic digesters, sludge holding tanks. Prepared Site/Civil & Yard Piping Designs. Prepared and applied for DEP Permits: Chapter 102 General, Water Quality Management Part II, and Air Quality Management Plan Approval. Twp. LD, SWM, Floodplain Development Plan approvals.

Loyalsock Township Little League Softball Field Lighting *Lycoming County, PA*

Land Development Plan to add overhead lighting at the Loyalsock Township Little League softball field in Short Park. Obtained approval from Loyalsock Township Planning Commission and Board of Supervisors.

Limestone Township Recreational Park *Lycoming County, PA*

Improvements included: a handicap accessible parking lot, a paved walking trail from the parking lot to the concession stand and two ballfields, new playground equipment, associated lawn and site restoration.

Lycoming County Bridge Bundling *Lycoming County, PA*

Thirteen municipal-owned bridges will be replaced and four will be rehabilitated under the County's local bridge bundling program. The bridges will be bundled in a series of construction projects, each planned to include 4 to 5 bridges.

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Waltz, Residential Subdivision/Land Development Plans *Lycoming County, PA*

Engineered six lot residential subdivision to comply with Old Lycoming Township SALDO, SWM and Zoning ordinances including private drive w/ cul-de-sac, hydrologic & hydraulic computations. Site topographic and boundary survey. Extensive testing for OLDS.

Renovo Borough, Ontario Avenue River Access and Resurfacing *Clinton County, PA*

Reconstructed 2,100 LF of Ontario Avenue using 62,000 SF of new bituminous pavement, 29,000 SF of bituminous pavement overlay and 17,500 SF of concrete paving including sidewalks and the boat launch. Regraded Ontario Avenue and replaced storm inlets. Provided ADA compliant ramps at all intersections. New river access park with parking lot, lighting, landscaping and a pavilion. River access included grading, a boat launch extending into the West Branch of the Susquehanna, stormwater runoff water quality pond. River access required a PA DEP Joint Permit (Chapter 105) for Small Projects.

Client References -- Please call the following references who are clients of Bassett Engineering, they can tell you first-hand about their experience with our services.



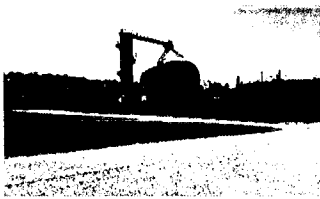
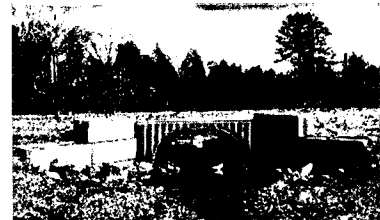
Renovo Borough
*5th Street River Access, Ontario Avenue Reconstruction,
Erie Avenue Rehabilitation,
3^d and 11th Streets Resurfacing*
Ms. Marsha Davis, Borough Administrator
(570) 923-2612
128 Fifth Street Renovo, PA 17764

Loyalsock Township Little League
Short Park Softball Field Lighting
Mr. Matt Custer, League
Vice President
(570) 502-5961
Mattcuster2323@gmail.com



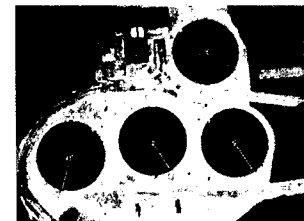
Walnut Street Baptist Church
Soccer Field and Gymnasium
Pastor Tim Longenecker
(570) 753-8785
201 W. Highland Avenue, Avis, PA 17721

Pine Township
*Airport Road and English Run Road
Bridge Replacements and English Run
Culvert Replacement*
Ms. Shelley Johnston, Supervisor
(570) 326-8214
925 Oregon Hill Road, Morris, PA 16938



Derry Township Municipal Authority
*Clearwater WWTF, Benchmark Survey,
Energy Enhancements*
William Rehkop, Facility Director
(717) 566-3237
670 Clearwater Road, Hershey, PA 17033

Altoona Water Authority
Westerly Wastewater Treatment Facility
Ms. Todd Musser, Director of
Wastewater Treatment Operations
(570) 326-8214
900 Chestnut Avenue, Altoona, PA 16601



Section 4: Adequacy of Resources/Timely Project Completion

Availability to Complete Project

Our current workload allows us to effectively complete this assignment for the County. Handling multiple projects at one time is the nature of municipal engineering. When we served as Planning and Community Development's Engineer a few years ago the reviews were small short-fuse projects that we fit into our ongoing workload. Now that our engineering staff has increased, we see how accommodating the County's needs will be a welcome supplement to our ongoing workload. Keith Miller will be dedicated to this project and will be the County's main contact and our primary reviewer. We have been effectively completing such assignments over the past 24 years and we encourage you to contact our references for unbiased reviews of our services. Bassett Engineering makes a total commitment to complete all assignments on time.

Britt Bassett, PE, assisted by our Engineering Team, has the following projects underway:

Lycoming County Bridge Bundling: BE is engineering the replacement and rehabilitation of 17 bridges owned by seventeen municipalities throughout the County. Wallace Montgomery, a premier bridge engineering firm in the Mid-Atlantic region and an ENR-500 firm, is assisting BE. We are currently completing the Phase 1 Study and will be designing the first of four bridge bundles in the fall of 2020, with the first bundle being constructed in 2021. BE is extremely proud to serve our home county on yet another project, particularly one that will guide the way for local bridge bundling projects in Pennsylvania.

Cummings Township Land Development Plan: BE is preparing a land development plan and expects to obtain a PennDOT Highway Occupancy Permit for the Township's proposed garage, cinder shed and parking lot. BE will submit the LD plan to the Lycoming County Planning Commission for review shortly.

Leiby's Dairy Wastewater Treatment Plant: BE currently is studying a wastewater treatment plant for an ice cream and ice cream mix producer located near Tamaqua, PA. We will design, estimate costs, and supervise construction of a plant that will treat all industrial wastewater from their production facilities. The project will require DEP NPDES, Water Quality Management and Chapter 102 permits, as well as Township approval of the land development plan and variances.

LRBSA Throop WWTF Blower Pipe Replacement: BE currently is studying the replacement of a 500-foot long 18" blower pipe at the Throop WWTF for the Lackawanna River Basin Sewer Authority. We will then design, bid, and provide construction phase engineering of this main artery for maintaining wastewater treatment. The project will be designed in the fall of 2020, bid in the spring of 2021, and constructed in the summer of 2021.

Tunkhannock Township Fox Road Bridge Replacement: BE assisted the Township in acquiring \$1.0M in DCED MTF funding and \$786,900 in PennDOT MTF funding. BE is currently designing and has applied for a GP-11 Permit to replace this bridge over the South Branch of Tunkhannock Creek in Wyoming County. We will then bid and provide construction phase engineering. The project will be designed in the fall of 2020, bid in the spring of 2021, and constructed in the summer of 2021.

DTMA Clearwater WWTF Energy Enhancements: BE was hired as a subconsultant to assist Brown and Caldwell, an ENR Top-50 engineering firm, with the design, bidding and construction of the Energy Enhancements project for the Derry Township Municipal Authority's Clearwater WWTP. This waste-to-energy project involves facility upgrades including a new biogas-fueled combined heat and power (CHP) engines, gas conditioning, gas conveyance systems, sludge blending improvements, and secondary digester modifications. BE is responsible for all site work, yard piping and permitting (AQM, WQM, Ch. 102, Land Development, ESC). Bids were recently opened and construction will start soon.

Altoona Water Authority Guaranteed Energy Savings Project Biosolids Treatment Improvements: BE was hired as a consultant to Energy Systems Group, a leading energy services provider, for the design, bidding and construction of the Biosolids Treatment Improvements project for the Altoona Water Authority's Westerly WWTF. This waste-to-energy project involves facility upgrades including the installation of two new anaerobic digesters, conversion of two existing aerobic digesters, H2S receiving, a new digester control building, new biosolids thickening and drying systems, and a beneficial biogas utilization system. BE is responsible for all site work, yard piping and permitting (AQM, WQM, Ch. 102, Land Development, ESC). BE also completed the funding application for the project, the first GESA project to ever be funded by PENNVEST. The project team anticipates issue of the Letter of No Prejudice imminently, construction to begin next month, and construction completed in the fall of 2022.

South Centre Township Act 537 Plan: BE prepared an Act 537 Sewage Facilities Plan for the Township in Columbia County, which DEP is currently reviewing. The situation in South Centre is quite complex, but we anticipate DEP to approve the Final Plan this Fall, and design of a new wastewater system to start this fall as well.

Hartleton and Lewis Act 537 Plans: BE is also preparing two other Act 537 plans in Union County; one for Hartleton Borough and one for Lewis Township. Both plans are following roughly the same schedule as South Centre Township with minor variations based on review timelines.

Wharton Township Cemetery Road Bridge: BE designed, bid, and is preparing to supervise the construction of a 42-foot span concrete arch in Potter County. This bridge which spans the East Fork Sinnemahoning Creek is heavily used as a part of the Potter County snowmobile trail system. Construction is planned to be completed yet this year.

Dutchland, Inc. Process Engineering: BE serves Dutchland, Inc., the Mid-Atlantic's leading manufacturer of precast wastewater treatment plants, as treatment process engineers and general consultants. BE provides preliminary designs for Dutchland to develop cost proposals, and prepares Design Engineer's Reports to include with DEP WQM Part II Permit Applications. Projects range from small, simple package plants to the design of full scale wastewater treatment facilities for clients across the region.

Clifford Township Bridges: BE designed, obtained GP-11 Permits for, bid, and supervised construction of two bridge replacements and a new pedestrian bridge in Susquehanna County. The bridge replacements are currently being constructed and are at substantial completion with the only outstanding items being guiderail installation. The pedestrian bridge is in the design and permitting phase and is delayed by DEP insisting that the township obtain a GP-105 for the bridge and other past work in the park.

Madison Township: BE designed, obtained GP-11 Permits for, bid, and supervised construction of several projects for Madison Township, Columbia County including two bridge repairs, two aluminum box culverts on Valley Road, plus another replacement on Hollow Road. The Valley Road culverts are at substantial completion with the only outstanding items being seeding and mulching.

Continuity and Stability

Britt Bassett, PE, President, founded Bassett Engineering in 1996 and has over 35 years of civil engineering experience. We are a state of the art municipal and environmental engineering firm who are celebrating our 24th year in business. Our experienced leadership team provides management stability.

Keith Miller, PE is our land development specialist, with over 25 years of experience in land development with Bassett and for State College, Lancaster and North Dakota firms. Keith has worked on the full variety of land development, with particular emphasis on commercial properties, prior to joining us. We have broadened his horizons including construction phase engineering and inspection.

Bassett Engineering's Team includes:

- Licensed engineer with over 25 years of experience;
- Surveyor with over 40 years of experience; and
- Three recent graduates with Engineer-in-Training certificates, two of whom were recently promoted to Engineer II.
- One is the son of the firm's founder; providing 2 generations of unique stability to the firm.

Bassett Engineering is one of the oldest established consulting firms in Lycoming County. We have grown into a team of highly skilled, committed professionals who take great pride in their work and are passionate about serving our County.

Bassett Engineering's mission is to provide cost effective and unique solutions to our client's problems by applying proven technology in innovative arrangements. We customize our recommendations and designs to address our client's specific needs, desires, and concerns. Our goal is to provide the highest quality municipal and environmental engineering in all locations where we practice.

Our customers are townships, boroughs, municipal authorities, businesses and individuals throughout Central and Northern Pennsylvania. We provide guidance, support, and expertise in a wide variety of engineering issues that confront our clients. We are an equal opportunity employer.

Bassett Engineering provides design, administration, public bidding, project management, funding assistance and construction inspection services for numerous townships, boroughs and municipal authorities throughout Northcentral PA. Our work assignments in this capacity have been numerous and varied, including land development designs and reviews, environmental and PennDOT permitting, bridge replacement and repair; NBIS bridge inspections, roadway reconstruction and resurfacing, curb, driveway and sidewalk design, stormwater improvement projects, pedestrian safety improvements, wastewater treatment plants, waste-to-energy, water and sewer systems, and recreational planning.

SECTION 6
PRICE PROPOSAL

Legal Ad
Sun Gazette
To Be Run: July 30th and August 3rd

NOTICE TO BIDDERS

ADDENDUM NO. 1 RFP FOR ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE

The additions and/or deletions contained in this Addendum shall be made a part of the plans and specifications and contract documents for the above-referenced solicitation, and shall be subject to all applicable requirements thereunder, as if originally shown and/or specified. In case of any conflict between the specifications, and this Addendum, this Addendum shall govern.

This Addendum must be returned with your bid as acknowledgment of its receipt. Bidders may obtain the Addendum on the County website at www.lyco.org and Request for Bids.

The following modification is made to the text for the referenced solicitation:

The scope of the project has changed from one (1) tower site to two (2) tower sites, resulting in a number of changes to the RFP issued. Please see the following changes for the Lycoming County RFP for E&S services.

1. Change from “Hughesville Water Authority Tower Site” to “Hughesville Water Authority Tower Site and Hesker Hill Tower Site: (1) on the cover page, (2) on Notice to Bidders page 1-1, second paragraph, and (3) on Section 2, page 2-2, paragraph 2.9, third line.

2. Change to Scope of Work & Technical Specifications, Introduction, page 5-1 is as follows:

Lycoming County is currently upgrading our existing radio system to better serve the residents, businesses, tourists and public safety agencies of the county. In order to achieve the overall plan, Lycoming County will be contracting for the construction of two (2) raw lands to finish tower sites to improve RF coverage for our first responders. Additionally, on the one site, a second plot of land is to be cleared for the water authority to use (no further development of the second plot is required).

3. Changes to Scope of Work & Technical Specifications, General Requirements, item 1, page 5-1 are as follows:

1. The names and locations of the two (2) new proposed tower sites are:

- a. Hughesville Water Authority tower site
 - i. Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
 - ii. Street address: 279 Reservoir Road, Hughesville, PA
 - iii. Township: Wolf
 - iv. County: Lycoming
 - v. Size of site plot: 100'x100'
 - vi. Height of tower: 250'

Hughesville Water Authority land which is to be cleared (not developed) for water authority use is:

- i. Street address: 279 Reservoir Road, Hughesville, PA
- ii. Township: Wolf
- iii. County: Lycoming
- iv. Approximate size of plot to be cleared for the water authority: 100'x100'

- b. Hesker Hill tower site
 - i. Latitude: 41-14-19.1 N, longitude: 77-14-35.1 W
 - ii. Street address: 1324 Hesker Hill Road, Jersey Shore, PA
 - iii. Township: Piatt
 - iv. County: Lycoming
 - v. Size of site plot: 75'x75'
 - vi. Height of tower: 250'

The County will be responsible for procurement of site and leasing of property.

4. Change to Mandatory Site Walk on Notice to Bidders, page 1-1, paragraph 4 is as follows:

A mandatory site walk will be held on Wednesday, August 5, 2020, at 10:00 AM for the two (2) tower sites, starting at the Hughesville Water Authority site located at 279 Reservoir Road, Hughesville, PA.

5. Change to Price Proposal, section 6.1 Cost Elements is as follows:

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final	

Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	
Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HUGHESVILLE	

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	

Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HESKER HILL	

GRAND TOTAL FOR BOTH SITES	
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*see attached costs

ACKNOWLEDGEMENT

I hereby acknowledge receipt of this Addendum for the above noted project.

Signature  Date 8-21-20

6.1 Cost Elements: Bassett Engineering hereby affirms that services not specifically mentioned in this RFP, but necessary to provide the functional capabilities described, are included as part of the cost elements. This table itemizes our costs and those of our subconsultants.

Hughesville Site	Cost (\$)			
	Bassett Engineering	Subconsultant		Total Fee
		Sub Fee	Company	
Site Grading/Site Layout	\$ 6,000			\$ 6,000
Stormwater Drainage Design	\$ 3,500			\$ 3,500
Erosion/Sediment Control	\$ 2,500			\$ 2,500
Civil Permitting	\$ 3,000			\$ 3,000
Geotechnical		\$ 7,535	Kitlinski	\$ 7,535
Geotechnical Boring Stakeout	\$ 900			\$ 900
Construction Stakeout	\$ 4,240			\$ 4,240
Soil Resistivity	\$ 250	\$ 2,300	Geo-Tech	\$ 2,550
Preliminary and Final Construction Drawings (CDs)	\$ 11,750			\$ 11,750
Utility Coordination	\$ 600	\$ 3,750	Jade Stone	\$ 4,350
Zoning Information	\$ -			\$ -
FAA/FCC	\$ 1,000	\$ 5,645	Grubb	\$ 6,645
Field Survey/Courthouse Research	\$ -			\$ -
Survey Plans	\$ 6,800			\$ 6,800
Environmental Investigation	\$ 250			\$ 250
Infiltration Testing	\$ 300	\$ 2,500	Nolan + Excavator	\$ 2,800
Wetlands/Stream Delineation		\$ 800	Kingfisher	\$ 800
Phase 1 Investigation & Report	\$ 1,500			\$ 1,500
Hearing Attendance (If Needed)	\$ 250			\$ 250
Phase 2 Investigation and Report (If Needed)	\$ 2,500			\$ 2,500
NEPA/SHPO Services		\$ 4,000		\$ 4,000
Deliveries, Copies, Etc.	\$ 20			\$ 20
SUBTOTAL HUGHESVILLE SITE	\$ 45,360	\$ 26,530		\$ 71,890

Hesker Hill Site Site	Cost (\$)			
	Bassett Engineering	Subconsultant		Total
		Sub Fee	Company	
Site Grading/Site Layout	\$ 3,000			\$ 3,000
Stormwater Drainage Design	\$ 2,000			\$ 2,000
Erosion/Sediment Control	\$ 1,200			\$ 1,200
Civil Permitting	\$ 2,400			\$ 2,400
Geotechnical		\$ 5,085	Kitlinski	\$ 5,085
Geotechnical Boring Stakeout	\$ 900			\$ 900
Construction Stakeout	\$ 2,120			\$ 2,120
Soil Resistivity	\$ 250	\$ 2,300	Geo-Tech	\$ 2,550
Preliminary and Final Construction Drawings (CDs)	\$ 3,150			\$ 3,150
Utility Coordination	\$ 400	\$ 3,750	Jade Stone	\$ 4,150
Zoning Information	\$ -			\$ -
FAA/FCC	\$ 1,000	\$ 3,645	Grubb	\$ 4,645
Field Survey/Courthouse Research	\$ -			\$ -
Survey Plans	\$ 2,200			\$ 2,200
Environmental Investigation	\$ 250			\$ 250
Infiltration Testing	\$ 200	\$ 2,000	Nolan + Excavator	\$ 2,200
Wetlands/Stream Delineation		\$ 800	Kingfisher	\$ 800
Phase 1 Investigation & Report	\$ 1,500			\$ 1,500
Hearing Attendance (If Needed)	\$ 250			\$ 250
Phase 2 Investigation and Report (If Needed)	\$ 100			\$ 100
NEPA/SHPO Services		\$ 2,000		\$ 2,000
Deliveries, Copies, Etc.	\$ 20			\$ 20
SUBTOTAL HESKER HILL SITE	\$ 20,940	\$ 19,580		\$ 40,520

GRAND TOTAL BOTH SITES

\$ 112,410

Subconsultant

FT Kitlinski & Associates, Inc.
 Richard Grubb & Associates, Inc.
 Jade Stone Engineering PLLC
 Kingfisher Group LLC
 Geo-Technology Associates Inc.
 Nolan, Jami SEO

Abbreviation

Kitlinski
 Grubb
 Jade Stone
 Kingfisher
 Geo-Tech
 Nolan

August 20, 2020

Bassett Engineering Inc.
Attn: Britt Bassett, P.E.
1440 Broad Street
Montoursville, PA 17754

Re: Request for Electrical Engineering Services

File: 228-20

Dear Bassett Engineering:

Jade Stone Engineering, PLLC is pleased to present Bassett Engineering with this proposal to provide the Electrical Engineering Services pertaining to the Lycoming County Two (2) Tower Sites Project.

Based on our current understanding of the project, Bassett Engineering is seeking a qualified sub-consultant to provide the electrical design phase services for the Lycoming County Two (2) Tower Sites Project. The overall project scope of work outlined herein is to include but is not limited to the following;

- Construction of two (2) new radio tower sites and all associated components

To assist Bassett Engineering with this project, Jade Stone Engineering, PLLC proposes to provide the following scope of services:

Scope of Services

Design Phase Services

The intent of this phase is to develop the proposed construction bid set drawings (electrical only) for the Lycoming County Two (2) Tower Sites Project:

1. Review background information (drawings, reports, etc.) pertinent to the project to gain a better understanding of the proposed systems and equipment.
2. Attend a review meeting with Bassett Engineering to define specific project requirements. It is anticipated this will take place at the same time as the initial site walk-thru or via conference call.



3. Develop $\pm 60\%$ and 90% milestone design documents including engineering drawings and technical specifications to include:
 - Development of electrical site plans showing the general arrangement of all new underground electrical duct-banks, hand-holes, man-holes, equipment locations, structures, buildings, etc.
 - Bassett Engineering to provide base drawings (site) to JSE in AutoCAD format (Version 2018, or earlier) for development of necessary electrical site plans.
 - JSE will design a new electrical service entrance and associated distribution gear to support all proposed improvements at both radio tower sites.
 - JSE will develop a connected/demand load analysis to ensure proper electrical service sizing/ratings.
 - i. It is anticipated that a 200 amp, 240 volt electrical service will be required at each site.
 - Coordination with the local utility will be provided as required.
 - Development of single line diagrams (SLD) showing the interconnection of all proposed equipment within the electrical distribution system.
 - Note, no power distribution is included within this proposal. It is anticipated JSE will design the electrical service entrance and associated gear but nothing beyond this point.
 - Design of tower grounding systems.
 - Soil resistivity tests to be by others and provided to JSE for use with design.
 - Connection to single point ground bar within shelter.
 - Development of project specific electrical details and schedules to support the design and implementation of the proposed equipment, systems, and structures associated with each radio tower site.
 - Attend a $\pm 60\%$ and 90% review meeting with Bassett Engineering to review the design milestone documents, discuss, and refine the design concepts towards the development of the final design documents. It is anticipated this review will take place via conference call.
 - Review comments received from the design review meetings and incorporate those comments into the project design.
4. Develop final design documents, including stamped/signed contract drawings. Final design documents to progress all work as outlined above and herein to the 100% bid-level milestone. Drawings to be in AutoCAD and PDF formats.
5. Provide full electrical support to Bassett Engineering throughout the duration of the project.

Deliverables

1. Submit draft (progress) set of all construction documents at the 60% and 90% design milestones for review and comment by Bassett Engineering.
2. Submission of final/conformed copies of the contract documents.

Technical Assumptions

1. This proposal includes electrical engineering services only.



2. Bidding and construction phase services have been omitted from this proposal.
3. No site visits are included within this proposal.
4. Emergency generator system design and/or coordination of such systems is not included within this proposal.
5. Branch circuitry and electrical feeder design is not included within the scope of this proposal.
6. Development of any building/structure floor plans is not included.
7. Design of lighting systems or tower obstruction lighting is not included within this proposal.
8. CCTV and security system designs have been excluded from this proposal.
9. Environmental testing of hazardous materials or contaminated soils, or associated remediation design is not included in the scope of this proposal.
10. Drawing reproduction is assumed to be by others.
11. Technical specifications are not included within the scope of this proposal.
12. This proposal assumes that any changes resulting from each of the review submission milestones (60% & 90%) will be generally minor in nature and will not require the redesign of the previously completed engineering work. If significant changes become necessary during the design process, Jade Stone Engineering will immediately notify Bassett Engineering to negotiate an appropriate adjustment in fee at that time.
13. JSE has assumed the electrical design will be completed using AutoCAD software (2018 version). The use of Revit or other 3D modeling software is not included within this proposal.
14. A utility survey, property/land boundary survey, and/or topographic survey is not included within this proposal.
15. Where it exists, Bassett Engineering will provide existing/current documentation (drawings, border, site survey, engineering reports, utility reports, utility bills, etc...) for Jade Stone Engineering's use in developing the contract documents.
16. A Bassett Engineering representative will be available to assist Jade Stone Engineering while on site, as necessary.



We have based this fee on our current understanding of the project and the proposed services as defined and outlined above. If unanticipated circumstances occur, and it becomes apparent that additional effort may be required, Jade Stone Engineering will notify Bassett Engineering to discuss a fee adjustment prior to proceeding with additional services. The below fee schedule represents lump sum values which will be invoiced on a project percent complete basis.

• <u>Electrical Design Phase Services</u>	<u>\$7,500.00</u>	<u>(Lump Sum)</u>
• Total	\$7,500.00	(Lump Sum)

We appreciate the opportunity to propose on this project and look forward to the possibility of working with Bassett Engineering on this project. Should you have any questions or wish to discuss any portion of this proposal, please feel free to contact us.

Sincerely,



JADE STONE ENGINEERING PLLC
Jeffrey E. Robinson, P.E., LEED AP BD+C
Electrical Engineer

Authorization

Jade Stone Engineering, PLLC is hereby authorized by Bassett Engineering, to proceed with the services proposed and described herein.

Britt Bassett, P.E.

Date





RICHARD GRUBB & ASSOCIATES

Engineering • Planning • Construction

1901 S. 9th Street | Space 307 | Philadelphia, Pennsylvania 19148 | 609-655-0692 | www.rgaincorporated.com

**Proposal, Hughesville Water Authority Site
41 15 16.18N and 76 43 16.45W
Reservoir Road**

**Wolf Township, Lycoming County
Pennsylvania**

August 12, 2020

RGA, Inc. (RGA) proposes to complete Section 106 consultation for Bassett Engineering, Inc. for the proposed Hughesville Water Authority wireless telecommunications project at 41 15 16.18N, 76 43 16.45W in Wolf Township, Lycoming County, Pennsylvania, based on project descriptions provided on August 10, 2020 by Bassett Engineering, Inc. RGA understands the proposed lattice tower will measure 250 feet in height, will be located in a 100-foot square lease area, and that utilities will be routed overhead, requiring the installation of seven utility poles. Access will be provided by a proposed 1,800-foot long access road. RGA will complete a visual effects assessment, Phase I archaeological survey, and Tribal consultation. RGA understands that Bassett Engineering, Inc. will prepare and submit the FCC Form 620 for the project, complete the public notice and affidavit and conduct public consultation.

The scope of work will consist of:

- Research to identify properties listed in or eligible for the National Register of Historic Places (NRHP) in the project area and vicinity. Research will utilize online resources available on the Pennsylvania Cultural Resource Information System (PA CRIS), as appropriate.
- A Phase I archaeological survey to determine if archaeological resources are present within the Area of Potential Effects for archaeology (APE-Direct Effects).
- Completion of a Pennsylvania One Call prior to subsurface testing. It is assumed that the APE-Direct Effects does not need to be marked in white.
- Subsurface archaeological testing, including the manual excavation of up to nine (9) shovel test pits (STPs) within the proposed lease area, up to seven (7) STPs for proposed utility pole installation, and 36 STPs for the proposed access drive. In total excavation of up to 52 STPs is proposed. Areas with greater than 12 percent slope will not be subject to STP excavation. Each STP will measure 40 centimeters square in plan to document stratigraphy and to determine if intact archaeological resources are present within the APE-Direct Effects (see Assumptions and Exceptions below). Excavation will extend up to two to three feet below grade. All soils will be screened with ¼-inch wire mesh to facilitate artifact recovery. All screening will take place on tarps, and excavated soils will be placed back into each STP upon completion. Shovel test pit excavation in gravel or asphalt-paved areas that may necessitate the use of a backhoe is not included in this proposal. An STP log will be produced and the profile of one STP will be photographed.
- Processing and cataloging of recovered artifacts. An artifact inventory will be produced. It is assumed that up to 60 artifacts will be recovered. Artifact curation is not included. It is assumed that the property owner will reject submission of recovered artifacts to the Pennsylvania Historical and Museum

ADDITIONAL OFFICES | New Jersey | New York | Maryland | North Carolina

DBE/WBE/SBE CERTIFIED

Proposal, Cultural Resources Survey
Hughesville Water Authority Tower
August 14, 2020
Page 3

Costs

RGA will complete the visual effects assessment, Phase I archaeological survey, and Tribal consultation for \$9,644.00, plus the cost of public notice and Tribal consultation fees.

Name (Print), an authorized representative of Bassett Engineering, Inc.

Name (Signature)

Date



RICHARD GRUBB & ASSOCIATES

1901 S. 9th Street | Space 307 | Philadelphia, Pennsylvania 19148 | 609-655-0692 | www.rgaincorporated.com

**Proposal, Hesker Hill Site
41 14 19.1N and 77 14 35.1 W
Hesker Hill Road**

**Piatt Township, Lycoming County
Pennsylvania**

August 12, 2020

RGA, Inc. (RGA) proposes to complete Section 106 consultation for Bassett Engineering, Inc. for the proposed Hesker Hill wireless telecommunications project at 41 14 19.1N, 77 14 35.1W in Piatt Township, Lycoming County, Pennsylvania, based on project descriptions provided on August 10, 2020 by Bassett Engineering, Inc. RGA understands the proposed lattice tower will measure 250 feet in height, will be located in a 60-foot square lease area, and that utilities will be routed overhead, requiring the installation of seven utility poles. Access will be provided by an existing farm lane. RGA will complete a visual effects assessment, Phase I archaeological survey, and Tribal consultation. RGA understands that Bassett Engineering, Inc. will prepare and submit the FCC Form 620 for the project, complete the public notice and affidavit and conduct public consultation.

The scope of work will consist of:

- Research to identify properties listed in or eligible for the National Register of Historic Places (NRHP) in the project area and vicinity. Research will utilize online resources available on the Pennsylvania Cultural Resource Information System (PA CRIS), as appropriate.
- A Phase I archaeological survey to determine if archaeological resources are present within the Area of Potential Effects for archaeology (APE-Direct Effects).
- Completion of a Pennsylvania One Call prior to subsurface testing. It is assumed that the APE-Direct Effects does not need to be marked in white.
- Subsurface archaeological testing, including the manual excavation of up to five (5) shovel test pits (STPs) within the proposed lease area and up to seven (7) STPs for proposed utility pole installation. Each STP will measure 40 centimeters square in plan to document stratigraphy and to determine if intact archaeological resources are present within the APE-Direct Effects (see Assumptions and Exceptions below). Excavation will extend up to two to three feet below grade. All soils will be screened with ¼-inch wire mesh to facilitate artifact recovery. All screening will take place on tarps, and excavated soils will be placed back into each STP upon completion. Shovel test pit excavation in gravel or asphalt-paved areas that may necessitate the use of a backhoe is not included in this proposal. An STP log will be produced and the profile of one STP will be photographed.
- Processing and cataloging of recovered artifacts. An artifact inventory will be produced. It is assumed that up to 30 artifacts will be recovered. Artifact curation is not included. It is assumed that the property owner will reject submission of recovered artifacts to the Pennsylvania Historical and Museum Commission and that the recovered artifacts can be returned to the property owner. Should curation fees be required, a supplemental cost will be necessary.
- Assessment of potential significance of identified archaeological resources, if any.

ADDITIONAL OFFICES | New Jersey | New York | Maryland | North Carolina

DBE/WBE/SBE CERTIFIED

- Preparation of an archaeological site registration form to the Pennsylvania State Historic Preservation Office (PA SHPO) for inclusion in the archaeological survey report, if necessary.
- Preparation of a project review form, if necessary.
- Preparation of written results within a combined Phase I archaeological survey report and visual effects assessment for inclusion into Form 620. Recommendations for further survey (i.e. Phase II archaeological survey) or no further survey will be included.
- A site visit to document the viewshed and relationship between the project site and any known NRHP-listed or -eligible resources within the APE-Visual Effects, as defined in the Nationwide Programmatic Agreement, Section VI.C.4.
- An assessment of visual effects on any NRHP-listed or -eligible resources.
- Maps and photographs to support the findings of the Phase I archaeological survey and the visual effects assessment.
- Consultation with the PA SHPO regarding the assessment of direct and visual effects, as needed.
- Consultation with Native American Tribes identified through the TCNS. The results of consultation will be provided to Bassett Engineering, Inc. for inclusion into the FCC Form 620.

Assumptions and Exceptions

The scope of work includes consultation with Native American Tribes but does not include the consultation fees charged by those Tribes to review the project. The number of Tribes identified by the TCNS vary by site location and, as a result, the costs are unknown prior to receipt of the Notice of Organization from the TCNS. Thus, Tribal consultation fees will be passed through to Bassett Engineering, Inc. and the tower builder. These fees also vary based on geographic location. Similarly, curation box fees and curation preparation fees, if necessary, will be passed on to Bassett Engineering, Inc. and the tower builder.

This proposal assumes that the limits of disturbance will be confined to a 60-foot by 60-foot lease area and the installation locations for up to seven (7) utility poles.

RGA assumes no contaminants are present that would require the use of HAZWOPER-trained personnel or the preparation of a Site-Specific Health and Safety Plan. RGA must be notified prior to the commencement of fieldwork if contaminants are known to exist and RGA requests that copies of completed Environmental Assessments or Investigations pertinent to contaminant characterization be supplied, if available. Should contaminants exist within the project area, a supplemental cost may be necessary.

The visual effects assessment does not include completion of any additional work requested by the PA SHPO. If the visual effects assessment results in the identification of a historic district or other historic property likely to be adversely affected by the project, RGA will consult with Bassett Engineering, Inc. regarding the possibility of using computer-generated viewshed mapping, and/or a balloon or crane test to evaluate the visual effects of the project. Viewshed mapping and balloon/crane tests can be provided by RGA for an additional cost.

Should the proposed tower result in an adverse effect on an NRHP-listed or -eligible historic property, the tower builder may negotiate a Memorandum of Agreement among itself, the FCC, and the PA SHPO. RGA can provide this service for an additional cost.

Proposal, Cultural Resources Survey
Hesker Hill Tower
August 14, 2020
Page 3

Costs

RGA will complete the visual effects assessment, Phase I archaeological survey, and Tribal consultation for \$7,187.00, plus the cost of public notice and Tribal consultation fees.

Name (Print), an authorized representative of Bassett Engineering, Inc.

Name (Signature)

Date

F. T. KITLINSKI & ASSOCIATES, INC.
CONSULTING GEOTECHNICAL ENGINEERS

BLAIR C. KITLINSKI, P.E.

TELEPHONE: 717-652-8020
FAX: 717-651-0725

3608 NORTH PROGRESS AVENUE
HARRISBURG, PENNSYLVANIA 17110
(1.2 MILES NORTH OF PROGRESS AVENUE
INTERCHANGE NO. 60 OF I-81)

August 19, 2020

Mr. Britt Bassett, P.E.
Bassett Engineering, Inc.
1440 Broad Street
Montoursville, Pennsylvania 17754

Re: Geotechnical Engineering Investigation
Proposed Hughes Radio Tower
Hesker Hill Road, Platt Township
Lycoming County, Pennsylvania

Britt:

In response to your August 14, 2020 request, and based on certain information received from your office, we are pleased to present the following proposal for furnishing geotechnical engineering services in connection with the referenced project.

SCOPE OF WORK

As indicated in the request for proposal, the subsurface investigation will be comprised of three (3) standard drive-sample/core borings scheduled for depths of 35.0 feet each. This will result in a total of 105 lineal feet of drilling to be completed at the site. The borings will be advanced through the overburden following the standard penetration test with split spoon samples being performed on a continuous basis. It is anticipated the underlying bedrock will be encountered prior to reaching the scheduled depths of the borings. If this is the case, each of the borings will be advanced not less than at least ten (10) feet into the rock in order to verify its presence and integrity. No provision has been made for the stake-out of the test boring locations or for determining the ground surface elevation at each boring point. Furthermore, based on google mapping it appears there are no obstacles with regard to access to the tower site.

Utilizing the results of the test borings, information gained from a site reconnaissance, and laboratory soil tests; we will prepare an engineering report on the subsurface and foundation conditions. This report will contain the results of the test borings and laboratory testing together

with our recommendations for foundation design and construction.

REMUNERATION

Remuneration for the engineering and technical services to be rendered will be as follows and is based on the assumption that our office will not be responsible for the survey work associated with locating the test boring points in the field.

I. TECHNICAL SERVICES		
A. Remuneration for test boring services - based on three(3) 35-foot deep borings	Lump Sum	\$ 2,400.00
B. Survey work relative to locating boring points in the field and obtaining a ground surface elevation at each boring point – no provision		\$ 0.00
Total Estimate of Cost for Technical Services		\$ 2,400.00
II. LABORATORY SOIL/ROCK TESTING		\$ 450.00
III. ENGINEERING SERVICES		
A. Programming		\$ 105.00
B. Cost for site reconnaissance, boring inspection, And logging of soil samples/rock cores		\$ 750.00
D. Preparation of an engineering report by a professional engineer registered in the Commonwealth of Pennsylvania; and containing all accumulated data together with our conclusions and recommendations relating to the subsurface conditions and <u>the foundation</u>		\$ 1,380.00
Estimate of Cost for Engineering Services		\$ 2,235.00
TOTAL ESTIMATED COST FOR ALL SERVICES		\$ 5,085.00

The estimated cost of \$ 5,085.00 for our geotechnical engineering services is not a fixed amount and could vary upward or downward depending upon the final depths of the borings, the complexity of the subsurface conditions encountered and the amount of work performed.

Mr. Britt Basset, P.E.
Basset Engineering, Inc.

August 19, 2020

However, the sum of \$5,085.00 can be considered a not-to-exceed amount without prior authorization from your office.

We sincerely appreciate the opportunity to present this proposal and look forward to working with your office on this assignment.

Very truly yours,

F. T. KITLINSKI & ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "Blair C. Kitlinski", with a long horizontal flourish extending to the right.

Blair C. Kitlinski, P.E.

Britt Bassett

From: Blair Kitlinski <ftka@comcast.net>
Sent: Friday, August 21, 2020 11:33 AM
To: Britt Bassett
Subject: RE: Geotechnical Proposal - Hughes Radio Tower

Britt-

The cost for the two(2) tower sites would be \$5,085.00 + \$5,085.00 + \$ 2,450 = \$ 12,620. The additional \$ 2,450.00 includes takes into account the water situation at the Hughesville site which will require an extra day to complete that project and 2 nights of per diem.

Blair

Blair C. Kitlinski, P.E.
F. T. KITLINSKI & ASSOCIATES, INC.
Consulting Geotechnical Engineers
3608 North Progress Avenue
Harrisburg, Pennsylvania 17110
Telephone: 717.652.8620
Fax: 717.651.0725

From: Britt Bassett [mailto:bbassett@bassetteng.com]
Sent: Wednesday, August 19, 2020 4:36 PM
To: Blair Kitlinski
Subject: RE: Geotechnical Proposal - Hughes Radio Tower

Thanks Blair this is very helpful. I don't think I remembered to mention but there is a second site. Should I just double this price? We can talk if you want. The other one has MUCH easier access.

Thanks. Yours, **Britt**

From: Blair Kitlinski <ftka@comcast.net>
Sent: Wednesday, August 19, 2020 11:13 AM
To: Britt Bassett <bbassett@bassetteng.com>
Subject: RE: Geotechnical Proposal - Hughes Radio Tower

Britt,
Attached is our proposal for the Hughes Radio Tower. Please telephone or email if you have any questions.
Thank you for the opportunity to submit a proposal.
Blair

Blair C. Kitlinski, P.E.
F. T. KITLINSKI & ASSOCIATES, INC.
Consulting Geotechnical Engineers
3608 North Progress Avenue
Harrisburg, Pennsylvania 17110

GEO-TECHNOLOGY ASSOCIATES, INC.

GEOTECHNICAL AND
ENVIRONMENTAL CONSULTANTS

A Practicing Geoprofessional Business Association Member Firm



August 20, 2020

Bassett Engineering Inc.
1440 Broad Street
Montoursville, Pennsylvania 17754

Attn: Keith Miller, PE

Re: Proposal for Geotechnical Services
Hughesville Water Authority and Hesker Hill Radio Tower Sites
Lycoming County, Pennsylvania

Mr. Miller:

Geo-Technology Associates Inc. (GTA) is pleased to submit this proposal to Bassett Engineering, Inc. ("Client") for the geotechnical services associated with the two radio tower sites described in this Proposal. GTA was provided with the *Request for Proposal (RFP) for Engineering and Surveying Services for Hughesville Water Authority Tower Site* dated July 20, 2020 and the *Addendum No. 1* that added the Hesker Hill Site to the Project. The RFP indicates that the radio towers will each be 250 feet in height.

GTA will perform test borings, field resistivity testing, infiltration testing, laboratory soil testing, and engineering analysis, and prepare a geotechnical report summarizing the results and recommendations.

SCOPE OF SERVICES

This proposal is limited exclusively to the services described in this section. If the Client requests additional services, such services will be billed as discussed in the *Additional Services* section of this proposal. GTA will:

Geotechnical Services

Task 1 – Geotechnical Boring Stakeout

- Stakeout of borings and test pits will be performed by the Client and is not included in this proposal.

1803 Mt. Rose Avenue, Suite A-1, York, PA 17403 (717) 318-5451 Fax (717) 318-5460

✦ Abingdon, MD ✦ Baltimore, MD ✦ Laurel, MD ✦ Frederick, MD ✦ Waldorf, MD ✦ Sterling, VA ✦ Somerset, NJ ✦ NYC Metro
✦ New Castle, DE ✦ Georgetown, DE ✦ York, PA ✦ Quakertown, PA ✦ Beaver Falls, PA ✦ Malvern, OH ✦ Charlotte, NC ✦ Raleigh, NC

Visit us on the web at www.gtaeng.com

Task 2 – Geotechnical

- After the boring/test pit locations have been staked in the field by the Client, GTA's drilling subcontractor will contact PA One Call to identify public underground utilities. However, the public utility notification system will not locate and mark private utilities; therefore, the Owner is responsible for locating and marking any privately-owned utilities within the area of proposed explorations. No explorations will be performed in developed areas or near known utilities, due to the potential for buried private utilities.
- Arrange for a tracked or ATV drill rig to be mobilized to each site. Unless otherwise advised, it is assumed that GTA and the subcontractor have permission to traverse the sites in the most efficient direct path between borings. We assume that each site can be accessed with a tracked drill rig and that there are no trees or deadfall that impedes the movement of the rig. If necessary, hand clearing of trees and deadfall will be performed on an hourly fee basis.
- At each site, perform three Standard Penetration Test (SPT) borings to a depth of 35 feet. Borings will include standard penetration test (SPT) sampling in soils and coring through the rock. For each site, a total of 105 feet of test borings is included in this Proposal. The borings will be backfilled with drill spoils. No other surface restoration will be performed and all extra spoils will be spread around the borehole.
- Provide a full-time geotechnical professional to coordinate and log the explorations. The professional will visually classify the soil samples, obtain samples for testing, perform water level measurements, and prepare field logs.
- Perform limited laboratory index testing to evaluate the general engineering characteristics of the material. This testing may include grain size analysis, plasticity testing (Atterberg limits), natural moisture content, and unconfined compressive strength of rock.
- Prepare a separate geotechnical engineering report for each site that includes the results of our field explorations and laboratory analyses, and our assessment of the implications of the subsurface conditions on the proposed radio towers. The report will include exploration location plans, typed boring logs, and field and laboratory testing results. The report will include the following:
 - Discussion of subsurface conditions encountered by the explorations, including soil types, water levels, rock types, and anomalous subsurface conditions.
 - Earthwork recommendations for site preparation, grading, fill compaction, trench backfill, and drainage measures.
 - Recommendations for bearing capacity, frost depth, and slab on grade support for buildings and equipment pads.

- Recommendations for foundation support of radio towers, which may include drilled shafts, spread footings, and deadman. For drilled shafts, provide recommendations and parameters to determine allowable axial, uplift, and lateral (P-Y model parameters) capacity.
- Seismic site classification.
- Summary of field resistivity (Wenner array) testing results from Task 3.
- Stormwater infiltration test data and recommendations from Task 4.

Task 3 – Soil Resistivity

- Both properties will be cleared of all crops and vegetation within the 300 foot length by 6 foot width of each proposed resistivity line. All clearing will be performed by others and is not included in the lump sum fee. If clearing is necessary, it will be billed on an hourly fee basis.
- Perform 1-D field electrical resistivity testing at the radio towers using the Wenner 4 probe array in general accordance with ASTM G57. At each tower two perpendicular lines will be performed. Each line will have total lengths of 30, 60, 90, 120, 150, 180, 210, 240, 270 and 300 feet. The test areas will be limited to areas that do not require clearing. Note that test results will be compromised by interference from standing water, frozen soil, buried metals or utilities, and shallow bedrock.
- Include the results of the field resistivity testing in the geotechnical report in Task 2.

Task 4 – Infiltration Testing

- Arrange for a backhoe to be mobilized to the site. Unless otherwise advised, it is assumed that GTA and the subcontractor have permission to traverse the site in the most efficient direct path between test pit locations. We assume that each site can be accessed with a backhoe and that there are no trees or deadfall that impedes the movement of the equipment. If necessary, hand clearing of trees and deadfall will be performed on an hourly fee basis.
- Perform 7 test pits at Hughesville and 3 at Hesker Hill to evaluate the subsurface conditions. The test pits will be excavated to maximum depths of 8 feet. The test pits will be observed and logged by an experienced geotechnical professional for evidence of infiltration limiting zones (i.e., rock, groundwater, and redoximorphic evidence of groundwater.)
- Perform field infiltration testing adjacent to each exploratory test pit to evaluate the in-situ infiltration rates. The testing will be performed with double ring

infiltrometers in general accordance with the guidelines presented in the Pennsylvania Department of Environmental Protection's *Stormwater Best Management Practices Manual*. Test depths are expected to be generally less than 6 feet deep, and the excavations will need to be benched or sloped to allow for safe entry.

- Include the results of the infiltration testing and our recommendations for stormwater infiltration in the geotechnical report in Task 2.

Limitations

During the course of work, traversing fields will be required to access the exploration locations, and the ground surface might be disturbed at and between the exploration locations. While GTA will attempt to minimize the amount of disturbance, it must be understood that some disturbance and depressions and/or irregularities in the ground surface will occur upon backfill and completion of the explorations. Restoration or compensation is not included in GTA's *Scope of Services*.

The successful planning, design, and construction of the project will require coordination between the owner, design team, and reviewing agencies. Following submission of the geotechnical report, GTA can attend meetings to assist in developing the project towards completion of the design and construction plans. This service item will be performed upon your request, and billed on an hourly basis.

TO BE PROVIDED BY THE CLIENT

Certain information or services must be provided by the Client or site owner in order for GTA to properly perform its services. These include, but are not limited to:

- Provide GTA with site plans depicting all buried and overhead utilities, and the existing and proposed topography and structures.
- Provide clear site access for the exploration equipment, and marking of the areas where access is not permitted. Both sites will be cleared to allow access for a tracked drill rig and backhoe to each boring/test pit location. Both properties will be cleared of all crops and vegetation within the 300 foot length by 6 foot width of each proposed resistivity line.
- Stake the exploration locations prior to GTA's One-Call.
- Provide structural information, including the structural loads and settlement tolerances.

PROJECT FEES

Based on currently available information, the fee for the listed *Scope of Services* will be as follows, presuming that the field work for both sites will be performed concurrently within the same mobilization. If separate mobilizations are necessary for individual sites, increased mobilization fees will be charged.

Task	Lump Sum Fee for Two Sites in Same Mob	Lump Sum Fee for Individual Task and Separate Mob for Each Site	Remarks
Task 1 – Geotechnical Boring Stakeout	NA	NA	To be performed by Client
Task 2 – Geotechnical	\$16,320 both sites, same mob	\$8,410 one site, separate mob	3 borings per site to 35 ft each
Task 3 – Soil Resistivity	\$2,800 both sites, same mob	\$2,300 one site, separate mob	2 lines per site
Task 4 – Infiltration Testing	\$5,800 both sites, same mob	\$3,575 one site, separate mob	7 tests at Hughesville and 3 at Hesker Hill
TOTAL	\$24,920	\$14,285	---
Additional Services			
Standby and Hand Clearing	\$300/hour	Standby for delays dictated by client, landowner, or owner, not related to GTA's negligence. This includes time to remove trees caused by deadfall or logging activities that impede movement of the drill rig or resistivity testing.	

Changed conditions or additional requirements may result in an adjustment to the fees.

ADDITIONAL SERVICES

Experience indicates that certain additional services may be requested or necessary which GTA cannot presently determine or estimate. For this reason, the fee for these items is not included in our fee estimate. Some of the services that may be required to complete the work, but that are expressly excluded from the *Scope of Services* are:

- Exploration stakeout and survey.
- Additional mobilization fees if work for the sites is performed separately.
- Standby for delays dictated by client, developer, property owner, or government agency, that are not related to GTA's negligence, includes time for clearing of trees, deadfall, and vegetation that impedes mobilization and performance of borings, test

- pits and resistivity testing.
- Repair of damage to underground utilities and drains if PA One Call is notified.
- Private utility locator.
- Site restoration other than backfilling exploration holes once.
- Compensation for crop and pasture damage.
- Sediment and erosion control.
- Correction of work due to inaccurate information supplied by Client or its agents.
- Structural design of shallow, intermediate, and deep foundations.
- Analysis and testing for design of slopes, pavement, and stormwater facilities.
- Construction monitoring.
- Environmental sampling, testing, analysis, or site assessments.

Additional Services will be performed upon written authorization of the Client. Fees for additional services shall be in addition to any fees for the work described in the *Scope of Services* section. GTA's fees for additional services will be billed on a unit fee basis in accordance with the rates set forth herein and the attached *Fee Schedule*, unless noted otherwise herein. The unit rates are subject to periodic review and change by GTA.

GENERAL PROVISIONS

The attachments listed below are a part of this proposal, and should be reviewed and understood. Your verbal authorization to proceed, or issuance of a purchase order to GTA acknowledges your acceptance of the terms of this Agreement, including the *January 2017 General Provisions* attached hereto. Please fully execute this proposal by signing the *Acceptance* below, (either by signing a printed copy of the Agreement or by signing an electronic copy of the Agreement using a digital signature) and returning one complete copy to our office.

Geo-Technology Associates, Inc. welcomes the opportunity to be of assistance to you and we look forward to working with you on this project. If you have any questions, please contact this office.

Sincerely,

GEO-TECHNOLOGY ASSOCIATES, INC.



Jon D. Raab, P.E.
Vice President

JDR/jdr

S:\1 UNSIGNED PROPOSALS\Pending\Bassett Lycoming Cell Towers\2020-08-20 Lycoming Radio Towers - GEO Proposal.doc

Attachments:

- General Provisions January 2017
- GBA Publication "Important Information About This Geotechnical Engineering Proposal"

2020 STANDARD AGREEMENT

Lycoming County Tower Sites

Wolf & Piatt Township(s)

We appreciate the opportunity to provide a proposal for Environmental Consulting (EC) services for your important project. As you are aware, we well known for our work with projects involving **wetlands, lakes, and waterways**, all of which are directly related to sustainable *land development and real estate value*. You can be assured we will work hard to help make your project a success!

WETLANDS

DELINEATION / MITIGATION / MONITORING

Kingfisher's principal and wetland scientists have performed wetland delineations and obtained Jurisdictional Determinations (JD) on several thousand acres of land in Pennsylvania. *We have also re-defined the delineation of less experienced consultants!* Kingfisher will complete your work in a professional and timely manner. We will work hard to make your project a success!

AGREEMENT

This agreement made this 12th day of August 2020 between the Consultant, hereinafter referred to as Kingfisher Group, LLC and **Bassett Engineering**, herein after referred to as the Property Owner Representative

I. PROPOSAL

Kingfisher Group, LLC does hereby agree to perform and furnish to the Property Owner/Representative wetland services on the terms and conditions hereinafter set forth, and the Property Owner Representative agrees to make payment for said services described below. **The services to be provided by Kingfisher is a Wetland Delineation and a Report of Findings for two tower sites located in Lycoming County, PA** and the fees to paid by the Property Owner/Representative are as follows:

II SCOPE OF WORK (AS REQUIRED):

A. Wetland Delineation and Boundary Assessment:

Kingfisher biologists' methodology for wetland delineations utilizes U.S. Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region. (Version 2.0). EDRC/EL TR-12-1 to provide the technical criteria, field indicators, and recommended methods to identifying and delineating jurisdictional wetlands. Our expertise includes a thorough understanding of the following fields of study and disciplines used to determine the presence (or absence) of wetlands:

- 1. Wetland Plant Taxonomy and Characterization of Hydrophytic Vegetation.**
- 2. Identification and Characterization of Wetland (Hydric) Soils.**
- 3. Hydrology and Geomorphology of Wetland Ecosystems.**

Note: Kingfisher biologists are a recognized authority on wetland boundary assessments and often provide expert witness testimony to resolve legal issues. Our Principal has serve as an instructor for wetland delineation courses at Penn State University.

III. REPORT

Kingfisher will provide a written report including an overall description of the study area, project location map, soils map and soils description; description of methodology used to identify, classify, and identify wetlands and "Waters of the U.S." In addition, Kingfisher will provide a map with all wetland data points and other features using a Trimble Terrain Navigator Pro GPS system to assist your surveyor. The Wetland Delineation Report can be used as a database for any future State/Federal permit applications (if required) for unavoidable wetland fills, encroachments and site improvements.

IV. SCHEDULING OF PERFORMANCE

The Wetland Survey shall begin on or around August, 2020 provided this Agreement is promptly returned to our office. An approximate date of arrival will be set by mutual agreement with the Property Owner-Representative and the Consultant. However, the Consultant shall not be liable for loss or damage of any kind resulting from delay in arrival at the site from any cause beyond our control.

V. COMPENSATION AND PAYMENT SCHEDULE

Payment for the services outlined in this proposal shall be a lump sum fee of \$1575.00 (One Thousand Five Hundred and Seventy Five Dollars). Payment shall be made according to a mutually agreeable schedule.

In the event a Jurisdictional Determination (JD) is required, an additional cost of Eighty Five Dollars per hour will be assessed to the project.

VI. ADDITIONAL STIPULATIONS

The Property Owner/Representative recognizes that prompt payment of the Consultant's invoices is an essential aspect of the Agreement. Accordingly, the Property Owner/Representative agrees to pay all charges upon receipt of the Consultant's invoices, and that the Consultant has the right to terminate or suspend services if charges are not paid according to terms, and hold Consultant harmless from claims due to Property Owner/Representative's failure to provide timely payment. Legal fees related to default on collection shall be paid by Property Owner/Representative. Existing plat maps, field survey data, topographic information, engineered plans or drawings, including previous environmental studies or wetland delineations shall be provided to Kingfisher by the property Owner/Representative on a timely basis. These reports are presumed to be technically accurate and correct; any inaccuracies resulting from false studies or data not performed by Kingfisher will be the sole responsibility of the Property/Owner Representative. This proposal is valid for a period of 90 days, unless contacted by the Property/Owner Representative for an extension. Liability shall be limited to total cost for service rendered.

VII. ACCEPTANCE

Submitted: Russell I. James August 12, 2020
Russell I. James, President Date

Accepted By: _____
Authorized Representative E-mail Address Date

Mailing Address: _____ Tel. _____ Fax _____

Kingfisher Group, LLC
301 North Boulevard
Clarks Summit, PA 18411
(570) 499-0266 / e-Fax 928- 832-1129

E-mail: Russell I. James at kingwet@icloud.com

THANK YOU FOR CONSIDERING OUR FIRM!

The undersigned, as Bidder, hereby declares that the total project costs as indicated above, includes all necessary work to complete this project in full according to the general specifications contained in the RFP. Products and services not specifically mentioned, but are necessary to provide the functional capabilities shall be listed and included as part of the cost elements.

The undersigned further understands and agrees that if the County accepts the bid, no additional funds will be allowed beyond the stated total project costs.

Company Name: Bassett Engineering, Inc.

Address: 1440 Broad Street, Montoursville, PA 17754

Point of Contact: Britt Bassett Phone Number: 570-368-2131

Fax Number: 570-368-2026 Email address: bbassett@bassetteng.com

Name of person submitting proposal: Britt Bassett, PE

Signature:  Date: 08/21/2020

When submitting a bid, place the bid form sheet as the top page of the bid package and the bid price schedule as the second page of the bid package.

SECTION 7
PROPOSAL FORM

PROPOSAL FORM

Important note to Bidders: It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to: Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 21st, 2020. **This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: Bassett Engineering, Inc.
Company Address: 1440 Broad Street
Montoursville, PA 17754
Main Telephone: 570-368-2131 Main Fax: 570-368-2026

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Britt Bassett, President
Contact Telephone: 570-368-2131 Fax: 570-368-2026
Contact Email: bbassett@bassetteng.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Britt Bassett / President
Office Address: 1440 Broad Street
Montoursville, PA 17754
Telephone: 570-368-2131 Fax: 570-368-2026
Email: bbassett@bassetteng.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	<u>1</u>	Date	<u>July 30, 2020</u>
Addendum No	<u> </u>	Date	<u> </u>
Addendum No	<u> </u>	Date	<u> </u>
Addendum No	<u> </u>	Date	<u> </u>

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

Company Type (check one):

- Sole Proprietorship Partnership Corporation Joint Venture

Bidder attests that:

1. He/she has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements;

2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor and material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

Bassett Engineering, Inc.

Company Name

23-3048 493

Federal ID#

1440 Broad Street

Street Address

PO Box

Montoursville PA

City

State

17754

Zip

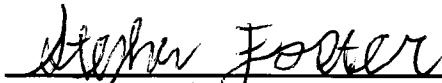
570-368-2131

Telephone #

570-368-2026

Fax #

WITNESS:



Signature (see below)

COMPANY:



Signature (see below)

Stephen Foster

Name (print)

Britt Bassett

Name (print)

Marketing Assistant

Title (print)

President

Title (print)



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
6/14/20

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Wilkinson - Dunn Company 455 River Avenue Williamsport PA 17701		CONTACT NAME: Mary McKinley PHONE (A/C No. Ext): 570-322-6611 FAX (A/C No): 570-323-9722 E-MAIL ADDRESS: MMcKinley@WilkinsonDunn.com	
INSURED Bassett Engineering Inc. 1440 Broad Street Montoursville PA 17754		INSURER(S) AFFORDING COVERAGE INSURER A: The Hartford	NAIC #
		INSURER B:	
		INSURER C:	
		INSURER D:	
		INSURER E:	
		INSURER F:	

COVERAGES	CERTIFICATE NUMBER: CL1993010682	REVISION NUMBER:
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THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			44 SBA AM9198	9/7/2019	9/7/2020	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea. occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			44 UEC FG2683	9/7/2019	9/7/2020	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED \$ RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	44 WEC AD5FMN	9/7/2019	9/7/2020	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 100,000 E.L. DISEASE - EA EMPLOYEE \$ 100,000 E.L. DISEASE - POLICY LIMIT \$ 500,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER County of Lycoming Attn: Mya Toon 48 West Third Street Williamsport, PA 17701	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE Jessica Betz/JESSIC
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SECTION 8

NON-COLLUSION AFFIDAVIT

INSTRUCTIONS FOR NON-COLLUSION AFFIDAVIT

This Non-Collusion Affidavit is material to any contract awarded pursuant to this proposal. According to the Pennsylvania Antibid-Rigging Act, 62 Pa.C.S.A. § 4501, et seq, government agencies may require Non-Collusion Affidavits to be submitted together with proposals.

This Non-Collusion Affidavit must be executed by the member, officer or employee of the Bidder who makes the final decision on prices and the amount quoted in the proposal.

Bid rigging and other efforts to restrain competition and the making of false sworn statements in connection with the submission of proposals are unlawful and may be subject to criminal prosecution. The person who signs the affidavit should examine it carefully before signing and assure himself or herself that each statement is true and accurate, making diligent inquiry, as necessary, of all other persons employed by or associated with the Bidder with responsibilities for the preparation, approval or submission of the proposal.

In the case of a proposal submitted by a joint venture, each party to the venture must be identified in the proposal documents, and an Affidavit must be submitted separately in behalf of each party.

The term "complementary bid" as used in the Affidavit has the meaning commonly associated with that term in the bidding process, and includes the knowing submission of proposals higher than the proposal of another firm, and intentionally high or noncompetitive proposal, and any other form of proposal submitted for the purpose of giving a false appearance of competition.

Failure to file an Affidavit in compliance with these instructions will result in disqualification of the proposal.

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal August 21, 2020

State of Pennsylvania

County of Lycoming

I state that I am President (Title) of Bassett Engineering, Inc. (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. Bassett Engineering, Inc. (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

I state that Bassett Engineering, Inc. (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

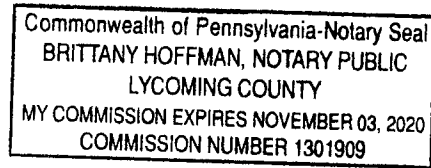
A statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: Britt Bassett

Signature: *Britt Bassett*

Title President

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 19th DAY
OF August, 20 20



Brittany Hoffman
Notary Public

My Commission Expires: 11/3/2020

SECTION 9
EXCEPTION FORM

EXCEPTION FORM

Section Number	Explanation
N/A	N/A

**Lycoming County, Pennsylvania RFP for Engineering and Surveying for
Hughesville Water Authority Tower Site
Questions and Answers #1**

Dear Proposer,

Listed below are the answers to the questions received as of 4:00 P.M. EST, July 24, 2020.

Question 1: Are the plans for this project posted somewhere?

Answer 1: The RFP for this project is posted on the county website:
<http://www.lyco.org/Departments/Fiscal-Services/County-Central-Purchasing>.

Question 2: Is the list of bidders posted?

Answer 2: No. The RFP is still out for bid.

Question 3: Is there bypass pumping or dewatering or storage in this project?

Answer 3: No.

Thank you for participating in this process.

Best Regards,

Terri Nelson

Terri Nelson, PMP
Project Supervisor
MCM Consulting Group, Inc.
2595 Clyde Avenue, Suite 1
State College, PA 16801
814- 206-6370 (Phone)
814-834-4714 (Fax)
TNelson@MCMConsultingGrp.com
www.MCMConsultingGrp.com

**Lycoming County, Pennsylvania RFP for Engineering and Surveying for
Two (2) Tower Sites (per Addendum 1)
Questions and Answers #2**

Dear Proposer,

Listed below are the answers to the questions received as of 4:00 P.M. EST, July 31, 2020.

Question 1: Are resumes required for any or all people referenced in the organizational listing?

Answer 1: Resumes are not required, but the organizational list of key personnel for the project should include their defined tasks.

Question 2: In light of the COVID-19 pandemic, will the County be accepting electronic submissions?

Answer 2: Per Section 2.9 of the RFP, Submission of Proposal, the last two sentences state: "Proposals must be mailed or hand-delivered. Proposals delivered by fax or electronic mean are not acceptable and will not be considered."

Question 3: It is unclear whether the existing tower will be demolished in order to erect the new tower?

Answer 3: For both the Hughesville Water Authority and Hesker Hill sites, there is no existing tower on the land plot designated for the new tower, so there is no existing tower to be demolished.

Question 4: Is there any bid or contract administration in the engineering services?

Answer 4: No.

Question 5: Is the foundation design for the tower part of the engineering scope or will the design be completed by the tower manufacturer?

Answer 5: The tower foundation design and stamped tower drawings will be provided by the tower manufacturer.

Answer 10: For the clearing of the second plot of land at the Hughesville Water Authority site, it will include the layout and stakeout surveys for the area. The physical clearing will be performed as part of the construction contract.

Please note the following two (2) changes to the information provided in the RFP for Hesker Hill site:

1. The street address is 1259 Hesker Hill Road.
2. The dimensions for the land plot for the tower site are 60'x60'.

Thank you for participating in this process.

Best Regards,

Terri Nelson

Terri Nelson, PMP
Project Supervisor
MCM Consulting Group, Inc.
2595 Clyde Avenue, Suite 1
State College, PA 16801
814- 206-6370 (Phone)
814-834-4714 (Fax)
TNelson@MCMConsultingGrp.com
www.MCMConsultingGrp.com

**Lycoming County, Pennsylvania RFP for Engineering and Surveying for
Two (2) Tower Sites (per Addendum 1)
Questions and Answers #3**

Dear Proposer,

Listed below are the answers to the questions received as of 4:00 P.M. EST,
August 7, 2020.

Question 1: RFP includes a bid opening date (August 25, 2020) but does not include an award date. Please provide an approximate award date.

Answer 1: Per the RFP, section 2.15, Award of Proposal, it states that: "The County will award the contract(s) to the best responsible, responsive Bidder who meets all terms, conditions, and specifications of the RFP, within 60 days of the opening of the proposals." Using calendar days, that would be on or before October 24, 2020.

Question 2: RFP gives dimensions for two lease areas of 100'x100' or 20,000 square feet which is below NPDES permit requirements for 1 acre disturbed area. Please verify if NPDES permit is required.

Answer 2: The Hesker Hill site plot has been reduced to 60'x60'. The Hughesville Water Authority plot size is also anticipated to be reduced to 50'x60'. (Please refer to accompanying diagrams for the Hughesville Water Authority and Hesker Hill tower site compound layouts.) It is expected that the preferred proposer, as part of the project, will determine if a NPDES permit is required.

Question 3: Will owner provide a typical compound layout of tower and all tower equipment?

Answer 3: Yes, please see the accompanying diagrams for the Hughesville Water Authority and Hesker Hill tower site compound layouts.

Question 4: Will electric and telecom utilities need extended to the tower sites and, if so, will they need upgraded?

Answer 10: It is the responsibility of the preferred proposer to determine the amount of impervious coverage at each of the two (2) sites.

Question 11: What are the power requirements for the sites?

Answer 11: 240V 200A service is required for the new shelter at each of the two (2) sites.

Question 12: Is power available nearby from the electric utility company for the new service?

Answer 12: There is an existing electric utility pole within 200' of the Verizon Wireless tower at the Hughesville Water Authority site, and within 200' of the proposed site location at the Hesker Hill site.

Question 13: What are the electrical loads for the shelter and tower? Will the shelter be a packaged building with all electrical equipment provided and only require a single feed, or will the design include sizing and layout of this equipment?

Answer 13: The Lycoming County shelter and compound require a 240V - 200 amp feed. The successful proposer will design the appropriate utility feed to be able to accommodate up to 4 - 240V 200A feeds to both compounds.

Question 14: Who is responsible for foundation design?

Answer 14: The tower manufacturer will provide the tower foundation designs. The shelter manufacturer will provide the shelter foundation designs.

Question 15: Is there truly a need for electrical resistivity tomography (ERT) if there is going to be geotechnical work being requested?

Answer 15: It is the responsibility of the preferred proposer to ensure that, per the RFP, resistivity testing and report are provided as part of the geotechnical work secured for both sites.

Question 16: With the Boundary Surveys of the properties, do you want the boundaries field marked?

**Lycoming County, Pennsylvania RFP for Engineering and Surveying (E&S)
for
Two (2) Tower Sites (per Addendum 1)
Questions and Answers #4**

Dear Proposer,

Listed below are the answers to the questions received as of 5:00 P.M. EST,
August 14, 2020.

Question 1: For the NPDES permitting, will the tower site and the land clearing for the new water tank for the Hughesville Water Authority be considered as one project or will the tower be permitted under the County and the land clearing under the Water Authority?

Answer 1: The new tower site and the land clearing for the new water tank are under the same project.

Question 2: Are there specific laboratory tests such as soil classification and direct shear tests that are required or needed for the tower design under the geotechnical investigation and report?

Answer 2: Laboratory soil testing shall be provided as required to verify visual descriptions and determine foundation design parameters. Laboratory testing shall include, but is not limited to:

- o Water contents (ASTM D 2216 - 19)
- o Sieve analysis (ASTM D6913/D6913M-17)
- o Liquid and plastic limits (ASTM D 4318-17el)
- o Specific gravity (ASTM D 854-14)

Question 3: Electrical Question; Is power supply design part of E&S consultant's scope of work?

Answer 3: Yes. Per the RFP, Scope of Work & Technical Specifications, Engineering Services, B. Site Design, item 1c states "fencing, grounding, and electrical plan and details".

Question 10: Site Security Question; Will each pad site have its own separate set of gates?

Answer 10: The Hughesville Water Authority tower site compound and the Hesker Hill tower site compound will each be enclosed by fencing and have a set of gates. The separate Hughesville Water Authority plot that will be cleared for the water authority does not fall under consideration for gates as part of this project.

Question 11: Utility Clarification; Water supply and sanitary sewer service connections will not be required, please confirm for both sites.

Answer 11: Neither water supply nor sanitary sewer service connections will be required.

Question 12: Utility Clarification; Power supply and telecommunications services are the two utility services required for this Project, please confirm for both sites.

Answer 12: Yes. Per the RFP, Scope of Work & Technical Specifications, Engineering Services, B. Site Design, item 4 states "Facilities required at each of the tower sites are power and communications."

Question 13: Permit Clarification; Lycoming County will provide documents to E&S consultant for submission to regulatory agencies for the Radio Tower (foundation, superstructure, lighting, painting) and the Service Shelter (foundation, structure, utility connections, building lighting, roof drainage connections propane gas tank, electrical generator, electrical transformer), please confirm.

Answer 13: The county will the stamped drawings for the tower and shelter, including foundations. The E&S vendor is responsible for other aforementioned items.

Question 14: Permit Question; Will E&S consultant be required to process FCC Form 854 on Owner's behalf?

Answer 14: No. MCM, Consulting Group, Inc. will do the ASR registration.

Question 15: Expenses Question; RFP indicates that all review fees are to be paid by the Client and included in the proposal. May consultants work off an escrow for review vs a straight fee which will be difficult to predict? Should the applicant

Question 21: Will a topographic survey be required for the entire Hughesville Borough property? As an alternate to a complete topographic survey, would the County consider limiting the topographic survey to the area of interest and utilizing available LiDAR for the unaffected areas of the site?

Answer 21: The survey is for the tower site plot and new/improved access road only, and the boundaries for the tower site plot should be marked. The site must be civil surveyed for topography. Lidar topo is not acceptable.

Question 22: Will a title report be provided for the Heskler Hill Road and Hughesville Borough sites?

Answer 22: No, there will be no true title search.

Question 23: Will the parent tracts at the Hughesville and Heskler Hill sites require a boundary survey?

Answer 23: No.

Question 24: If answer to question 23 is yes, will there be any corners required to be set or lines blazed and painted, or are the boundary surveys only to make sure the lease areas are located within the interior of the parent tracts?

Answer 24: The answer to question 23 is no, so question 24 is not applicable.

Question 25: If the answer to question 23 is no, then only the plots for the tower sites need the boundary lines blazed and painted and corners marked?

Answer 25: Yes, the boundaries for the tower site plot should be marked.

Question 26: In QA series 3, question 6 indicated that the county performs all zoning functionality for the two tower locations. The Hughesville Tower is located in Wolf Township that has its own local ordinance. Will zoning be administered through Wolf Township or will the county perform the zoning functionality for this location?

Answer 26: It will be the responsibility of the preferred proposer to determine whether the zoning is through Wolf Township or the county.

Answer 33: Yes, it should be assumed that there will be conduit installation and coordination regarding communications services for the sites.

Question 34: It appears that there will be a fuel storage tank on the tower sites. Will this tank have spill containment measures? Or should we plan on providing them?

Answer 34: No spill containment measures will be needed for the propane tank.

Question 35: We are intending to use a subcontractor to complete portions of the scope outlined in the RFP. What documentation do you require from us and/or our proposed sub to accomplish this?

Answer 35: Per Section 5, evaluation criteria, vendor references, “the vendor shall include an organizational list of all key personnel in this project (prime and subcontractors), defining their tasks.”

Question 36: Are we performing the Zoning Permitting/Civil Permitting for the extra 100’x100’ area near the water tank?

Answer 36: No.

Question 37: Assuming Electrical service is definitely included in the Utility Coordination, but is fiber line route also included in this milestone?

Answer 37: No, microwave will be used for connectivity.

Question 38: If fiber line route is included on Utility Coordination, is it safe to assume that the Utility Coordination scope of fiber work will only pertain new fiber line route on the parent parcel, and no coordination for fiber route outside of the parent parcel?

Answer 38: Since the answer to question 37 is no, this question is not applicable.

Question 39: In Addendum 1 under the change to the Price Proposal on pages 2 and 3, there is a line item Civil Permitting* for each Tower Location. Was the * added to denote additional information or a note that wasn’t added? What was intended to be included with this line item?

Answer 45: This project only includes clearing the land for the future water tower site.

Question 46: Within Q&A #3 (August 7, 2020), Answers 2 and 3 indicate attached typical diagrams/layouts, but I did not see anything attached or posted on the site.

Answer 46: They have been provided for posting to the county website.

Question 47: At the Hughesville tower site, are the radio tower and future water tower sites directly adjacent to one another? If so, will a single gravel access drive and parking area serve both sites? If not, will the future water tower site need its own gravel access and parking area? Will the diagrams/layouts referenced address this?

Answer 47: The radio tower is not directly adjacent to the future water tower site. This project is for the tower site plot and new/improved access road to the tower site. Parking and access for the future water tower site is not included in this project.

Question 48: What all is expected to be included under the Environmental Investigation task?

Answer 48: Environmental investigation would include any additional studies deemed necessary that are not be included under geotechnical, stormwater management, NEPA/SHPO

Question 49: Do either project locations require a new driveway connection to a township road and if so, what is the approximate length of the new driveway?

Answer 49: No.

Thank you for participating in this process.

Best Regards,

Terri Nelson

Terri Nelson, PMP
Project Manager/Staff Supervisor



Lycoming County Planning Engineer

Bassett Engineering Inc.

Three-year Appointment. Served as Alternate Engineer first two years, and as Prime Engineer final year. Reviewed Stormwater Management designs, driveways, on-site roads, and improvement guarantees for 24 municipalities under the review of the Lycoming County Subdivision and Land Development Ordinance.

Project Team:

Britt Bassett PE, BCEE
Project Manager

PROJECT 1: Penn Commercial Vehicles: Reviewed the Stormwater Management System design including calculations to size all components, and reviewed the parking and driveway including the connection with Lycoming Mall Drive, a PennDOT road.

PROJECT 2: Aqua Resources Larry's Creek Pump Station: Reviewed the driveway including the connection with the Jersey Shore Water Authority access road, and the Stormwater Management System design including calculations to size all components. Project is a pump station to allow the Jersey Shore Area Joint Water Authority to sell water to gas drillers.

PROJECT 3: Wasson Subdivision: Reviewed the Stormwater Management System design including calculations to size all components, and reviewed the driveway including the connection with the adjacent township road. Project is a three-lot residential subdivision.

PROJECT 4: Red Bend Hunting Club: Reviewed the Stormwater Management System design including calculations to size all components, and reviewed the driveway including the connection with the adjacent township road.

PROJECT 5: Watson Township Building: Reviewed the Stormwater Management System design that featured rain gardens including calculations to size all components, and reviewed the parking lot including the connection with PA Route 44.

Bassett Engineering
1440 Broad Street
Montoursville, PA 17754
www.bassetteng.com
Phone: 570-368-2131
info@bassetteng.com

Bassett Engineering Inc.



Comfort Inn Expansion

Loyalsock Township

Lycoming County

Bassett Engineering Inc.

Bassett Engineering provided civil engineering consulting services for the project which consisted of construction of an 8,000 sq. ft., three-story expansion of an existing Comfort Inn and ancillary features on a 1.16 acre site.

Project Team:

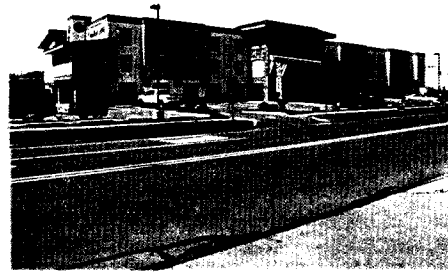
**Britt Bassett, PE, BCEE,
Project Manager**

Contractor:

PneuDart

Timeline:

2011 - 2012



Engineering included preparing plans and details covering grading, parking, paving, an entrance onto Country Club Road, stormwater management, landscaping, and utility connections. Stormwater management consisted of an oversized underground pipe that connects to the Loyalsock Township Storm sewer. Parking lot accommodates single-axle vehicle parking with

several oversized stalls included to accommodate oversized gas company pickup trucks. The building is elevated with parking at ground level below. Sewer lateral was extended from the Township Collection System.

BE prepared construction plans and details to satisfy Loyalsock Township's requirements for Land Development approval. In addition, the Township Engineer reviewed and approved the Stormwater Management Plan.

BE obtained Permit approvals including the Erosion & Sediment Control Plan through the Lycoming County Conservation District and a Sewage Facilities Planning Module for Loyalsock Township that Williamsport Sanitary Authority approved.

BE coordinated project tasks with Project Team Professionals including topographic surveying, Architectural, Electrical, Plumbing and Building Mechanical Engineering.



Bassett Engineering

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info@bassetteng.com

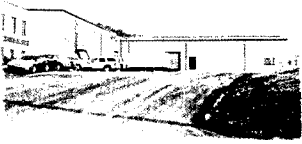
Bassett Engineering Inc.

Grit Commercial Printing

Fairfield Township

Lycoming County

Bassett Engineering Inc.

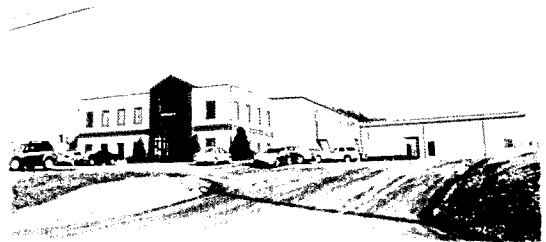


Bassett Engineering provided civil engineering services for a 33,000 sq. ft., one-story building expansion and ancillary features to serve the new facility on a 2.6 acre site. Engineering included preparation of plans covering grading, parking, paving, stormwater management and utility features. The stormwater management system consisted of an aboveground infiltration pond with overflow discharge to a roadside swale.

Project Team:

**Britt Bassett PE, BCEE,
Project Manager**

BE prepared construction plans and details to satisfy requirements for Land Development approval through Fairfield Township. Also, the Township Engineer reviewed and approved a Stormwater Management Plan.



BE obtained Permits including the Erosion & Sediment Control Permit through the Lycoming County Conservation District and connection to Water and Sanitary Sewer for Lycoming County Water and Sewer Authority.

BE coordinated project tasks by subconsultants, included topographic surveying and infiltration rate testing.

Bassett Engineering

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Montoursville, PA 17754
www.bassetteng.com

Phone: 570-368-2131
info@bassetteng.com

Bassett Engineering Inc.

Nicholas Meats, LLC

Greene Township

Clinton County

Bassett Engineering Inc.

Bassett Engineering (BE) provided civil and environmental engineering services for Nicholas Meats including surveying, land development, environmental permitting, waste treatment feasibility, and environmental site assessments. Nicholas has expanded the plant multiple times over the years. A major plant expansion included expanding the usable part of the plant site by several acres and adding hundreds of parking spaces. BE designed site grading, stormwater collection, detention and infiltration, domestic waste storage, drives, parking, and other facilities.

The Waste Treatment Feasibility Study determined the cost effectiveness of treating waste onsite to the point where the water could be reused in the plant, plus the feasibility of cogeneration using biogas.

Waste Treatment: Wastewater from the meat packing process is treated with a membrane bioreactor (MBR), denitrification filter, ozone and reverse osmosis to make it clean enough to be reused throughout the packing plant. Digested residuals is dewatered so they could be stored through the winter, land applied, and potentially sold.

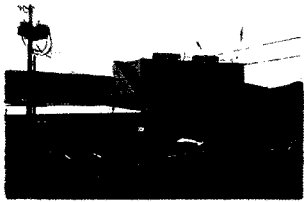
Cogeneration: Meat packing plant waste, residuals from the wastewater treatment processes, and potentially food waste from external sources, are fed to a thermophilic anaerobic digester. Piston engines burn digester gas to drive electricity generators. Electricity is used in the meat packing plant, with excess sold back to the grid. Waste heat from the exhaust and engine water jackets is used to heat the digester plus water used in the meat packing plant.

Stormwater management consisted of diverting off-site runoff; separate collection, detention and infiltration of industrial stormwater and roof runoff, interception and diversion of groundwater from karst topography, and filling of sinkholes. discharging to a surface pond that discharges to an adjacent creek. Parking lot accommodates single-loop tractor-trailer traffic through the building, plus single-axle vehicle and truck parking.

Sewage Facilities: Increase in employment caused flows to exceed OLDS capacity. Designed and permitted wastewater holding tanks.

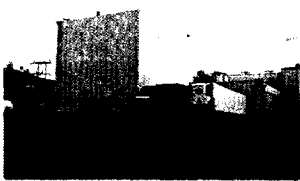
BE obtained approvals including:

- DEP Permits (in conjunction with Clinton County Conservation District and US Army Corps of Engineers)
- Chapter 102 NPDES Permit for Stormwater Discharge Associated with Construction Activities
- Chapter 102 Industrial NPDES Permit for Stormwater Discharge Associated with Industrial Activities
- Chapter 105 Joint Permit for Water Obstruction and Encroachment
- Component 2 Sewage Facilities Planning Module
- PennDOT Highway Occupancy Permit for entrance to new employee parking lot
- Greene Township: Land Development Plan and Sewage Facilities Planning Module



Project Team:

**Britt D. Bassett, PE,
BCEE Project Manager**



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Bassett Engineering Inc.



Project Team:

Britt Bassett, PE, BCEE
Project Manager

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Petroleum Products

Fairfield Township

Lycoming County

Bassett Engineering Inc.

Bassett Engineering provided civil engineering services for the project which consisted of constructing a 10,000 sq. ft. building and ancillary features to serve the new industrial fluids warehouse on a 2.6 acre site.

Engineering tasks by BE included preparation of plans covering grading, paving, entrance onto Choate Circle, stormwater management and utility features. Stormwater management consisted of an underground infiltration bed discharging to a surface pond that discharges to an adjacent creek. Parking lot accommodates single-loop tractor-trailer traffic through the building, plus single-axle vehicle and truck parking.

BE obtained approvals including the NPDES Permit for Stormwater Discharge Associated with Construction Activities through Lycoming County Conservation District, connection to Sanitary Sewer for Lycoming County Water and Sewer Authority, and Land Development Plan through Fairfield Township.

BE coordinated project tasks by subconsultants including topographic surveying, petroleum storage tank permitting, wetlands delineation, infiltration rate testing and Township land use approvals.



Bassett Engineering Inc.



5th Street River Access

Renovo Borough

Clinton County

Bassett Engineering Inc.

Council Members:

Carl Olshefskie,

Mayor

Ann Tarantella,

President

Patricia Rauch,

Vice President

Mark Campbell

Kari Kepler

Rhonda Balchun

Thomas Tarantella Jr.

Merry Ann Olshefskie

Rob Eckard

Project Cost:

\$251,000

Project Team:

Britt Bassett, PE

Keith Miller, PE

Contractor:

John Nastase

Construction

Timeline: **2017**

Bassett Engineering

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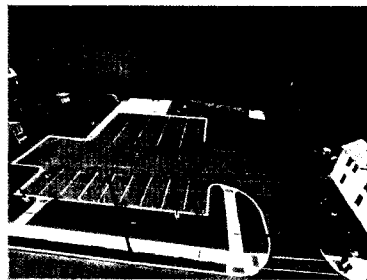
info@bassetteng.com

Constructed a concrete boat launch, asphalt ramp and parking lot at the intersection of 5th Street with Ontario Avenue.

Work included stormwater pipe and inlets, tack coating, base and wearing course asphalt, saw cutting, site clearing, grading and cleaning, concrete curbs, sidewalks, aprons and ADA ramps. Appurtenances and site restoration included seam sealing, tree and stump removal, rain garden, lighting, riprap, pavement markings, landscaping, signage, benches, picnic tables, trails, erosion, and sediment control measures.

Bassett Engineering surveyed, designed, obtained permits, and provided construction phase engineering including inspection.

Aerial View of Parking Lot



Aerial View of Boat Launch



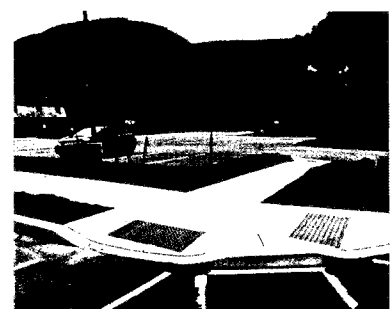
Boat Launch



New Bench



Sidewalk & ADA Ramps



Bassett Engineering Inc.



CULTURAL
RESOURCE
CONSULTANTS

CORPORATE STATEMENT OF QUALIFICATIONS

Richard Grubb & Associates, Inc. (RGA), established in 1988 as a full-service cultural resource management firm, has since grown to become one of the largest, independent archaeological and historic preservation consulting companies in the Mid-Atlantic, Midwest, Northeast, and Southeast regions. The firm has a reputation for excellence among a diverse clientele and the federal and state agencies that review its products. RGA's primary role is to assist public and private clients through the process of complying with federal, state, county, and municipal cultural resource and historic preservation regulations. The company operates regionally from its corporate headquarters in Cranbury, New Jersey and has managed cultural resource investigations throughout the United States, including within the Territory of Puerto Rico, from that office. Branch offices in Philadelphia, Pennsylvania and Wake Forest, North Carolina and remote locations in Chester Springs, Pennsylvania; and Marietta, Ohio provide support to the company's geographically broad service area.

RGA is registered as a Small Business Enterprise under multiple NAICS codes, including 541720, with the State of New Jersey, Department of the Treasury, under the Small Business Set-Aside Act and Minority and Women Certification Program. RGA is certified as a Women Business Enterprise (WBE) under this same New Jersey agency. The firm is also certified as a WBE with the New York State Division of Minority and Women's Business Development, the New York City Department of Small Business Services, the Port Authority of NY & NJ, the State of Delaware Office of Supplier Diversity, the Pennsylvania Department of General Services, and the City of Philadelphia. RGA is registered as a Disadvantaged Business Enterprise (DBE) through the New Jersey, Pennsylvania, Delaware, New York, Connecticut, Massachusetts, Rhode Island, North Carolina, and Florida Unified Certification Programs.

RGA has a current staff size of 40 including Alice Domm, Chief Executive Officer and President; Richard Grubb, Vice President; 11 full-time principal investigators for archaeology; 14 full-time principal investigators for architectural history and history; and 13 field directors, field technicians, material culture specialists, GIS and CADD technicians, and administrative staff. Fifteen RGA principal investigators and field directors hold current OSHA and Hazwoper training certifications. RGA's professional staff has the experience and credentials to meet the Secretary of the Interior's Qualifications Standards (36CFR61) in Archaeology, Architectural History, and History. In addition to this core team, RGA retains highly qualified temporary archaeological technicians as necessary during peak seasons to insure simultaneous project and client needs are planned for and addressed in all geographic regions served.

RGA has completed over 6,200 archaeological, historical and architectural projects and currently holds a cultural resource consulting parent agreement with the Delaware Department of Transportation, and term agreements with the Vermont Agency of Transportation, and the New Jersey Department of Transportation and NJ TRANSIT through prime engineering firms. RGA also holds direct ID/IQ contracts with the U.S. Department of Agriculture (USDA), Allegheny National, Wayne National, and Monongahela National Forests, as well as on-call agreements with the USDA-New Hampshire Natural Resource Conservation Service, the New York Power and Canal Authorities. The firm also holds a GSA Schedule where Federal agencies can order RGA's services under SIN 899-1.

RGA's demonstrated success in current contracting rests in past performance, a dynamic organizational framework, state-of-the-art hardware and software resources that streamline data collection and analyses, and strong regional relationships with clients and regulatory and permitting agencies. This client focus is driven by the professionalism and dedication of individual staff with expertise and credentials in all aspects of cultural resource management, the firm's practical approach to client communications, the achievement of scheduled milestones, and the delivery of time-sensitive, quality reports.

Field, Laboratory, and Office Equipment

RGA owns a full suite of field and laboratory equipment necessary to support all types of cultural resource management projects. Field equipment includes four fully equipped vans, and five SUV's that can transport archaeological and architectural field crews to local and remote project sites. In addition to standard field equipment (shovels, augers, screens, etc.), RGA's recording devices include 14 digital cameras, five Garmin 400T Global Positioning Units (GPS), two Suunto Engineering transits, two Nikon Total Stations and three Trimble professional grade GPS Units, and 17 iPad tablets. RGA uses iPad tablets during archaeological surveys, which provide access to real-time fieldwork results and informed decisions on excavation strategies and interpretations. Shovel test pit and excavation unit data are recorded via digital fieldwork forms in FileMaker. For OSHA (29 CFR 1910.120) compliant HAZMAT projects, 40-hour certified team members are outfitted with the necessary level of personal protective equipment.

RGA maintains a fully equipped archaeological laboratory facility in Cranbury, New Jersey, where all cleaning, identification, cataloguing, and curation takes place. Laboratory equipment includes an Olympus stereomicroscope, artifact processing equipment, a soil flotation device, and standard artifact conservation and archival storage supplies. The laboratory houses an extensive reference library to assist in the analyses of prehistoric and historic archaeological material culture and report preparation. RGA has prepared archaeological collections for curation to Department of Interior Standards for submission to various state and federal repositories. Faunal analyses are facilitated by an in-house zooarchaeology laboratory.

RGA's corporate headquarters includes 41 networked computers, two networked printers, an exchange server, terminal server, and a Microsoft server with a combined five terabyte of data storage capacity. Remote desktop connections and remote access to email and voice mail allow for quick responses to clients and the completion of deliverables. A variety of licensed software as well as file transfer protocol (FTP) capabilities are utilized to provide timely production of reports and other deliverables.

GIS/GPS Operations

To improve client services, fieldwork and data analysis quality, and overall project efficiency, RGA researches and collects Global Information Systems (GIS) data and utilizes GPS units as standard elements of nearly all project types. RGA utilizes combined raster and vector data in ArcGIS to create accurate up-to-date and historic representations of environmental, geographic, and political site conditions for field investigations and analysis. Publically available GIS data and in-house generated shapefile data is utilized to develop archaeological sensitivity models for watershed mapping and field maps, and to document the location of historic properties and archaeological site boundaries. Field survey data is collected using a Trimble Pathfinder ProXH GPS Receiver and Trimble Recon Datalogger, Trimble Geo 7X Unit, and post-processed with Trimble Pathfinder Office. These sub-foot accuracy GPS units support digital and manual surveying techniques for precision drafting with AutoCAD Map3D 2013 and ArcView 10.5. As necessary the total station provides precision accuracy to facilitate mapping of archaeological data for export to AutoCAD, GIS, or simply as raw spreadsheet data. To keep up-to-date, RGA annually renews the maintenance plans for each of these software packages: AutoCAD Map 3D, ArcGIS, Pathfinder Office, and TerraSync.

The spatial analyst extension of ArcMAP in ArcGIS enables qualitative and quantitative data collected during historical, historic architectural and archaeological surveys to be efficiently queried and extracted from compiled databases, and graphically projected in a cost effective, synthesized, easily interpreted format. The data can be projected in GIS shape file format, enabling both project sponsors and clients to effectively incorporate pertinent data into project plans and designs.



CULTURAL
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COMPLIANCE SERVICES FOR THE TELECOMMUNICATIONS INDUSTRY

RGA, Inc. (RGA) was established in 1988 as a full-service cultural resource management firm and has since grown to become one of the largest, independent archaeological and historic preservation consulting companies in the Mid-Atlantic, Midwest, and Northeast regions. The firm has a reputation for excellence among a diverse clientele and the federal and state agencies that review its products. RGA's primary role is to assist public and private clients through the process of complying with federal, state, county, and municipal cultural resource and historic preservation regulations. The company operates regionally from its corporate headquarters in Cranbury, New Jersey and has managed cultural resource investigations throughout the Mid-Atlantic, Northeast, and northern Appalachian regions from that office. Remote locations in Pennsylvania, Maryland, North Carolina and Ohio, provide support to the company's geographically broad service area.

RGA performs a variety of services for telecommunications projects, including historic architecture and archaeological surveys for the completion of Federal Communications Commission Form 620 (for new towers) and Form 621 (for collocations); Native American consultation; State Historic Preservation Office (SHPO), local government, and Historic Preservation Commission consultation; as well as the coordination of the Memorandum of Agreement process. RGA's client base includes engineering and environmental firms, as well as wireless carriers. Since 2000, RGA has performed over 1,750 wireless projects in 17 states including over 1,300 in New Jersey, 245 in New York and over 100 in Pennsylvania.

Range of Services:

- Nationwide Programmatic Agreement Reviews for Collocations
- Initial Project Screenings
- Viewshed Analysis (Viewshed Mapping, Crane and Balloon Tests)
- Phase IA Literature Reviews
- Phase IB Cultural Resource Surveys
- Historic Building Assessments
- National Register of Historic Places Evaluations, Testing, and Excavations
- Public Involvement
- Coordination of Memorandum of Agreement Process
- Agency and Certified Local Government Consultations
- NEPA Documentation (CED, EA, and EIS)

RGA's broad experience in telecommunications allows for a professional understanding of the permitting complexities. RGA understands the importance of providing a fast response to its telecommunications clients. With the often expedited scheduling of NEPA compliance activities for telecommunications projects, it is vitally important that projects be turned around as fast as possible, and that they meet with regulatory approval. RGA has an exceptional reputation on both counts.



CULTURAL
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LYNN ALPERT

SENIOR ARCHITECTURAL HISTORIAN (36 CFR 61)

YEARS OF EXPERIENCE:

With this firm:

2012 Present

With other firms: 1

EDUCATION:

MS 2012

University of
Pennsylvania
Historic Preservation

BA 2006

Temple University
Art History, *Summa Cum
Laude*

PROFESSIONAL TRAINING:

Advisory Council on
Historic Preservation,
Section 106 Essentials
Training Course, August
2012

PROFESSIONAL ORGANIZATIONS:

Member of the
Vernacular Architecture
Forum

Member of the Pioneer
America Society;
Association for the
Preservation of Artifacts
and Landscapes

Member of the American
Alliance of Museums

Professional Experience Summary:

Lynn Alpert's experience includes historical research and writing, architectural surveys and analysis, preparation of National Register of Historic Places nominations, and Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER) documentation. She has prepared and directed cultural resources surveys in accordance with Section 106 of the National Historic Preservation Act, as amended, NEPA, and other municipal and state cultural resource regulations. Ms. Alpert's educational and professional experience exceed the qualifications set forth in the Secretary of Interior's Standards for an Architectural Historian [36 CFR 61].

Representative Project Experience:

PHI Jade Run Site, Vincentown, Southampton Township, Burlington County, NJ (Sponsor: TowerNorth Development, LLC, and Cellco Partnership d/b/a Verizon Wireless) Architectural Historian for an architectural survey for a proposed new cell tower telecommunications facility in Vincentown. Initiated consultation with local interested parties regarding the project, delineated the Area of Potential Effects (APE) for Visual Effects, and determined that no historic properties would be adversely affected by the undertaking.

Maplewood Collocation Site, Maplewood Township, Essex County, NJ (Sponsor: New York SMSA Limited Partnership d/b/a Verizon Wireless) Architectural Historian for a proposed wireless collocation project to be located on a c. 1960 condominium building. Assessed the potential National Register eligibility for the condominium building, delineated the APE for Visual Effects, and determined that no historic properties would be adversely affected by the undertaking.

PHI West Bristol Wireless Telecommunications Facility, Borough of Bristol, Bucks County, PA (Sponsor: Verizon Wireless) Architectural Historian for a reconnaissance-level architectural survey for the proposed PHI West Bristol Wireless Telecommunications Facility. Background research and field investigations identified 18 architectural resources more than 50 years of age inside the Area of Potential Effects for Architecture, one previously determined eligible to the National Register. As a result of the survey, it was determined that none of these architectural resources would be affected by the undertaking.

Guttenberg Collocation Site, Town of Guttenberg, Hudson County, NJ (Sponsor: New York SMSA Limited Partnership d/b/a Verizon Wireless) Architectural Historian for a visual effects assessment for a proposed wireless collocation project to be located at 152 70th Street, a circa 1920 two-story brick building located in the Town of Guttenberg, Hudson County, New Jersey. Due to its lack of architectural significance and integrity, 152 70th Street was not determined eligible for the National Register. It was determined that the undertaking would have no effect on historic properties.



CULTURAL
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MICHAEL J. GALL

PRINCIPAL SENIOR ARCHAEOLOGIST (36 CFR 61)

YEARS OF EXPERIENCE:

With this firm:

2001-Present

With other firms: 3

EDUCATION:

MA 2004

Monmouth University
American History

BA 2001

Monmouth University
History and
Anthropology

PROFESSIONAL

TRAINING:

C.R.M. Essentials,
Trenton, NJ, 2007

40-hour Health and
Safety Training for
Hazardous Waste
Operations and
Emergency Response
(OSHA 29 CFR
1910.120), October 2004;
8-hour HAZWOPER
Refresher, March 2017

PROFESSIONAL

REGISTRATION:

Register of Professional
Archaeologists

PROFESSIONAL

SOCIETIES:

Council for Northeast
Historic Archaeology

Society for Historical
Archaeology

Archaeological Society of
New Jersey (Treasurer)

Professional Experience Summary:

Michael J. Gall has extensive experience in applying Section 106 of the National Historic Preservation Act, as amended, the New Jersey Register of Historic Places Act, and other relevant state and municipal laws. Mr. Gall has served as a Principal Investigator on Phase I-III archaeological investigations and archaeological monitoring, and specializes in historical archaeology. He has experience working on archaeological sites in New Jersey, Pennsylvania, Connecticut, Delaware, Maryland, Massachusetts, and New York. He exceeds the qualifications set forth in the Secretary of Interior's Standards for Archaeologists [36 CFR 61].

Representative Project Experience:

DOV Charger Way, City of Dover, Kent County, DE (Sponsor: Verizon Wireless)

Principal Investigator for a Phase I and II archaeological survey performed as part of an FCC Form 620 in compliance with Section 106 of the Historic Preservation Act (NHPA). The archaeological surveys identified and evaluated historic and prehistoric archaeological resources. Consultation with Native American tribes and the Delaware Historic Preservation Office (HPO), and other interested parties, was undertaken. The HPO determined that archaeological monitoring during construction was necessary to mitigate adverse effects to identified archaeological resources. An archaeological monitoring plan was prepared and approved by the HPO.

PHI Jade Run, Southampton Township, Burlington County, NJ (Sponsor: Verizon Wireless)

Principal Investigator for a Phase I and II archaeological survey conducted in compliance with Section 106 of the NHPA as part of an FCC Form 620 submission. The survey identified a potentially significant prehistoric Native American archaeological site. Extensive consultation was conducted with the New Jersey HPO and Native American tribes to determine an appropriate Phase II archaeological survey effort and enable project completion. The Phase I and II archaeological survey reports were reviewed and approved by the New Jersey HPO and Tribal HPOs.

ALL Fullerton, Whitehall Township, Lehigh County, PA (Sponsor: Verizon Wireless)

Principal Investigator for a Phase I Archaeological Survey for a proposed wireless telecommunication facility as part of an FCC Form 620 submission under Section 106 of the NHPA. Survey resulted in the identification of a prehistoric Native American archaeological site. Mr. Gall worked directly with Verizon Wireless Land Management personnel in site relocation and additional archaeological survey tasks to avoid adverse effects to the identified resource.

WIL Hances Point Road, North East, Cecil County, MD (Sponsor: Verizon Wireless)

Principal Investigator for a Phase I archaeological survey completed as part of an FCC Form 620 under Section 106 of the NHPA in advance of a wireless telecommunication project. No significant archaeological resources were identified and no further archaeological survey was recommended. A Phase I archaeological survey report was submitted and approved by the Maryland Historical Trust.

HEADQUARTERS | 29 Prospect Plains Road | Building D | Cranbury, New Jersey 08512 | 609-655-0692 | www.rgacorporated.com

DBE/WBE/SBE CERTIFIED

Statement of Qualifications



WHY JADE STONE?

Our team has proven experience and extensive knowledge in site electrical projects, and we pair that knowledge with a level of customer service for our clients that is rarely matched in the industry.

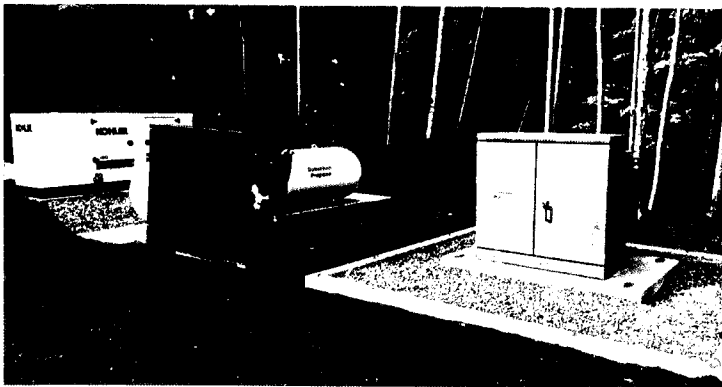
We coordinate every detail with the client and work together to keep the project running smoothly. We address issues and resolve them quickly to achieve the same ultimate goals – meeting deadlines and keeping within the budget.

KNOWLEDGE

Jade Stone's combined experience allows our team to take on projects of all sizes and complexities in a variety of market sectors.

Electrical/Energy Services

- Medium and Low voltage Distribution
- Emergency Power Systems
- Substations and Switchgear
- Primary Service
- Overhead and Underground Distribution Design
- Generation and Transmission
- Feasibility Studies
- Interior/exterior Lighting Design
- Lightning protection & grounding
- Smart Grid Applications for Residential
- Surge Protection Systems
- Life Safety Systems
- Parking Lot and Roadway lighting Design
- Facility Security Lighting, Access Control and Camera Design
- Sound Systems, Network, Data and Communication Systems Design
- Electrical Studies (short circuit, arc flash, & coordination)
- Uninterruptible Power Supplies
- NEC, Building Code of NYS, NFPA Code Review and Compliance
- Supervisory Control and Data Acquisition (SCADA) design
- Inspection of installed systems





Jade Stone Engineering (JSE) is a woman-owned small business (NYS certified WBE engineering firm) founded in January of 2012. The firm focuses specifically on mechanical, electrical, plumbing, and fire protection design and engineering. We also offer construction inspection services, ARC flash studies, and thermal imaging services.

The Successful Project:

The engineering team at JSE is committed to providing clients with unrivaled customer service and successful projects- a standard that goes beyond an immaculate set of bidding documents. A success, by JSE's definition, is a project that has run smoothly, was constructed on time, on budget, and has resulted in both a high quality and environmentally sustainable system.

A Committed Team:

The principals at JSE built the company on the philosophy of on-site engineering. The on-site philosophy emphasizes an involved, pro-active approach to project design- from the beginning to end- that yields both high levels of client satisfaction as well as successful projects.

Some of our on-site concepts include:

- *In-depth and extensive field investigation starting at the conceptual design phase.* JSE engineers verify existing conditions on-site before beginning a design. This extra time in the field reduces surprises during construction as well as unnecessary contractor RFIs. JSE strives to keep the contractors moving and the project on schedule to the maximum extent possible.
- *Continued contact with the owner's project representative, and, if possible, the trade contractors.* The JSE team has an outstanding reputation among contractors as team players who help to deliver practical design solutions both over the phone and in the field.
- *Site visits during construction.* JSE engineers take contractor RFIs seriously and can be counted on to be in the field whenever necessary.

Firm Location:

JSE services clients across the mid-Atlantic region from their main office in Watertown, NY.

Managing Partners:

Jade Stone Engineering, PLLC – Founding Partners:

- Jada Walldroff, P.E. - CFO
- Matthew Walldroff, P.E., LEED AP – Vice President of Mechanical Engineering
- Benjamin Walldroff, P.E., LEED AP – Vice President of Electrical Engineering

The Electrical Engineering Team:

JSE's Electrical Engineering department is diverse in both small and large projects. Under the leadership of Benjamin Walldroff the electrical team has a vast depth of knowledge and experience.

Ben worked for a number of large engineering firms in the mid-Atlantic region before returning to the North Country in 2007. Acting as the Vice President of Electrical Engineering, Ben takes an active role in all projects. His belief in on-site engineering, combined with his leadership style are significant factors in the success of JSE's electrical projects.

Mr. Walldroff is a LEED Accredited Professional (LEED AP) and actively seeks to integrate environmentally sustainable and responsible designs into each of his projects. To date, he has worked on over a dozen LEED Projects.



The Mechanical Engineering Team:

Led by Matthew Walldroff, JSE's Mechanical Engineering team is a highly respected group within the MEP field.

Matthew has a diverse mechanical engineering background and extensive project experience within the water/wastewater sector and higher education facilities. He has completed a number of LEED projects (including energy modeling) and understands the importance of collaboration amongst trades to achieve a successful, energy minded and maintenance friendly facility.

Part of Matt's unique experience includes retro-commissioning. He takes a practical approach to facility improvements and has been very successful in reducing his client's yearly maintenance and energy costs. He recently completed a 21 building, 2.5 million dollar retro-commissioning project on the Fort Drum U.S. Army Post, located just outside of Watertown, New York.

His hands-on approach, in-depth understanding of HVAC systems, and ability to effectively communicate with contractors and design teams are all significant characteristics that contribute to the success of JSE Projects.

Electrical/Energy Services include

- Medium and Low voltage Distribution
- Emergency Power Systems
- Substations and Switchgear
- Primary Service
- Overhead and Underground Distribution Design
- Generation and Transmission
- Feasibility Studies
- Interior Lighting and Protection System Design
- Smart Grid Applications for Residential
- Surge Protection Systems
- Life Safety Systems
- Parking Lot and Roadway lighting Design
- Facility Security Lighting, Access Control and Camera Design
- Sound Systems, Network, Data and Communication Systems Design
- Electrical Studies
- Uninterruptible Power Supplies
- NEC, Building Code of NYS, NFPA Code Review and Compliance
- Supervisory Control and Data Acquisition (SCADA) design
- Inspection of installed systems
- Construction inspection
- Telemetry/Control System Design

Mechanical Design Services include

- HVAC and Plumbing Design & Troubleshooting
- Heating Recovery Systems
- Central Heating and Cooling Plants (Boiler Systems and Chiller Systems)
- Energy Management Control System Design
- Manufacturing Facility Design
- Energy Modeling
- Geothermal Systems
- Commissioning
- Retro-Commissioning
- Energy Audits
- Feasibility Studies
- Building Assessments

Minority Utilization:

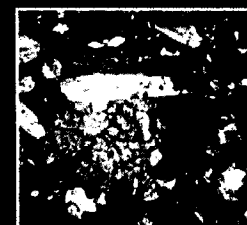
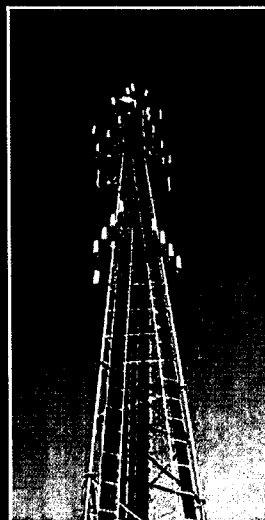
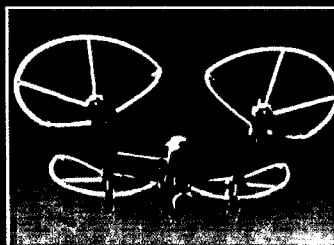
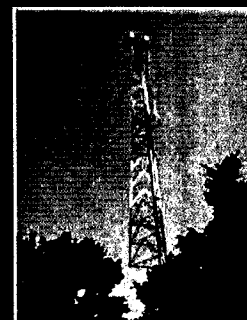
Jade Stone Engineering has both New York State and Federal woman-owned business status (NYS certified WBE and Federal EDWOSB [Economically Disadvantaged Woman Owned Small Business]).

Statement of Qualifications

GEOTECHNICAL ASSESSMENTS FOR LYCOMING COUNTY RADIO TOWERS

Prepared for:

BASSETT ENGINEERING INC.



Prepared by:



GEO-TECHNOLOGY ASSOCIATES, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

1803 Mt. Rose Avenue, Suite A-1
York, Pennsylvania 17403
(717) 318-5451

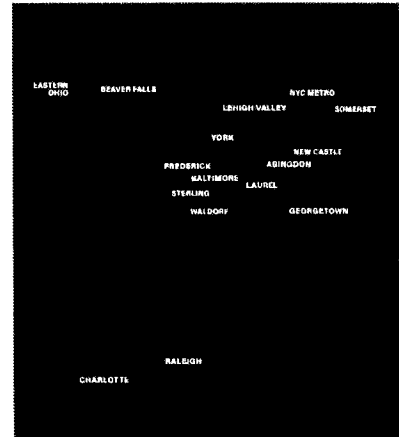
August 20, 2020



GEO-TECHNOLOGY ASSOCIATES, INC.

INTRODUCTION

Geo-Technology Associates, Inc. (GTA) is a professional firm specializing in geotechnical engineering, geoscience, environmental, and natural resources consulting, groundwater resource development, and materials testing engineering. Incorporated in 1985, GTA currently has more than 375 employees in 16 offices. GTA's offices are located in Abingdon, Baltimore, Laurel, Frederick, and Waldorf, Maryland; Georgetown and New Castle, Delaware; Somerset and Little Ferry, New Jersey; Quakertown, York, and Beaver Falls, Pennsylvania; Sterling, Virginia; Malvern, Ohio; and Charlotte and Raleigh, North Carolina (GTA Associates, Inc.). The firm serves commercial, residential, institutional, industrial, and energy clients, local, state, and federal government agencies, architects, engineers, and contractors. GTA focuses on geotechnical issues such as subsurface exploration, geotechnical and foundation engineering, groundwater resource and wastewater disposal issues, construction observation and materials testing, and environmental issues from environmental assessments through management of remediation for contaminated water and soil, and natural resource services ranging from natural resource inventories to federal and state permit processing.



GTA maintains a staff of geotechnical, environmental, and materials engineers, geologists, environmental scientists, planners, drillers, and engineering technicians. The engineers are licensed to practice in the mid-Atlantic states, Carolinas, and/or District of Columbia, and hold memberships in the American Society of Civil Engineers, National Society of Professional Engineers, and several other professional societies. GTA's technicians have certifications and/or memberships in the National Institute for Certification in Engineering Technologies, American Concrete Institute, International Code Council, American Welding Society, and regional agencies such as WACEL and NJDCA. GTA's engineering and field personnel are supported by our in-house AASHTO Materials Reference Laboratory, Cement and Concrete Reference Laboratory, Washington Area Council of Engineering Laboratories, and/or U.S. Army Corps of Engineers accredited soil, aggregate, and concrete laboratory facilities.

Geotechnical engineering services include preliminary and design phase subsurface exploration using test boring, cone penetrometer, and test pit programs; foundation analysis, design of specialty earth retaining systems, slope stability analysis, seismic analysis, earthwork recommendations, laboratory and field materials testing; and construction observation. GTA's experience serves to forecast potential difficult ground conditions and to economically minimize their impacts on construction. GTA also provides hydrogeologic and soil investigations for groundwater appropriation and wastewater treatment application, geologic studies for mineral and construction materials resources, analysis and design of dams, and concrete mix design and testing. GTA's in-house drilling department provides efficient and adaptable service to support geotechnical and environmental assessments.

GTA's groundwater and wastewater services include groundwater resource exploration, aquifer testing, aquifer impact evaluation, water appropriation permit services, and soil suitability evaluations for on-site wastewater disposal. GTA has successfully performed numerous groundwater resource development projects for municipalities, institutional clients, commercial interests, and residential land development clients. GTA's staff includes professional geologists licensed in Delaware, Pennsylvania, Virginia, and North Carolina (MD does not currently have a professional geologist licensing program). Our soil science and hydrogeologic staff facilitate the provision of a wide array of services, from initial feasibility evaluations of yield and wastewater disposal potential to confirmatory field testing, permit services, and cooperation with site engineers in site plan configuration.

GTA offers comprehensive environmental capabilities including site assessments and characterization; remedial investigation, design, and implementation; asbestos and lead-based paint surveys; wetland and forest stand delineation, mitigation design and monitoring, and federal and state permitting; rare, threatened, and endangered species consultation; and GPS location of environmental features. GTA provides strong project management, quality assurance, and quality control for each project, and can provide holistic environmental issues support. Our strategy is typically a phased approach providing the appropriate level of effort in each project phase for optimum cost management. For consistently protective and cost-effective remedies, GTA evaluates site-specific issues and applicable regulatory requirements, thereby avoiding unnecessary cleanup requirements. Through this process, GTA has successfully implemented cost-effective remedial actions at sites where soils and/or groundwater have been contaminated by organic and inorganic constituents, and where regulatory requirements resulted in wetland and stream mitigation design and construction.



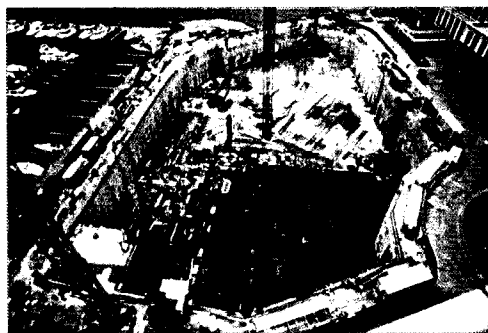
DESCRIPTION OF SERVICES

I. GEOTECHNICAL ENGINEERING SERVICES

A. Engineering Services

GTA provides a full array of consulting and testing to meet clients' geotechnical requirements. Our highly qualified and experienced staff offer assistance in geotechnical and geosciences issues during the design and evaluation phase of projects including, but not limited to:

- Feasibility Studies
- Subsurface Investigation
- Test Boring and Well Installation
- Shallow and Deep Foundation Analysis
- Flexible and Rigid Pavement Analysis/Design
- Claims Analysis
- Remedial Design
- Slope Stability Analysis/Design
- Seepage Analysis
- Retaining Wall Design/Recommendations
- Ground Improvement Design/Recommendations
- Subsidence Mitigation
- Karst Geology Analysis
- Geologic Hazard Mapping
- In-Situ Testing
- Seismic Analysis
- Groundwater Control Design
- Geotechnical Instrumentation and Monitoring



GTA's staff assists our clients to reduce construction liability and improve marketability of developed areas. GTA uses geophysical, in-situ testing, and traditional geotechnical techniques to identify potential site hazards, and is accomplished in assisting clients with potential difficulties with construction and to reduce their impact on the project.

During the field and laboratory investigations, ongoing geotechnical evaluation of the data can be performed to ensure that the necessary information is obtained. Upon completion of field and laboratory work, or on an agreed schedule of submission, GTA can prepare reports addressing relevant issues, providing results, conclusions, and recommendations regarding, but not limited to:

- | | |
|--|-----------------------------------|
| Soil and moisture conditions | Compaction requirements |
| Rock and spring locations | Excavation items |
| Topsoil availability | Method of pile or footing support |
| Stormwater management facilities | Suitable pile type |
| Subgrade-drainage requirements | Allowable pile loading |
| Test pile requirements | Settlement considerations |
| Load test requirements | Effects on adjacent construction |
| Allowable bearing pressure | Corrosion effects |
| Groundwater considerations | Borrow items |
| Location of man-made features, such as dumps, fills, etc. | Scour protection |
| Special surface & subsurface challenges (mines, swamps, etc.) | Bearing elevation |
| Earthwork information including shrinkage and/or swell factors | Settlement analysis |
| Slope and surface drainage recommendations | |



GEO-TECHNOLOGY ASSOCIATES, INC.

PERSONNEL AND RESOURCES

I. GENERAL

GTA maintains a highly trained and qualified staff to perform the comprehensive services required by its clients. All GTA professional staff are degreed in one or more of the following disciplines: Civil, Geotechnical and Environmental Engineering, Environmental Sciences, Geology, Biology, and Chemistry and/or Physics.

II. PROFESSIONAL DESIGNATIONS

<u>Name of Employee</u>	<u>Registration</u>
J. Patrick Klima	Professional Engineer (DE, MD)
Amin Rahman	Professional Engineer (MD, VA, NC, SC, WV)
Christopher M. Reith	Professional Engineer (DE, MD, NJ, NY, PA)
Ravi Malviya	Professional Engineer (DC, MD, VA)
David N. Zmijewski	Professional Engineer (PA, NJ)
Dennis C. Loh	Professional Engineer (CT, NJ, NY)
Gregory R. Sauter	Professional Engineer (DC, DE, MD, ND, PA, VA)
Jonathan D. Raab	Professional Engineer (OH, PA, WV)
Craig T. Rodano	Professional Geologist (PA)
Meghan Lester	Professional Engineer (DE, KY, MD, PA)
Thomas M. Wirth	Professional Engineer (DE, MD, PA)
John P. Wille	Professional Engineer (NC, SC)
Robert Dykstra	Professional Engineer (MD, NJ, NY)
Benjamin T. Dinsmore	Professional Engineer (MD)
Michael W. Derr	Professional Engineer (MD, NJ, PA)
Gary S. Rakow	Licensed Site Remediation Professional (LSRP) (NJ)
Paul S. Scott	Hydrogeologist, Professional Geologist (DE, NC, PA, VA)
Paul H. Hayden	Professional Geologist (MS); LSRP (WV); Registered Site Manager (RSM) (NC)
Andrew S. Hendricks	Professional Geologist (DE, PA, VA); Licensed Remediation Specialist (WV)
Samuel J. Stevenson	EPA AHERA Asbestos Inspector (MD, VA)
Richard Lake	Licensed Site Remediation Professional (LSRP) (NJ)
Craig R. McCarrick	Licensed Site Remediation Professional (LSRP) (NJ)
Dan Buhler, Jr.	Licensed Site Remediation Professional (LSRP) (NJ)
Jeffrey Christopher	Professional Geologist (PA), LSRP (NJ)
David A. Davis, Jr.	Professional Geologist (PA)
Jeffrey W. Mutter	Professional Geologist (PA)
Allison Tether	Professional Geologist (PA)
Andrew J. Zmoda	Professional Geologist (PA, VA); Professional Engineer (MD, PA)
Randy Daub	Professional Engineer (PA, OH)
Benjamin G. Myers	Professional Engineer (DE, MD, PA)
Sarah E. Dalton	Professional Engineer (DC, MD, PA, VA)
Andrew D. McKeen	Professional Engineer (MD, VA)
Timothy Coville	Professional Engineer (MD)
John P. Ermer	Professional Engineer (MD)
Scott J. Taylor	Professional Engineer (MD)
Eric B. Church	Professional Engineer (MD)
Robert A. Johanson	Professional Engineer (MD)
Michael Whiteley	Professional Engineer (MD)
W. Shawn Sullivan	Professional Engineer (NC)
Juan Salinas	Professional Engineer (VA)
John Capozzolo	Professional Engineer (NJ, NY)
Joseph Skirkie	Professional Engineer (NY)
Kirill Korostelev	Professional Engineer (NY)
Doug Fernandez	Professional Engineer (NY)
David S. Krahl	Well Driller (DE, MD, NJ)

Resumes of key personnel are presented in Appendix A.



GEO-TECHNOLOGY ASSOCIATES, INC.

III. RESOURCES / CAPACITY

GTA has the manpower, financial resources, management and technical support staff to complete the specified project tasks in a timely and efficient manner. Personnel employed by the firm are listed below by discipline:

- 1 - Environmental Engineers
- 23 - Environmental Scientists
- 17 - Field/Staff Scientists
- 29 - Geotechnical Engineers
- 24 - Project/Staff/Field Geotechnical Professionals
- 7 - Geologists
- 1 - Hydrogeologists
- 2 - Project/Staff Hydrogeological Professionals
- 6 - Laboratory Managers
- 52 - Construction Managers
- 175 - Engineering Technicians
- 1 - CADD
- 2 - Site Health & Safety Officers
- 6 - Master Drillers / Drillers
- 10 - Driller's Helpers
- 31 - Administrative
- 387 - Total Personnel

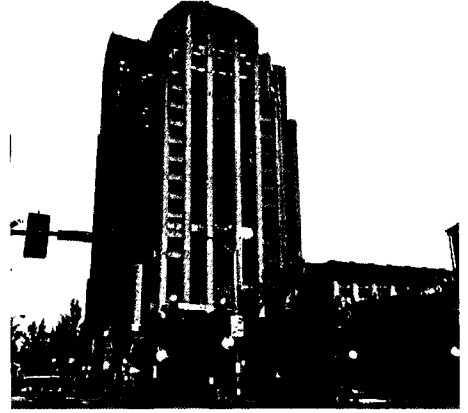
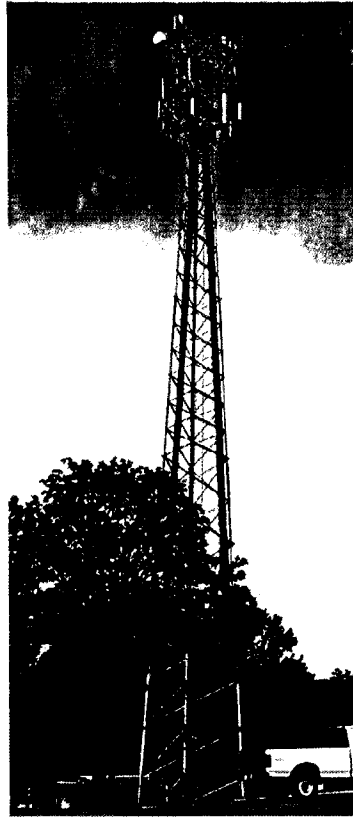
GTA has developed excellent working relationships and maintains accounts with analytical laboratories accredited to perform soil and water analysis of environmental contaminants. GTA will submit the necessary environmental samples to one of the regional laboratories based upon their analytical expertise, cost and turnaround times. The laboratories frequently employed by GTA include, but are not limited to:

Phase Separation Science, Inc.
6630 Baltimore National Pike
Baltimore, MD 21228

Alpha Analytical Inc.
8 Walkup Drive
Westborough, MA 01581

Criterion Laboratories, Inc.
400 Street Road
Bensalem, PA 19020

Branch Testing Laboratories, Inc.
32 South Avenue W.
Cranford, NJ 07016



Since 1997, Geo-Technology has provided a variety of environmental consulting and geotechnical engineering services for more than 4,000 cellular antenna tower installations. Project sites include new towers and monopoles, co-locates on towers and monopoles, and co-locates on buildings. Building co-locates include evaluation of potential asbestos-containing materials encountered by antenna installation or cable routing. Phase I & II Site Assessment services are performed in accordance with applicable ASTM standards. Phase II assessments typically include soil and groundwater quality characterizations. Sites are also evaluated under NEPA, which may include a SHPO review for potential impacts to historic sites. GTA has provided geotechnical exploration, sampling and foundation recommendations for new tower sites, as well as soil resistivity testing of various sites for grounding wire design.

Specific services have included:

- Phase I and Phase II Environmental Site Assessments
- Management of contaminated media during construction
- NEPA evaluations, including historic resource/SHPO evaluations
- Asbestos and lead-based paint surveys
- Forest stand delineations, forest conservation plans and associated permits and waivers
- Wetland delineation and associated permits and waivers
- UST removal and sampling for contaminated soil
- Geotechnical services including soil borings, soil classifications, soil resistivity, and foundation design
- Construction observation
- Material testing
- Health and safety audits

Major Wireless Carriers

Various Locations: VA, MD, DE, PA, NJ, NC, SC, TN, WV, WASH. DC



**GEO-TECHNOLOGY
ASSOCIATES, INC.**

JONATHAN D. RAAB, P.E.
Vice President

PROJECT ASSIGNMENT:

Geotechnical Project Manager

YEARS OF EXPERIENCE:

GTA: 15
Other Firms: 12

EDUCATION:

M.S. Engineering Geology, Drexel University, 2002
B.S., Civil Engineering, Drexel University, 1993

ACTIVE REGISTRATION:

Pennsylvania, Professional Engineer, 2003, #PE061910
West Virginia, Professional Engineer, 2011, #19169
Ohio, Professional Engineer, 2011, #E-75809

PROFESSIONAL AFFILIATIONS:

Associated Builders and Contractors - Keystone Chapter
PAAMA
York County Economic Development Corporation
South Central Pennsylvania AEC

QUALIFICATIONS:

Mr. Raab is a Vice President with GTA and has more than 27 years of practical experience in the geotechnical engineering field, with experience in Pennsylvania, West Virginia, Ohio and New York. Mr. Raab has experience with many types of clients and project types, including preliminary geotechnical site assessments, private land development projects, building and foundation design, retaining walls, public transportation projects, roadway design, bridge and culvert design, ground stabilization/modification and construction phase services. He has extensive experience in the oil and gas sector, including geotechnical assessments for construction of well sites and access roads; slope stability analyses; slope stabilization and repair evaluation, including walls, buttresses, soil nails, slope benching, drainage systems, and slope flattening; chemical stabilization of soils with cement and quicklime; roadway distress assessment and pavement design; and full depth reclamation (FDR) design for roadway stabilization.

Walmart 15 Fueling Station Evaluation – Principal engineer and technical reviewer for geotechnical evaluations for 15 fueling station additions to existing, operating Walmart's across Virginia and West Virginia, within a timeline of about 7 weeks to completion.

Lennar Homes 15 Site Due Diligence – Project manager and technical reviewer for geotechnical due-diligence evaluations for 15 residential development sites in central Pennsylvania with a timeline of 5 weeks from NTP to completion. Our evaluations consisted of test borings, test pits, laboratory testing, and geotechnical reports for each individual site.

S.R. 0015 Market Street Bridge over the Susquehanna River Lycoming County, Pennsylvania - Served as the geotechnical

engineer for the design of an eight span bridge over the Susquehanna and a new interchange connecting SR 0015 to I-180. Project included design of eight bridges, including the eight span bridge, a single point urban interchange that included 14 MSE walls supporting the ramps, two MSE walls constructed in flood control levees, and a soldier pile retaining wall.

ES3 Facility Expansion, York County, Pennsylvania - Geotechnical project manager for seven task orders within one year period, including:

- 750,000-sf building construction, with structural mat foundations.
- Retaining wall explorations and recommendations
- Evaluation of slope failure and remediation recommendations
- Stormwater management and infiltration testing explorations.

Oil/Gas Geotechnical Pad Evaluation - Performed geotechnical analyses for the construction of over 160 well drill pads. Geotechnical evaluation included borings and laboratory testing of soils and rock. Recommendations were provided for rock excavation and suitability, groundwater issues, soil stability, embankment stability, embankment benching, groundwater and range relief, rock excavation stability, settlement, acid rock drainage potential, shallow and deep mining issues, shrink/swell of earthwork, and chemical drying of soils. Slope stabilization measures included use of rock buttressing, toe benches, bonding benching, and geogrid reinforcement. Services provided for the following operators: Chesapeake Energy, Ascent Resources, Antero Resources, CNX/Consol, Southwest Energy, Hilcorp, and Edgemarc.



**GEO-TECHNOLOGY
ASSOCIATES, INC.**

F. T. KITLINSKI & ASSOCIATES, INC.
CONSULTING GEOTECHNICAL ENGINEERS

BLAIR C. KITLINSKI, P.E.

TELEPHONE: 717-652-8620
FAX: 717-651-0725
ftka@comcast.net

3608 NORTH PROGRESS AVENUE
HARRISBURG, PENNSYLVANIA 17110
(1.2 MILES NORTH OF PROGRESS AVENUE
INTERCHANGE NO. 69 OF I-81)

Blair C. Kitlinski, P.E., President and Chief Engineer with over 33 years of experience in soil and rock mechanics, foundations, seepage through soils, and geotechnical engineering. He graduated from Virginia Polytechnic Institute and State University in 1987 with a Bachelor of Science degree in Civil Engineering. Prior to earning this degree, Mr. Kitlinski was engaged as a Landscape Architect with the engineering/architectural firm of Hayes, Seay, Mattern & Mattern based in Roanoke, Virginia. Formal training for this assignment was received at the Pennsylvania State University which resulted in a Bachelor of Science degree in Landscape Architecture in 1979. He joined F. T. Kitlinski & Associates, Inc. in 1987.

His involvement in technical engineering activities began in 1971, and has covered construction control of soils and embankments, laboratory testing, inspection associated with the installation of caissons, driven piles, rock anchors, auger-cast piles, drilled pipe piles, subsurface field exploration, surveying, infiltration testing, anchor retention systems and grouting programs.

His experience to date includes buildings, warehouses, industrial plants, airports, highways, sewage treatment plants, bridges, standpipes, groundwater studies, military installations, park systems, shopping centers, dams and cellular towers.

Mr. Kitlinski has completed in excess of 250 subsurface investigations for self supporting

towers similar to those proposed for the two Hughes Radio Towers. The largest percentage of

these investigations are in connection with the cellular tower industry. The towers covered by these investigations consist of monopoles ranging from 80 to 180 feet in height and multiple leg towers varying from 120 to 320 feet in height. Typical foundations used for the support of the towers include mat foundations, deep/buried spread footings and mats, caissons and rock anchors.

Experience of the Wetland Delineator

Russell James

Russell James has conducted wetland delineations on hundreds of commercial real estate projects representing many thousands of acres throughout Pennsylvania and neighboring states since 1990. Mr. James has served as an instructor for wetland delineation courses at Penn State University, and has served as an expert witness in many real estate cases. He has supervised Marcellus Shale wetland delineation pipeline crews to assure technical proficiency and minimize over-flagging.

Further, Mr. James is a PA DCNR qualified botanist approved for conducting Species of Special Concern Surveys (SOSC) for Pennsylvania Endangered (PE) plant species, and has completed nationwide wetland mitigation projects throughout Pennsylvania, New York, Indiana, Alabama and others including Puerto Rico. Clientele included governmental agencies; U.S. Army Corps of Engineers, U.S. Fish & Wildlife Service, Penn DOT and numerous state and local municipalities, big box developers including Wal-Mart, Target, Home Depot, Crown America and others. Mr. James has an excellent rapport with the regulatory community in Pennsylvania.

AFFILIATIONS

Certified Professional Wetland Scientist PWS 3092. Society of Wetland Scientists
PADEP Advance Wetland Replacement Technical. Chairman: Wetland Construction Subcommittee.
National Task Force on Nuisance Invasive Aquatic Plant Species, Sea Grant Program. San Diego, CA.
Chairman of International Contacts, Aquatic Plant Management Society, Fort Meyers, Florida.
State Association of Wetland Managers
North American Benthological Society
North American Lake Management Society
Aquatic Plant Management Society (Past Board Member Midwest Chapter)

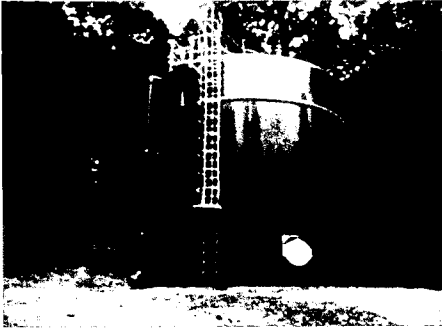
PUBLICATIONS

The Role of Constructed Wetland Treatment Systems (CWTS) in Ecological Restoration. Land and Water. May/June 1995. 16-18 p.
Scrub-Shrub Buffer Zones and Their Importance in Maintaining Lake Water Quality. What's Wet Journal of the Pennsylvania Lake Management Society. Volume 2. Number 4. October, 1990.
An Evaluation of Two Copper Compounds for use in the Management of Najas minor in Rocky Gorge Reservoir, Laurel, Maryland. Original Research under contract to the Washington Suburban Sanitary Commission, Laurel, Maryland. February. 1993.
Restoring Lake Water Quality. Pennsylvania Township News. August. 1980.

CONFERENCE & SEMINAR PRESENTATIONS

Recent changes in wetland regulations in Pennsylvania. What the Professional Land Surveyor needs to know changes in wetland delineation protocols, Exceptional Value (EV) upgrades in stream and watersheds. PAPLSA Annual Conference. 2012 Hershey, PA. Conducted a four hour workshop.
Aquatic Vegetation Identification and Management. 1990. Department of the Navy. Cherry Hill, N. J.
Hydrilla: A New Threat to Temperate Lakes. North American Lake Management Society. Great Gorge, New Jersey. 1992.
Identification and Characteristics of Common Pond Plants. Penn State University. State College, PA. May, 1998.
Constructed Wetland Treatment Systems for Landfill Leachate. Universidad del Turabo, Universidad Metropolitana, San Juan, Puerto Rico. September 9, 1994.
The role of aquatic herbicides in maintaining wetland mitigation sites. Midwest Aquatic Plant Management Society, Indianapolis, Indiana, March 21, 1995.
Littoral Zone Restructuring in Freshwater Lakes. Instructor for NC State University, Raleigh. 1996.

Statement of Qualifications and Experience for



Surveying and Engineering Services

for

Hughesville Water Authority and Hesker Hill Tower Sites

PA



submitted to the

Lycoming county

Williamsport, PA



August, 2020 ©





615 West Highland Avenue
Ebensburg, PA 15931
814.472.7700
www.lrkimball.com

August 19, 2020

Mya Toon
Lycoming County
Lycoming County Executive Plaza
3360 Pine Street, Suite 4040
Williamsport, PA 17701

Re: Proposal for Surveying and Engineering Services for
Hughesville Water Authority Tower Site and Hesker Hill Tower Site (012631)

Dear Ms. Toon:

CDI-Infrastructure, LLC dba L.R. Kimball is pleased to submit one original and five hard copies of our Proposal for the Surveying and Engineering Services for the Hughesville Water Authority Tower Site and Hesker Hill Tower Site in response to your request for proposals. L.R. Kimball representatives have reviewed the request for proposal thoroughly.

L.R. Kimball is a diversified organization of consulting engineers, architects, planners, environmental scientists and construction managers. With over 65 years of quality service, we are annually ranked in the top 50 engineering / architectural design and construction management firms in the nation by *Engineering News Record*. The firm is headquartered in Ebensburg, Pennsylvania, and has various regional offices including Pittsburgh, State College, and Harrisburg. Our firm employs many professional, technical and administrative personnel.

L.R. Kimball has been the engineer for the Williamsport Regional Airport since 1973 and, in the past 10 years, we completed major development projects at the Airport including extending the runway to its current length, constructing full runway safety areas on both ends of the runway, constructing a full parallel taxiway for Runway 9-27, and completing a project to relocate the Instrument Landing System to provide better approach minimums for the runway. All of these projects required close coordination and approval of the Lycoming County Planning Commission, Montoursville Borough, the Lycoming County Conservation District, and, in many instances, the Northcentral Region of the PA DEP. As a result, we have unprecedented experience with many of the review and approving agencies that would be associated with the tower improvement projects. Also, as the Airport's engineer, we are intimately familiar with the FAA and FCC approvals needed for any project that could have an effect on the Airport or its approaches.

Thank you for the opportunity to submit our qualifications proposal. With your selection of L.R. Kimball, we will ensure that your goals and objectives are satisfied in the most professional and expeditious manner. Please contact us if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregory L. Schrock".

Gregory L. Schrock, PE, CPESC
Senior Project Manager
814-419-7883/ Greg.Schrock@lrkimball.com

GLS/reb

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PROPOSAL FORM

Important note to Bidders:

It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to:

Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 19, 2020. **This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: CDI-Infrastructure, LLC dba L.R. Kimball
Company Address: 615 West Highland Avenue
Ebensburg, PA 15931
Main Telephone: 814-472-7700 Main Fax: 814-472-7712

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Richard E. Genday, PE
Contact Telephone: 814-419-7873 Fax: 814-472-7712
Contact Email: Rick.Genday@LRKimball.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Gregory L. Schrock, PE, CPESC
Office Address: 615 West Highland Avenue
Ebensburg, PA 15931
Telephone: 814-419-7883 Fax: 814-472-7712
Email: Greg.Schrock@LRKimball.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	<u>1</u>	Date	<u>July 30, 2020</u>
Addendum No	<u> </u>	Date	<u> </u>
Addendum No	<u> </u>	Date	<u> </u>
Addendum No	<u> </u>	Date	<u> </u>

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

Company Type (check one):

- Sole Proprietorship Partnership Corporation Joint Venture

Bidder attests that:

1. He/she has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements;

2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor and material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

CDI-Infrastructure, LLC dba L.R. Kimball
Company Name

27-2620523
Federal ID#

615 W. Highland Avenue
Street Address

PO Box

Ebensburg
City

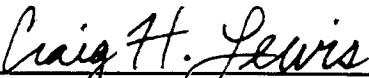
PA
State

15931
Zip

814-472-7700
Telephone #

814-472-7712
Fax #


WITNESS:


Signature (see below)

Craig H. Lewis
Name (print)

Secretary
Title (print)

COMPANY:


Signature (see below)

Richard E. Genday
Name (print)

Vice President
Title (print)

PRICE PROPOSAL

6.1 Cost Elements. Services not specifically mentioned in this RFP, but are necessary to provide the functional capabilities described, shall be included as part of the cost elements. Bidders should utilize this table below to justify costs.

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	7,450.00
Stormwater Drainage Design	4,250.00
Erosion/Sediment Control	3,050.00
Civil Permitting*	5,200.00
Geotechnical	24,000.00
Geotechnical Boring Stakeout	50.00
Construction Stakeout	4,585.00
Soil Resistivity	5,800.00
Preliminary and Final Construction Drawings (CDs)	4,850.00
Utility Coordination	2,700.00
Zoning Information	500.00
FAA/FCC	5,320.00
Field Surveying/Courthouse Research	4,520.00
Survey Plans	1,840.00
Environmental Investigation	0.00
Infiltration Testing	1,400.00
Wetlands/Stream Delineation	6,600.00
Phase 1 Investigation and Report	6,000.00
Hearing Attendance (If Needed)	1,400.00
Phase 2 Investigation and Report (If Needed)	5,900.00
NEPA/SHPO Services	7,000.00
Deliveries, Copies, Etc. (Regulatory fees)	7,400.00
SUBTOTAL FOR HUGHESVILLE	109,815.00

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	5,150.00
Stormwater Drainage Design	3,550.00
Erosion/Sediment Control	1,700.00
Civil Permitting*	3,350.00
Geotechnical	21,700.00
Geotechnical Boring Stakeout	50.00
Construction Stakeout	4,485.00
Soil Resistivity	5,600.00
Preliminary and Final Construction Drawings (CDs)	3,800.00
Utility Coordination	2,500.00
Zoning Information	500.00
FAA/FCC	5,320.00
Field Surveying/Courthouse Research	4,275.00
Survey Plans	1,840.00
Environmental Investigation	0.00
Infiltration Testing	1,400.00
Wetlands/Stream Delineation	6,600.00
Phase 1 Investigation and Report	6,000.00
Hearing Attendance (If Needed)	1,400.00
Phase 2 Investigation and Report (If Needed)	6,450.00
NEPA/SHPO Services	6,600.00
Deliveries, Copies, Etc. (Regulatory fees)	3,700.00
SUBTOTAL FOR HESKER HILL	95,970.00

GRAND TOTAL FOR BOTH SITES	205,785.00
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The undersigned, as Bidder, hereby declares that the total project costs as indicated above, includes all necessary work to complete this project in full according to the general specifications contained in the RFP. Products and services not specifically mentioned, but are necessary to provide the functional capabilities shall be listed and included as part of the cost elements.

The undersigned further understands and agrees that if the County accepts the bid, no additional funds will be allowed beyond the stated total project costs.

Company Name: CDI-Infrastructure, LLC dba L.R. Kimball

Address: 615 West Highland Avenue Ebensburg, PA 15931

Point of Contact: Richard E. Genday, PE Phone Number: 814-419-7873

Fax Number: 814-472-7700 Email address: Rick.Genday@LRKimball.com

Name of person submitting proposal: Gregory L. Schrock, PE, CPESC

Signature: 

Date: August 19, 2020

When submitting a bid, place the bid form sheet as the top page of the bid package and the bid price schedule as the second page of the bid package.

Rate Schedule

Hourly Rates - L.R. Kimball (a CDI Company)

Rate Schedule: 2020



Senior Civil Engineer	\$150.00
Project Manager / Civil Engineer	\$148.00
Civil Engineer	\$100.00
Engineer-In-Training - Civil	\$80.00
Construction Manager	\$95.00
CADD Specialist - Civil	\$68.00
Clerical	\$53.00
Geospatial Discipline Lead	\$113.00
Photogrammetrist	\$85.00
Surveyor PLS	\$95.00
Environmental Specialist	\$80.00
Senior Electrical Engineer	\$168.00
Project Electrical Engineer	\$88.00
Geologist	\$105.00
Environmental Manager	\$125.00

Reimbursable Expenses / Unit Pricing Schedule Listing

HP Presentation Bond Plotting - Ebensburg	\$1.35	Square Foot
HP Premium Bond Plotting - Ebensburg	\$1.55	Square Foot
HP High Gloss Photo Plotting -Ebensburg	\$2.15	Square Foot
Canon Bond Plotting - Ebensburg	\$1.75	Square Foot
Canon Photo Plotting - Ebensburg	\$2.00	Square Foot
Tab Dividers	\$0.14	Each Unit
CD Label Stock	\$0.80	Per Sheet
Black & White Copies - Repro	\$0.045	Per Copy
Color Copy - Repro	\$0.35	Per Copy
Black & White Copy - Other Than Repro	\$0.06	Per Copy
Volume Color Copy - Repro	\$0.25	Per Copy
Printer - Black & White Product	\$0.06	Per Page
Printer - Color Product	\$0.65	Per Page
Mileage - Car	\$0.58	Per Mile

The rates and multiples set forth shall be annually adjusted in accordance with normal salary review practices.

Legal Ad
Sun Gazette
To Be Run: July 30th and August 3rd

NOTICE TO BIDDERS

ADDENDUM NO. 1 RFP FOR ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE

The additions and/or deletions contained in this Addendum shall be made a part of the plans and specifications and contract documents for the above-referenced solicitation, and shall be subject to all applicable requirements thereunder, as if originally shown and/or specified. In case of any conflict between the specifications, and this Addendum, this Addendum shall govern.

This Addendum must be returned with your bid as acknowledgment of its receipt. Bidders may obtain the Addendum on the County website at www.lyco.org and Request for Bids.

The following modification is made to the text for the referenced solicitation:

The scope of the project has changed from one (1) tower site to two (2) tower sites, resulting in a number of changes to the RFP issued. Please see the following changes for the Lycoming County RFP for E&S services.

1. Change from “Hughesville Water Authority Tower Site” to “Hughesville Water Authority Tower Site and Hesker Hill Tower Site: (1) on the cover page, (2) on Notice to Bidders page 1-1, second paragraph, and (3) on Section 2, page 2-2, paragraph 2.9, third line.

2. Change to Scope of Work & Technical Specifications, Introduction, page 5-1 is as follows:

Lycoming County is currently upgrading our existing radio system to better serve the residents, businesses, tourists and public safety agencies of the county. In order to achieve the overall plan, Lycoming County will be contracting for the construction of two (2) raw lands to finish tower sites to improve RF coverage for our first responders. Additionally, on the one site, a second plot of land is to be cleared for the water authority to use (no further development of the second plot is required).

3. Changes to Scope of Work & Technical Specifications, General Requirements, item 1, page 5-1 are as follows:

1. The names and locations of the two (2) new proposed tower sites are:

- a. Hughesville Water Authority tower site
 - i. Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
 - ii. Street address: 279 Reservoir Road, Hughesville, PA
 - iii. Township: Wolf
 - iv. County: Lycoming
 - v. Size of site plot: 100'x100'
 - vi. Height of tower: 250'

Hughesville Water Authority land which is to be cleared (not developed) for water authority use is:

- i. Street address: 279 Reservoir Road, Hughesville, PA
- ii. Township: Wolf
- iii. County: Lycoming
- iv. Approximate size of plot to be cleared for the water authority: 100'x100'

- b. Hesker Hill tower site
 - i. Latitude: 41-14-19.1 N, longitude: 77-14-35.1W
 - ii. Street address: 1324 Hesker Hill Road, Jersey Shore, PA
 - iii. Township: Piatt
 - iv. County: Lycoming
 - v. Size of site plot: 75'x75'
 - vi. Height of tower: 250'

The County will be responsible for procurement of site and leasing of property.

4. Change to Mandatory Site Walk on Notice to Bidders, page 1-1, paragraph 4 is as follows:

A mandatory site walk will be held on Wednesday, August 5, 2020, at 10:00 AM for the two (2) tower sites, starting at the Hughesville Water Authority site located at 279 Reservoir Road, Hughesville, PA.

5. Change to Price Proposal, section 6.1 Cost Elements is as follows:

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final	

Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	
Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HUGHESVILLE	

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	

Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HESKER HILL	
GRAND TOTAL FOR BOTH SITES	

ACKNOWLEDGEMENT

I hereby acknowledge receipt of this Addendum for the above noted project.

Signature Richard E. Gandy

Date August 19, 2020

1. COMPANY OVERVIEW, SERVICES, AND PROJECT DELIVERY

Company Overview

L.R. Kimball (a CDI Company)



In 1953, L.R. Kimball was founded as a Consulting Engineering Firm. After college graduation, L. Robert Kimball, our founder, received a commission in the Army Air Corps. During World War II he served as lead navigator in B-17 aircraft with the Bloody 100th Bomb Group stationed in Thorpes-Abbotts, England. Through his flying service, he was awarded the Distinguished Flying Cross and other medals. Upon returning, he started a two-person consulting engineering firm specializing in civil engineering and surveying. In 1962, the Kimball family purchased what was once a historic inn, in Mr. Kimball's hometown of Ebensburg, PA and moved the headquarters there, where it remains to this day.

L.R. Kimball is among the nation's leading professional service companies offering its clients architectural and structural, mechanical and electrical design services, civil, environmental and transportation engineering expertise. We have served more than 1,500 clients throughout the United States. Over the course of six decades, clients have valued L.R. Kimball's steadfast principles and bedrock reputation which have produced exceptional results for our clients.



Our firm continues to rank among the leading design firms in Engineering News Record (ENR), the publication of record for over 70,000 engineering and construction industry professionals throughout North America. ENR published its Top 500 Engineering Design Firm rankings for 2019, and once again we have ranked among the leading design firms in North America.

Business Background

CDI-Infrastructure, LLC dba L.R. Kimball was founded in 2010 following the acquisition of L. Robert Kimball & Associates. L.R. Kimball is a Division of CDI Engineering Solutions.

L.R. Kimball Office Locations

L.R. Kimball takes prides in our diversity to provide our clients with full-service capabilities for any type of project. Management of our projects is completed by our single point of contact, the L.R. Kimball Project Manager. This person has access to fully trained individuals at his/her disposal for use on any project.

L.R. Kimball's corporate office is headquartered in Ebensburg, Pennsylvania serving a prestigious list of clients throughout the United States. Our work has earned numerous national and international awards for design and engineering excellence, including rankings in such publications as World Architecture Magazine, Engineering News-Record, and Building Design and Construction. L.R. Kimball's corporate office offers services in Architectural Engineering, Civil Engineering and Transportation and Environmental Engineering Services. Our home office also includes a 7,000 sf testing facility and houses state-of-the-art architectural and engineering hardware and software. This office maintains a permanent staff of professionals who are experienced in virtually every aspect of planning, design and construction administration. This makes L.R. Kimball a full-service firm with "seamless" capabilities.



L.R. Kimball's headquarters is strategically located to provide immediate response to projects while maintaining high quality, cost-effectiveness, and timeliness. The office location map above reflects our CDI / L.R. Kimball office locations in blue along with other CDI offices locations in orange.

Ebensburg Headquarters
 615 West Highland Avenue
 Ebensburg, PA 15931
 Phone: 814.472.7700
 Fax: 814-472-7712

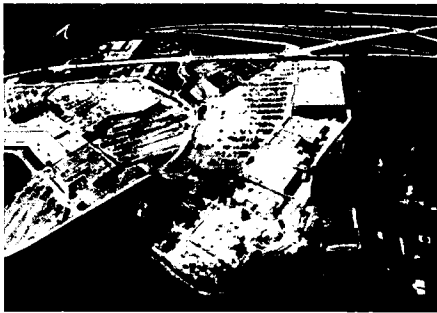


Primary Service Groups

L.R. Kimball is comprised of five divisions that provide nearly every service required to complete virtually any type of project. The staff assigned to your projects can draw upon the experience and knowledge of any of our dedicated personnel. Our five operating divisions include the following:

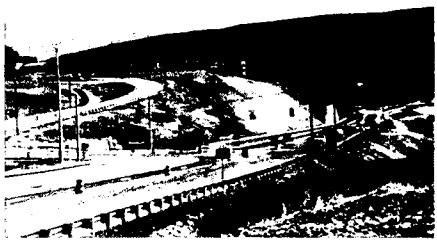
<i>L.R. Kimball Operating Divisions</i>	
Aviation and Civil Engineering Services	
Airport Planning Airport Design Airport Construction Management & Inspection	Civil Engineering Design and Inspection Water & Wastewater Engineering Land Development Demolition
Transportation Services	Construction Management and Inspection Services
Highway & Bridge Design Traffic Engineering, Plans, and Studies NEPA Documentation (CEE, EA, EIS) Environmental Planning / Site Assessments/ Wetlands	Transportation Construction Management & Inspection
Architecture and Engineering Building Systems Services	Geotechnical and Geospatial Services
Architecture Mechanical Engineering Plumbing Engineering Electrical Engineering Structural Engineering Design Build Services	Drilling Geographic Information Systems (GIS) Geospatial Services Photogrammetry & Mapping Surveying Laboratory Testing Services Environmental & Geophysical Services

L.R. Kimball's Primary Services



Civil and Environmental. Since the 1950's, we have built an outstanding reputation in civil and environmental consulting services. The wide spectrum of our clients includes industry, institutions, commercial facilities, utilities, private developers, and military and governmental agencies. Starting with the client, our project team conducts assessments and planning, siting, testing, permitting, design, and construction monitoring, with the goal of creating innovative solutions to complex, critical issues.

Our clients can expect full civil and environmental support for their projects. Our services also include full engineering support for facility and site designs, site assessments, geotechnical investigations and analysis, employee health and safety management and environmental permitting. These projects run the gamut of multimillion-dollar commercial, resort and hotel developments; industrial park and office complex developments; subdivisions; water and wastewater facilities; military facilities; solid and hazardous waste disposal operations; industrial facilities; utilities; and manufacturing facilities. We also assist the client with planning, financing options, grant assistance, construction monitoring, and operations consulting.



Transportation. Highways, bridges, and airports – the infrastructure that supports the movement of people and goods throughout the country. The design, construction, and maintenance of that infrastructure is critical to the economy and to the health and safety of the population. Structural integrity, safety, environmental impact, and design criteria of air and ground transportation facilities require a seasoned, knowledgeable staff who are well-versed in all aspects of integrated planning and context sensitive design. L.R. Kimball can provide that team.

Using the latest technology, we offer a full complement of planning, project administration, design, environmental permitting, construction inspection, and environmental studies for large and small projects. We take pride in our track record of maintaining successful, long-term relationships with our clients, including state departments of transportation, turnpike commissions, airport authorities, counties, municipalities, and developers.



Mapping Sciences. We offer full-service mapping sciences, including: surveying, aerial photography, analytical aerotriangulation, photogrammetry, planimetric and topographic mapping, digital orthophoto production, cadastral mapping, E9-1-1 addressing, environmental mapping, drone operations, and GIS. Our self-contained mapping operation is supported by an array of technical personnel. Throughout the years, L.R. Kimball has evolved to meet the ever-changing needs of our clients, from traditional land surveys to the most advanced digital mapping, remote sensing and GIS applications. With many mapping experts, we have the capacity, expertise

and equipment resources to undertake projects of varying sizes and technical complexity.

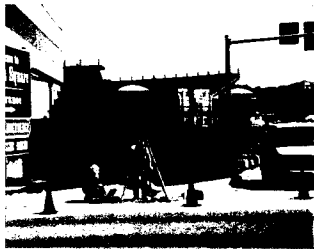


Architecture and Engineering Building Systems. Our services include innovative design for new buildings as well as renovation and adaptive reuse of existing buildings. A L.R. Kimball project is designed not only with aesthetics in mind, but also to meet the specific environmental needs of the people who work, learn, or live in that space. We consider the responsible stewardship of natural resources and energy sources in our projects to be a top priority. We have established a reputation as leaders in high-performance sustainable green building design.

A successful architectural project requires an integrated approach from all our divisions. Every project is assigned to a design team under the direction of a talented project manager, who coordinates the work of all involved.

Service Breakdowns

As a further breakdown to our primary services, L.R. Kimball provides a wide range of civil and environmental services. Our approach to civil and environmental projects is to provide cost-effective, value-conscious solutions while reducing the project risk for our clients. These solutions have often demonstrated significant "bottom line" improvements. The following are some of the more specific services that may be needed on the project.



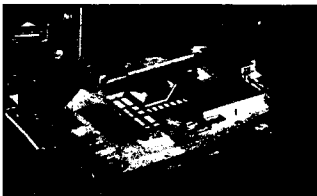
- Land Development and Site Design
- Geotechnical
- Drilling
- Environmental Site Assessment and Permitting
- Water and Wastewater Engineering
- Stormwater Management

Land Development and Site Design



L.R. Kimball knows what it takes to get the job done right the first time. From providing land planning, civil services for small community parks to big box retail, commercial, and industrial facilities, L.R. Kimball knows what is important to you.

L.R. Kimball has completed numerous land development projects including retail, residential, commercial, office, educational, industrial, recreational, and brownfields. A wide variety of comprehensive and master plans have been developed for local and county governments; state agencies; regional authorities; and residential, commercial, and industrial developers.



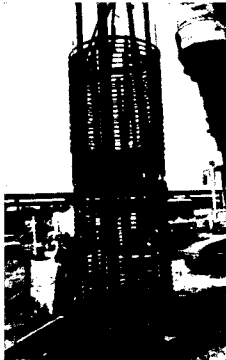
L.R. Kimball's expertise in the acquisition of regulatory approvals for land development projects is unsurpassed. From municipal zoning approvals to state transportation and environmental permits, L.R. Kimball has successfully secured permits for small- and large-scale land development projects.

"Kimball can be proud of the quality of work the staff is producing and be assured that it is noticed and appreciated. I have no reservations in recommending Kimball to any client requiring similar work."
-Jeffrey J. Raymond, President

Services

- | | |
|---|--|
| <ul style="list-style-type: none"> • Pre-development feasibility • Plan processing and regulatory approvals • Stormwater management • Land planning and landscape architecture • Site and civil engineering • Right-of-way acquisition plans • Subdivision and land development compliance | <ul style="list-style-type: none"> • Erosion and sediment control plans preparation • NPDES permitting • Comprehensive and master planning • Photo enhancements and renderings • Project siting studies • 3-D visualization services • Zoning approvals |
|---|--|

Geotechnical



Geotechnical engineering is vital to the success of any construction project. Early inclusion of geotechnical engineering professionals into the planning stages of a project is critical in identifying and minimizing potential problems. Geotechnical engineering adds value to projects and saves money.

Our in-house geotechnical laboratory has been accredited by the American Association of State Highway and Transportation Officials (AASHTO) Accreditation Program (AAP) in the fields of soils and Portland cement concrete testing. This accreditation includes the participation in semi-annual reference sample analysis and bi-annual inspections by AASHTO's Materials Reference Laboratory and Cement and Concrete Reference Laboratory. Our laboratory has also been validated by the Army Corp of Engineers to perform concrete and soils testing for their projects.

Services

- Slope stability analysis and design
- Transportation project investigation and design
- Dam design, inspection, and analysis
- Soils, concrete, and aggregate laboratory testing
- Geophysical surveys
- Landslides and other soil and rock instability assessments
- Landfill investigation, design, and closure
- Foundation investigation
- Geosynthetic QA/QC
- Material stockpile density determinations (Nuclear Methods)
- Groundwater studies
- Mine and quarry investigations
- Geologic hazards analyses
- Subsidence investigations
- Mine subsidence studies
- Mine and refuse fires assessments
- Ground improvement engineering
- Earth retention systems
- Project reviews



"The geotechnical engineering services...have been professional and responsive. With Kimball input, we have developed a drilled shaft foundation solution that will save costs for our customer, the Pennsylvania Turnpike Commission."

William J. Rohleder, Jr.
Figg Bridge Engineers, Inc.

Drilling



L.R. Kimball has been providing comprehensive drilling services for over 30 years. We have experienced crews that provide services on a full-time, year-round basis with modern drilling equipment. We maintain four drill rigs, including an all-terrain rig for use on engineering and environmental projects.

Our drillers have an average of over 10 years of experience, qualifying us to perform drilling services in very diverse subsurface conditions and terrain. Crews are experienced using 4.25, 6.25, and 8.25 inch I.D. hollow-stem augers; HQ, NX, and NQ2" rock and concrete coring; continuous split-spoon sampling using 2-inch and 3-inch spoons; CME continuous sampling; thin-wall tube sampling; and geotechnical in-situ testing. Drilling and sampling operations are conducted in accordance with ASTM standards. Our drillers are OSHA HAZWOPER trained.

Services

- Geotechnical borings
- NQ2" and HQ wire line rock and concrete coring
- Angle and horizontal borings
- Monitoring wells
- Unconsolidated material coring
- Slope indicator installation and instrumentation
- Down hole nuclear density testing
- Concrete coring and analysis
- 40-Hour OSHA trained and medically qualified crews
- Standard split-spoon and undisturbed sample collection
- Underground storage tank investigations, inspection, and analyses
- Infiltration Testing



"L. Robert Kimball is very customer service oriented and performs a valuable professional service. The department thanks you for current service and is looking forward to this continued service in the future."
 David J. Whitlatch, PE
 PennDOT

Environmental Site Assessments and Permitting

A landowner can be held liable for cleaning up a property, regardless of prior contamination or contamination by others. An environmental site assessment (ESA) provides the appropriate inquiry into the property and identifies possible liabilities associated with RCRA, TSCA, the Clean Air Act, the Clean Water Act, and other laws. L.R. Kimball's staff of environmental scientists provides an integrated approach to ESAs in three phases.

Phase I - Identify readily detectable and significant environmental risks

Phase II - Evaluate potential or actual contamination found

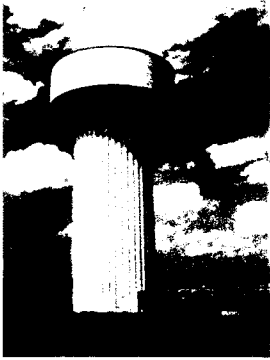
Phase III - Identify specific remediation and clean-up measures

Site assessments can be completed according to ASTM guidelines, or tailored to meet our client's specific needs. With the increasingly complex nature of the local, state, and federal environmental regulatory context,



knowledge of permitting for any type of development project is imperative. The advent of new legislation has provided future owners of former industrial properties opportunities for the release of liability from existing environmental conditions and return of the property to active use.

Water and Wastewater Engineering



L.R. Kimball has successfully produced and/or assisted in the evaluation, design, financing, construction and implementation of hundreds of water and wastewater facilities projects for the past 50 years. L.R. Kimball is capable of completing all elements of the planning project. We have developed work plans involving the application of unique planning and design strategies developed in response to stringent compliance orders, statutory or regulatory requirements, and financial and institutional issues related to authority needs. L.R. Kimball is experienced in working with (and within) multi-jurisdictional authorities and has achieved great success in meeting state and/or local permitting and other regulatory requirements. We are pro-active with regulatory and financial agencies and maintain routine contact with agency personnel. This approach ensures that project issues and constraints are understood by all parties, facilitates the permit and funding approval process, and minimizes potential delays in project implementation. L.R. Kimball has assembled an

experienced project team of dedicated professionals who have established working relationships with federal, state, county, and local agencies.

Water Services

- Water facility and corrective action planning
- Surface and groundwater source investigations
- Hydrologic and hydrogeologic modeling
- Underground utilities
- Dam designs and inspection
- Water storage and distribution designs
- Water treatment facility designs
- Project financing, administration, and implementation plans

Wastewater Services

- Wastewater collections
- Treatment plant designs
- Industrial pre-treatment
- Sludge disposal planning and permitting
- Corrective Action Plans
- Combined Sewer Overflow (CSO) studies and permitting
- Flow monitoring studies
- Smoke and dye testing
- Video inspection of sewer lines
- Construction inspection
- Surveying and mapping
- Funding assistance/grantsmanship
- Operations and maintenance programs
- Permitting
- Project financing, administration, and implementation plans
- Geographic Information Systems (GIS)
 - Data management services



"We wish to extend our sincere compliments regarding the manner in which you handled our wastewater treatment plant upgrade project. Your input beyond the treatment project on various problems of the system has been proven to be productive."

Sandra L. Teeter, General Manager
North & South Shenango Joint Municipal Authority

Stormwater Management



Since 1953, L.R. Kimball has provided comprehensive services related to stormwater management. We utilize evolving stormwater management practices based on the philosophy of maintaining, as nearly as possible, natural runoff flow characteristics. Our stormwater management practices include structural (detention ponds, pipes, etc.) and/or non-structural (land use planning to effectively preserve existing drainage patterns, vegetation, pervious areas, etc.) methodologies in which we provide the basic elements of a stormwater management program. The effectiveness of a stormwater management program is a result of good planning and engineering design, based on current concepts and practices.

L.R. Kimball's stormwater management experience is two-fold. We have experience in providing comprehensive watershed stormwater management plans utilizing state-of-the-art GIS based modeling technology. These plans support the development of which results in municipal land development and stormwater ordinances for regulatory based clients. We also have experience in providing services to numerous private sector landowners and developers to comply with federal, state, watershed-specific, county, and municipal stormwater management requirements and ordinances. This experience provides us with a clear understanding of currently accepted stormwater management methods and techniques, agency expectations and review processes, and the implementation of practical, yet economical, best management practices for our clients.

Services

- | | |
|--|--|
| <ul style="list-style-type: none"> • Comprehensive stormwater management master planning • Municipal stormwater management ordinance development • Stormwater management ordinance compliance • Regulatory stormwater permit compliance • NPDES assessment and permitting • Regulatory erosion and sedimentation control compliance • Emergency action plans and dam analyses | <ul style="list-style-type: none"> • Flood assessment and control • Geographic Information System (GIS) development • Floodway and floodplain assessments • Construction monitoring and documentation • Stormwater and drainage assessment, analysis, evaluation and designs • Stormwater quality control • Stormwater monitoring, sampling and analyses • Existing facility and site expansion, improvement or rehabilitation |
|--|--|



**"...I wish to extend our sincere compliments regarding the manner in which you handled our project. You can be proud of the quality of work your staff is producing and be assured that it is noticed and appreciated."
Tyrone Petrich, President
Enon Valley Borough Council**

Project Delivery

The services described above show the capabilities and depth L.R. Kimball can provide for a project. Having the services in house helps to provide a seamless transition throughout the project. It also enables L.R. Kimball to have face to face conversations and work meetings, as necessary with the project team and at a minute's notice, to keep the project progressing. This interaction and communication also help with the design and construction schedules because you can obtain answers and direction very quickly.

Typically, the L.R. Kimball project manager that works on the project proposal manages the project through fruition. L.R. Kimball's project management structure is based upon a model that utilizes a strong Project Manager as the initial point-of-contact for our clients. Your project will follow a Project Manager-led structure. Accordingly, Gregory L. Schrock, PE, will serve as L.R. Kimball's Project Manager for this project. He will report internally, directly to the Operations Manager and Principal-in-Charge for this project. Mr. Schrock has managed a broad range of projects throughout his career that have varied greatly in size and scope and involved new construction as well as rehabilitation and additions to existing facilities. Mr. Schrock's project design, production, and management experience includes a wide range of products and he has developed a strong reputation for delivering multiple projects on time and within budget.

L.R. Kimball's project management will include strong and continuous communication with your staff as well as copious record keeping for the project. This project will be assigned an internal project number for clarity of record keeping and tracking through our project management procedures, which focus on three key areas: Schedule Control, Cost Control, and Quality Control.

A communications plan will be reviewed at the initial kick-off meeting. The project's primary contact will be identified, as well as other client team members and L.R. Kimball team members involved in the project. All communications will be provided electronically to include the entire team or as specified by the clients. Tools such as email, NewForma, skype meetings, and conference calls will be used to assist with the distribution and communications for the project. When appropriate and/or requested, hard copies will be provided. L.R. Kimball will prepare and distribute meeting notes to document discussions and decisions made throughout the project.

Progress reports/summaries will be provided to the client that will summarize what was completed, planned actions, and a review of the project schedule. Any issues or concerns will be identified.

Schedule Control

The project schedule will begin with the preparation of a project scope and schedule description. The challenge in controlling any project's schedule is the early clarification and identification of the specific scope of work, and approach at the outset of the project, with coordination of all parties involved. The project schedule is viewed by L.R. Kimball as critical to the development of any project and will be discussed immediately with the client's staff. Specific discussion regarding the project construction, funding, permitting, or other applicable timetable will occur at the kick-off meeting and will be reviewed throughout the project.

As the project develops, it will then be our responsibility to help coordinate all communications with you and all members of the project team, to ensure that the schedule is completely understood in terms of its impact on all approval processes and construction start.

Throughout the duration of the project, this schedule will be reviewed, refined, and discussed among all project team members on a regular basis. The need to expedite client plan reviews for project permitting and funding processes will allow the design of the project to move quickly to the bidding phase, or alternatively to another construction delivery methodology. Planning for a well-integrated construction delivery phase through coordination with the client will help to accomplish the construction phase in an accelerated timetable and identify long lead items.

L.R. Kimball's Project Manager and other team members will monitor the construction schedule to ensure that shop drawings and other contractor submittals are submitted and processed in a timely manner.

Cost Control

L.R. Kimball's procedures for cost control ensure that sufficient opportunity is provided to accommodate changes in scope prior to the final design/construction documents phase, to avoid cost overruns. Construction cost estimates will be provided throughout the project, and by continually addressing the cost implications throughout the early phases of design, the team is able to identify cost issues before unrealistic expectations are created. These estimates will be prepared at increasing levels of detail as the project documentation is developed.

L.R. Kimball's approach to developing preliminary project costs is based on the use of historic data developed by L.R. Kimball professionals involved in the design of similar recent and relevant facilities. The keys to successful estimating are the early identification of all components that carry a project cost, and the establishment of an adequate project contingency.

Because of L.R. Kimball's procedures for cost control previously mentioned, we can restate that on major design projects, these procedures will ensure that sufficient opportunity is provided to accommodate changes in scope prior to the final design/construction documents phase in order to avoid excessive cost overruns.

During the design and construction documents phases, the quality of the overall construction documents also influences any project's cost control during the construction administration process. Our in-house quality control and cross-discipline review processes will be key components in the control of these costs by L.R. Kimball.

Quality Control

L.R. Kimball maintains an in-house team of experienced architects, engineers, project managers, and construction-related staff who are responsible for rigorous quality assurance and quality control (QA/QC) of construction documents on all design projects. These reviewers are typically not part of the regular project team that they are assigned to review, but they are familiar with the type of project, thereby facilitating reviews through a "fresh set of eyes".

Our QA/QC (Quality Assurance/Quality Control) team follows an established policy for drawing review and coordination. These reviews are in addition to the continual reviews undertaken by the Project Manager within each discipline. These formalized QA/QC reviews take place at various stages of the production of construction documents. Our Project Manager works closely with the QA/QC team during this review process for each project.

L.R. Kimball's QA/QC reviews also include coordination of the construction drawings with the documents produced by all disciplines involved in the design. In this regard, we utilize an interdisciplinary coordination process and construction document review system specifically designed to address points of interface, enabling both production personnel and our QA/QC team to locate discrepancies between disciplines.

Following the above procedures has improved the consistency of our work product and has helped to control costs and minimize change orders during construction.

QUALIFICATIONS AND EXPERIENCE OF OUTSIDE CONSULTANTS REGULARLY ENGAGED BY L.R. KIMBALL

L.R. Kimball has elected to team with the following firms to strengthen our team.

- **Schnabel Engineering (Schnabel)** – A world-class geotechnical engineering firm out of Glen Allen, VA and with regional offices located throughout the mid-Atlantic Region. Schnabel has worked with the Yeager Airport to help to stabilize and clean up the massive slope failure that occurred there.
- **Heberling Associates, Inc. (Heberling)** – has a main office located in Alexandria (Huntingdon County), a small town on the Juniata River in the mountains of central Pennsylvania. Their headquarters building is a historic five-story frame gristmill built in 1833 along the river and the Pennsylvania Canal. Heberling offers a full range of cultural resource management, preservation, and heritage resource services combining professional expertise and principles with cost-efficient methods.

Schnabel Engineering (Schnabel)



Schnabel
ENGINEERING

Schnabel provides specialized expertise and design for geotechnical, tunnel, and dam engineering projects across the U.S. and worldwide. As an entrepreneurial, employee-owned company of over 300 diverse professionals, we have a passion for client service and tough technical challenges. An ENR Top 250 engineering firm, Schnabel serves both public and private sector clients.

The firm was started in 1956 by Jim Schnabel, who established one of the first firms in the Mid-Atlantic region to offer services in “soil mechanics engineering.” We are still first in the minds of our clients who turn to us for help with their most challenging subsurface conditions. With a track record for delivering successful project outcomes, Schnabel has saved our clients millions of dollars through risk management, creative design, and construction solutions.

At the heart of our project successes is a talented and dedicated staff that embraces a culture of collaboration and shared rewards. Our supportive workplace environment has earned recognition by CE News as one of the Best Engineering Firms to Work For.

Schnabel has long been a valued teaming partner for designers and contractors in the transportation arena. This comes from our reputation of exceptional client service, our team-oriented culture, and our distinct array of services beyond the usual geotechnical engineering—tunneling, geostructures, sustainable geotechnics, numerical modeling, geosciences, and environmental. We have worked on design-build and P3 transportation projects collectively valued at over \$10 billion.

Our experience touches transportation via land, sea, and air, with successful projects in rail, transit, highways, bridges, airports, harbors, and ports. We are familiar with a broad range of transportation agency needs, including on-call contracts with various state DOTs, Amtrak, Federal Highway Administration, and Eastern Federal Lands. We support these projects with in-house AASHTO-accredited soil and materials laboratories and DOT-certified field personnel.

Based in the Washington, D.C. metropolitan region, Schnabel Engineering DC (SEDC) brings specialized expertise to projects in the nation’s capital and beyond, providing geotechnical design solutions for buildings, infrastructure development and construction.

Led by Bill Khouri, PE, SEDC’s technical staff have been involved in well over 1,000 projects along the eastern seaboard from New Jersey to Alabama and as far west as Arizona, with a strong, local presence in the Washington metropolitan area for the past 30 years. Within the District of Columbia, SEDC has worked on a variety of projects including large mixed-use developments, national monuments, hospitals, government facilities (local and federal) and universities. SEDC also provides construction support and inspection services, which allow us to confirm that our geotechnical recommendations are implemented properly during construction.

Selected Projects:

ATF Headquarters Facility / Washington, DC
Chilean Embassy / Washington, DC

Philippines Embassy / Washington, DC
General Service Administration (GSA) Office Building / Washington, DC
Internal Revenue Service (IRS) Building / Washington, DC
John F. Kennedy Center (JFKC) for the Performing Arts Additions / Washington, DC
John Paul II Cultural Center / Washington, DC
National Arboretum Renovations / Washington, DC
National Museum of the American Indian (NMAI) / Washington, DC
New Federal Building, Anacostia Annex / Washington, DC
United States Senate Library, Russell Senate Office Building / Washington, DC
National Institute of Health, 10-story Building No. 50 / Bethesda, MD
United States Institute of Peace / Washington, DC
Martin Luther King (MLK) Memorial / Washington, DC
Architect of the Capitol (AOC), Stormwater Management Study / Washington, DC
Old Executive Office Building, / Washington, DC

Heberling Associates, Inc. (Heberling)



Founded in 1983, Heberling Associates, Inc. includes a staff of more than twenty individuals educated in history, archaeology, geography, cultural resource management, historic preservation, museum management, and related fields. Their senior professional staff members all hold advanced degrees and meet or exceed the Secretary of the Interior's standards.

Heberling staff have completed hundreds of projects for clients in the public and private sectors. Heberling Associates offers a full range of cultural resource management, preservation, and heritage resource services combining professional expertise and principles with cost-efficient methods. The work of Heberling Associates, Inc. has been recognized for excellence by peers, clients, and cultural organizations.

Cultural Resource Management

Heberling Associates is well qualified to perform a broad range of cultural resource management services for our clients. The professional qualifications of their staff and work meet or exceed the qualification standards set forth by the Secretary of the Interior and the guidelines of individual state and local authorities, agencies, and organizations. They complete all of our projects under the direct management and supervision of one or more senior staff members.

Heberling has provided extensive cultural resource management services to companies and agencies engaged in all of the following areas:

- Infrastructure Planning and Development
- Water and Sewer
- Bridge Repairs and Replacement
- Highway Planning and Mass Transit
- Commercial and Residential Property Development
- Energy Exploration and Development
- Alternative Energy Development
- Telecommunications, including Cell and Radio Tower Placements and Fiber Optics Cables
- Parks Planning
- Battlefield and Historic Site Preservation

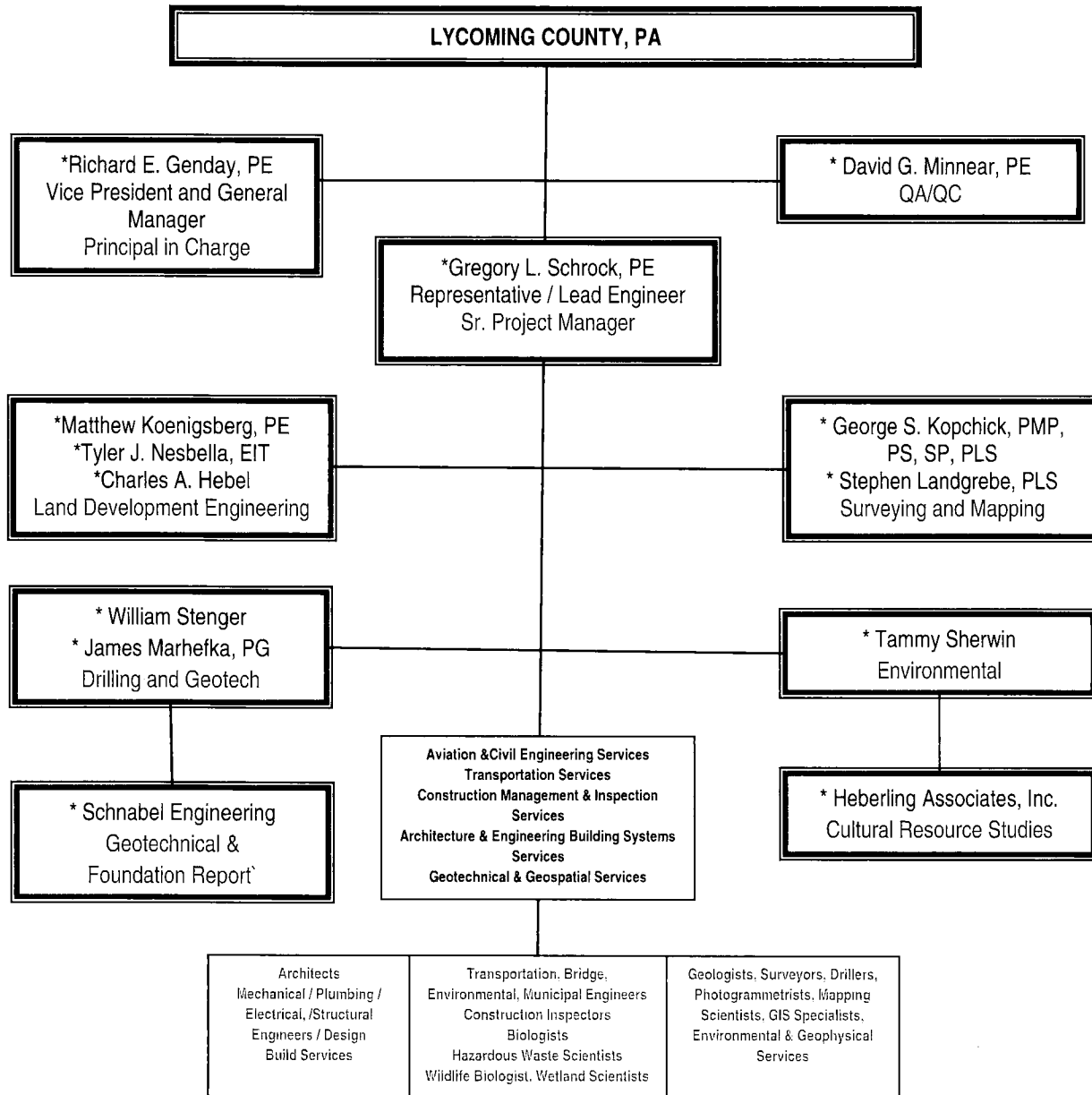
Examples of the range of services Heberling provides include the following:

- Comprehensive Cultural Resource Management
- Cultural Resource Assessments
- Reconnaissance Survey

- Intensive Archaeological Survey
- Data Recovery Programs for Prehistoric and Historic Archaeological Sites
- Architectural Research and Recordation including HABS/HAER Documentation
- Historic Structures Inventories and Determination of Eligibility Studies
- Determination of Effect Evaluations
- National Register Nominations
- Environmental Reconstructions
- Research
- Publications
- Brownfields Research
- Geoarchaeological Investigations

2. KEY PERSONNEL'S PROFESSIONAL QUALIFICATIONS AND EXPERIENCE

The L.R. Kimball Team of seasoned professionals has extensive experience in the planning, design, permitting, bidding, funding assistance, construction management, and construction inspection of numerous projects. Current staffing levels and work load provide sufficient qualified staff capacity to timely provide engineering services. The following is an organization chart along with a list of resumes for several of the key staff that will likely be involved with your upcoming projects. We have also provided a condensed list in Section 3 of some of the projects that L.R. Kimball has designed. Also noted on the resumes are the years of experience for each person.



Note: Additional resumes available upon request.

Resumes



Richard E. Genday, PE

Vice President and General Manager

Mr. Genday is L.R. Kimball's Vice President. Mr. Genday has over 38 years of experience and is Principal-in-Charge for all of the firm's projects, including civil, highway, bridge, airport and construction inspection contracts. Primary clients include The Pennsylvania Department of Transportation, Pennsylvania Turnpike Commission, Airport Authorities and various Federal, State and Municipal Governments. Services provided through the Transportation Division include: master planning, feasibility studies, NEPA documentation (CE, EA, EIS), preliminary engineering, final design, and construction inspection and contract administration. Primary responsibilities include staff management, development of the division's business and marketing plans, ensuring compliance with corporate QA/QC standards, and coordination of multi-disciplined projects involving other company service divisions. Projects coordinated by Mr. Genday have exceeded \$200,000,000 in construction costs.

Years of Experience: 38

Education:

BS, Environmental Engineering, The Pennsylvania State University, 1980

Registrations:

- 2010, NCEES
- 1986, PA, Professional Engineer
- 2012, AL, Professional Engineer
- 2012, CT, Professional Engineer
- 2012, DE, Professional Engineer
- 2012, FL, Professional Engineer
- 2013, IN, Professional Engineer
- 2012, KY, Professional Engineer
- 2012, MA, Professional Engineer
- 2012, ME, Professional Engineer
- 2013, MS, Professional Engineer
- 2012, MI, Professional Engineer
- 1997, NC, Professional Engineer
- 2012, NH, Professional Engineer
- 1997, NJ, Professional Engineer
- 2012, OH, Professional Engineer
- 2013, RI, Professional Engineer
- 1997, VA, Professional Engineer
- 2014, WI, Professional Engineer
- 1997, WV, Professional Engineer

Affiliations:

- National Society of Professional Engineers
- Design Structure Quality Institute
- American Association of Airport Executives (AAAE)

Mr. Genday has managed several airport development projects, as well as airport master planning, military base master planning and environmental clearance projects. Previously as an airport project engineer, he was directly responsible for the preparation, management and administration of 11 airport master plans and over 100 separate construction project contracts. Areas of specialization for master planning include noise analysis, aviation demand forecasting, and land use planning and environmental assessments in accordance with FAA Order 5050.4A. With respect to design, Mr. Genday is experienced in the evaluation and rehabilitation of bituminous and concrete pavement; new pavement designs, and the establishment of pavement management system through MicroPaver.

Recent projects for which Mr. Genday served as principal-in-charge include:

Yeager Airport, Runway 5-23 Rehabilitation and Safety Area Construction, Charleston, WV

– This project involved the rehabilitation of the primary ILS R/W 5-23 and improving associated runway safety areas. The project consisted of a bituminous overlay while utilizing the crack and seat technique to prepare the underlying concrete. The overlay consisted of three bituminous layers. They included a bituminous leveling course, a 3" bituminous binder course, and a 2" bituminous wearing course. In addition to this work, new runway edge lights were installed and the runway centerline lights were raised. Other miscellaneous construction items included raising the FAA's approach lights, regrading the R/W shoulders, runway marking, and runway grooving. This significant aspect of this project was that almost all of the work was completed between 11:30 p.m. and 6:00 a.m. to allow the airlines to operate their normal schedule during the day.

John Murtha Johnstown-Cambria County Airport, Master Plan, Johnstown, PA

– This project involved the completion of an Airport Master Plan and a 5-year Environmental Assessment for the John Murtha Johnstown-Cambria County Airport. Work tasks for the Master Plan included significant public participation, updating the mapping and aerial photography for the

Aviation Council of Pennsylvania (ACP)
American Society of Highway Engineers

Airport, conducting a facility inventory of physical and environmental features, developing aircraft activity forecasts, completion of a demand/capacity analysis, an airside/landside development assessment to include design standard compliance, helicopter operations evaluation, a runway length analysis, preparation of modification to standards forms, and an airport access evaluation, completion of a land-use assessment and a terminal planning assessment to look at general aviation development, automobile parking, rental car operations, ARFF response and emergency planning, aircraft fueling, military operations, administration facilities, terminal access, and air cargo facilities. The final product included an Airport Master Plan report and an Airport Layout Plan set including a property map, FAR Part 77 Surface map, approach plan and profiles, terminal area plan, and environmental inventory drawings. Recent transportation projects for which Mr. Genday served as principal-in-charge include:

SR 0219, Section 023 (Design/Build), Somerset County, PA - This Design / Build project consists of the rehabilitation of SR 0219, Section 023 in Somerset County, PA. Design work includes preparation of Traffic Control Plans, Roadway Construction Plans, Signing and Pavement Marking Plans, E&S, and two (2) mainline bridge replacements and one (1) overhead bridge rehabilitation. Project was fast-tracked reducing a 2 year schedule into 1 year.

PA Turnpike Allegheny Transportation Improvement Study – conducted a needs analysis and NEPA documentation to obtain agency concurrence for transportation improvements at the Allegheny Tunnel located on the Pennsylvania Turnpike between exits 10 and 11. The first phase of the project included preliminary design and environmental impact analysis of seven cut (bypass) alternatives and five tunnel alternatives. All environmental data for this project was mapped and impact analysis conducted using GIS. From the preliminary alternative analysis, a total of three cut and three tunnel alternatives, plus a no-build were selected with agency concurrence to be carried forward for detailed analysis. In addition, L.R. Kimball conducted the detailed engineering and environmental studies on these alternatives. Public involvement included conducting general public, public officials, and citizens advisory committee meetings, and preparing and distributing project newsletters. A project website was also prepared.

California University Multi-Modal Transportation Improvement Study – This multi-phased project which included assessing and developing an alternative solution to parking and automobile/pedestrian mobility and safety concerns as well as remote campus and housing connectivity issues with the main campus. The study also included addressing transportation connectivity issues between the main campus the Roadman Park remote campus, where student housing and sports facilities are located. The initial study was an Environmental Assessment with full NEPA documentation including Needs Analysis, Alternatives Analysis and Preliminary Design for a loop road, intermodal facility and parking garage, convocation center, and Urban Maglev system. Final design is now proceeding for the intermodal center, loop road and park'n'ride facility.

PennDOT District 9-0, PA –provided construction inspection services to PennDOT District 9-0 for almost 30 years. Our most recent experience includes open end agreements where we have had 20 work order assignments for specific projects. These include small bridges to roadway rehabilitation projects on major roadways and/or interstate systems. Some of these projects were included in the ARRA (American Recovery and Reinvestment Act) program. Each of L.R. Kimball open end agreements for construction services have a five year duration and currently will continue through 2015.



Years of Experience: 256

Education:

BS, Civil Engineering Technology, University of Pittsburgh at Johnstown, 1994

Registrations:

2006, NJ, Professional Engineer
2003, OH, Professional Engineer
1999, PA, Professional Engineer
2006, WV, Professional Engineer

Certifications:

Certified Professional in Erosion and Sediment Control (CPESC), No. 5567

Affiliations:

National Society of Professional Engineers
American Military Engineers

Gregory L. Schrock, PE, CPESC

Senior Project Manager

Mr. Schrock serves as a Project Manager and Commercial/Institutional Land Development Market Segment Leader for L.R. Kimball's Aviation and Civil Engineering Division. He specializes in various aspects of site development and municipal design. On the municipal side, he is involved with the design of waterlines, sanitary sewers, pumping stations, and water systems. As a project engineer/manager, he is responsible for the design, project management, project meetings and coordination, project specifications, client interaction, and permit acquisition for various land development projects. He is involved with the design of roadways, parking lots, site layout, stormwater management facilities and analysis, sanitary sewer systems, water distribution systems, and the preparation of contract documents.

Mr. Schrock's stormwater management design experience includes hydrologic and hydraulic analysis, detention basin design, stormwater collection and conveyance system design, preparation of construction drawings, preparation of stormwater management reports including pre- and post-development runoff computations, routing of storm flows through proposed detention basins, and basin design computations. He is also involved with the preparation of erosion and sedimentation control plans including designing the construction documents, preparing NPDES permit applications, letters, erosion and sedimentation control reports, preparing construction sequences, and design computations for each erosion and sedimentation control device utilized.

Project Experience

Southpointe II Business Park Development, Washington County

Authority, Canonsburg, PA. (Civil Engineer) Provided full Civil, Environmental, and Geotechnical services to develop 225 acres of the Southpointe II development. The site was the former Western Center located adjacent to the existing Southpointe Development. Work included mapping, surveying, geotechnical investigation, asbestos abatement, Phase I ESA, Phase II Investigations (Test Pits and Laboratory Analyses), Wetland Encroachment Permit (PADEP Ch. 105) and mitigation, building demolition, civil site design, land development, utility extensions and relocations, site grading, traffic studies, local roadway design, bridge widening, landscaping, permitting, and coordinating and updating master plan development as the project progressed.

Carrie Furnace Industrial Park, Pittsburgh, PA (Project Manager) This project was the re-development of an existing steel site. L.R. Kimball was involved with the preparation of plans and specifications to develop infrastructure for the site including utilities, roadways, stormwater management facilities, and site, grading, and utility plans. A soil layer was added to the site to cap the existing brownfield site and also raise the site elevations above the 100 year floodplain for future development.

UPMC Ebensburg Medical Office Building, Cambria County Industrial Park (Project Manager) L.R. Kimball prepared the site development plans and performed many of the due diligence services such as a Geotechnical Investigation, Wetland Delineation, Survey, Traffic Study, and Phase I ESA. L.R. Kimball also prepared site development plans and permitting including site, grading, utility, erosion and sedimentation control, stormwater management plans and NPDES Permit. Once UPMC purchased the Ebensburg Medical Office Building property and assumed control of the development, they retained L.R. Kimball to provide civil/site, Geotechnical and inspection / testing services during construction.

David G. Minnear, PE
Sr. Project Manager



Role on Project
Quality Assurance

Years of Experience: 41

Education:

BS, Civil Engineering,
The Pennsylvania State University,
1978

Registrations:

1983, PA, Professional Engineer
2016, KY, Professional Engineer
1997 MD, Professional Engineer
1998, NJ, Professional Engineer
1997, OH, Professional Engineer
1997, VA, Professional Engineer
1985, WV, Professional Engineer

Certifications:

OSHA 40 Hour Hazardous Waste
Operations & Emergency Response
Training
Confined Space Training

Affiliations:

Cambria County Solid Waste Management
Authority

Mr. Minnear serves as a Senior Technical Leader/Project Manager specializing in water resources and solid waste for the Aviation & Civil Engineering Division. He has worked on a wide variety of projects; including the design and inspection of dams, reclamation of abandoned mine lands and the development of regional stormwater management regulations. Mr. Minnear is responsible for providing technical support and quality assurance to the various on-going civil design projects and overseeing the staff of junior engineers, technicians and draftsmen. In addition, he is responsible for providing design direction and review of various civil projects, including fly ash and coal refuse disposal sites, municipal landfills, pipeline designs, mine reclamation, and hydraulic projects.

Mr. Minnear serves as the company's chief hydraulics engineer for projects involving dams, open channel flow, and area-wide stormwater management. Hydrologic/hydraulic engineering projects under his direction and supervision have included the design and assessment of dozens of dams; inspection and preparation of assessment reports as to the status of water supply, recreational and hydroelectric generating dams; review and preparation of FEMA flood insurance studies; studies to modify pre-existing flood insurance studies to allow for development within areas previously designated as being within the floodway boundaries; the assessment of flood protection levees, and the development of area-wide model stormwater management criteria.

Mr. Minnear is very familiar with the use of the U.S. Army Corps of Engineers computer programs, as well as numerous other hydrologic models and methods. He currently serves as Senior Technical Leader for hydraulic design projects involving dams and/or other stormwater management, where he over-see a staff of junior engineers and technicians.

Project Experience of Mr. Minnear includes:

- **McClintic Dam No 23, WV DNR Wildlife Resources Development, Mason County, WV.** This 11-acre lake is located within the McClintic Wildlife Preserve and includes a perimeter wetland construction intended to mitigate additional wetlands damaged in another portion of the site during a Superfund Cleanup Project. Mr. Minnear was the principal designer involved in the hydrologic / hydraulic evaluations of the site, as well as the preparation of construction and permitting packages.
- **Annual Dam Inspections, Pittston Coal Group, KY, VA, and WV.** Insurance Certification Inspector for annual inspections of up to 15 coal slurry impoundments. Dams were in various levels of use, from initial development to nearing abandonment. Inspection reports were instrumental in the issuance of insurance to allow for continued site operations.
- **Emergency Action Plans, Cambria Somerset Authority (CSA), Cambria and Somerset Counties, PA.** Sr. Hydraulic Engineer for preparation of the Emergency Action Plans updates for the Quemahoning, Wilmore, and Hinckston Run Dams. Oversaw

simulation of dam break analyses by computer modeling to determine downstream inundation limits and identified municipalities located downstream of the dams that would be potentially impacted by a catastrophic failure of the dam. These plans included the development of dam breach hydraulic models and flood inundation maps. Prior to computer modeling to simulate a dam failure, physically surveyed downstream obstructions to determine their effect on the flood wave resulting from the dam break. Based on the determination of the affected downstream municipalities, prepared a step by step procedure to be followed by emergency personnel in the event of such an emergency.

- Dam Inspections, Pennsylvania Department of Environmental Protection and Federal Energy Regulatory Commission, PA, NY, NJ, and MD. Principal Professional Engineer involved in the inspection of PADEP licensed water supply dams and the FERC licensed hydroelectric dams.
- **Whitetail Ski Resort, Whitetail Resort c/o Realty Skiing Development, Inc., Mercersburg, PA.** Principal Hydraulic Designer for the design and permitting of the 100-million gallon water supply reservoir at the resort, including the preparation of construction drawings and specifications, as well as permit documents. Also involved in monitoring construction progress and certification of completeness during construction. After completion of construction, annual dam inspections were performed.
- **Upper and Little Schuylkill River, Schuylkill County Conservation District, Schuylkill County, PA.** Project Engineer for the development of the water quality assessment of two watersheds. Responsibilities included quality assurance for the database development, assistance with the identification of site priorities, and preparation of remediation recommendations for each prioritized site.
- **Shamokin Creek Watershed Assessment, Northumberland County Planning Commission, Northumberland County, PA.** Senior Technical Specialist for the assessment which resulted in the development of a Watershed Restoration Action Strategy guiding future remediation work by the Shamokin Creek Restoration Alliance and Northumberland County Conservation District. Duties included quality control, presentation at public meetings, and project coordination with county personnel.
- **Yellow Creek Watershed, Blacklick Creek Watershed Association, Indiana County, PA.** Principal Designer and Project Manager for multiple facilities consisting of separate treatment “modules”. Two of these projects incorporated approximately 2.3 acres of mitigation wetlands as final treatment prior to discharge. The funding utilized for these projects was primarily the result of 319 Grants from the Commonwealth of Pennsylvania, along with additional funding from the Heinz Endowment.

- **Cambria Cogeneration Plant, Air Products & Chemicals, Inc., Ebensburg, PA.** Senior Design Engineer and Project Manager for the development of off-site facilities for the plant. This included the siting, design and construction monitoring of the raw water and wastewater pipelines to the plant, and the sewage and potable waterlines serving the plant. This also included coordination of pipeline locations within the easements and hydraulic design of the ductile iron raw water pipeline and the HDPE wastewater pipeline, as well as the sewage and potable lines.
- **Ottilio Landfill Remediation Services During Construction at the Ottilio Landfill, NJDEP, Newark, NJ.** Senior Engineer involved with the development of grading plans, hydrologic/hydraulic assessment and design for stormwater handling facilities, and general oversight for the construction drawings. Project involved the closure of an existing construction/demolition debris landfill with hazardous constituents.
- **Flyash Disposal Facility, Allegheny Energy Supply, Monongalia County, WV**
Project Design Engineer for this residual waste landfill with an anticipated life of 30 years. Responsible for all aspects of the design of the disposal facility, including site grading plans, sediment pond hydraulics, dam permitting and construction inspection, and development of construction drawings. This site work included the design of 5 sediment control dams, each of which required construction inspection and certification.



Years of Experience: 18

Education:

BS, Civil Engineering Technology, University of Pittsburgh at Johnstown, 2003

Registrations:

2009, -PA, Professional Engineer

Certifications:

Certified Professional in Erosion and Sedimentation Control (CPESC) 2009

Matthew A. Koenigsberg, PE, CPESC

Civil Engineer

Mr. Koenigsberg serves as a Project Engineer for L.R. Kimball's Aviation and Civil Engineering Division. He is currently involved in civil engineering projects throughout the eastern United States. His responsibilities include planning, design and preparing permit applications of sports, recreational, and education facilities; correctional institutions; and commercial developments.

Mr. Koenigsberg has also prepared feasibility studies and reviewed subdivision plans and planning modules for various municipalities. Mr. Koenigsberg has also been involved in the preparation of erosion and sedimentation control plans and stormwater management analysis.

Project Experience

331 Innovation Boulevard, GLP IP LLP, Innovation Park, State College, PA. Civil Engineer. This project was the development of an 80,000 sf office building located in Innovation Park. L.R. Kimball prepared the land development, erosion and sedimentation control and stormwater management design and associated permitting for this project.

Clearfield Firemen's Industrial Park Logistics Facility, The Clearfield Foundation, Clearfield, PA. Civil Designer who assisted with various design items. Duties included site design items such as site layout, grading, and erosion and sedimentation control and reports.

UPMC Ebensburg Medical Office Building, Cambria County Industrial Park (Project Manager) L.R. Kimball prepared the site development plans and performed many of the due diligence services such as a Geotechnical Investigation, Wetland Delineation, Survey, Traffic Study, and Phase I ESA. L.R. Kimball also prepared site development plans and permitting including site, grading, utility, erosion and sedimentation control, stormwater management plans and NPDES Permit. Once UPMC purchased the Ebensburg Medical Office Building property and assumed control of the development, they retained L.R. Kimball to provide civil/site, Geotechnical and inspection / testing services during construction.

Village at Luther Square, Life NWPA (Civil Engineer) L.R. Kimball was retained to prepare the site development plans, and surveying work for the New Life Building project (Adult Daycare Facility) located within Trinity Development within Monroe Township, Clarion County, PA. The work included the preparation of site development plans including site, grading, utility, erosion and sedimentation control, stormwater management plans and a lengthy access road into the project site. Land Development and Subdivision plans were submitted to Clarion County for review and Erosion and Sedimentation Control Plans were submitted to the Clarion County Conservation District. An ALTA survey was prepared for the project and the property corners were staked as part of the subdivision plan process.

United States Gypsum Corporation (Civil Engineer) L.R. Kimball has been retained since 2004 to prepare various civil engineering, architectural, structural engineering, electrical engineering, survey and geotechnical services for several site facilities and access roads, as well as stormwater facility design services.



Tyler J. Nesbella, EIT
Engineering Technician

Role on Project:
Site Engineering

Years of Experience: 3

Education:
BS, Civil Engineering Technology, University
of Pittsburgh, Johnstown, 2015

Registrations:
2014, PA, Engineer-in-Training

Mr. Nesbella serves as an Engineering Technician for L.R. Kimball's Airport and Civil Engineering Division. He has experience with gas line and gas well permitting, erosion and sedimentation control plans, stream crossing permits, drainage design, stormwater management, site development, highway occupancy permit applications, and construction inspection

Recent project experience Mr. Nesbella has assisted on includes:

General Permitting

- Washington County Airport – NPDES General Permit
- Washington County Airport – Environmental Permits
- Venango Regional Airport – NPDES General Permit
- Washington County Airport – Notice of Termination of old NPDES Permits
- ESCGP-2 Permitting
- DEP Permitting for Stream and Road Crossings
- PennDOT Highway Occupancy Permitting

Resident Project Representation

- Washington County Airport - Access Road – Paving
- Washington County Airport – Northside Hangar Development – Earth Excavation
- Leesburg Executive Airport – Runway and Taxiway Lighting Rehabilitation
- Doylestown Airport – Construct Bypass Taxiways – Paving

Stormwater Design

- Venango Regional Airport – Stormwater Calculations and Design for NPDES Permit, Drainage Design and Sizing
- New Garden Airport - Drainage Design and Sizing
- AutoCAD Stormwater and Drainage program experience

People's Gaslines (PNG)

- Project Coordinator (100+ projects)
- Determine pipe systems layouts and scopes
- Review projects for submission to Peoples Gas
- Coordinate with Municipalities for Paving, Sewer, and Underground Utility Information
- Mandate workload for 5+ resources on multiple projects

Project Inspection

- North Walnut Sanitary Sewer Replacement
- Oven Run Sanitary Sewer Installation
- ABC Hangar and Apron Rehabilitation – Washington County Airport
- RT 403 Sanitary Sewer Replacement

USJMA – N. Walnut Avenue Sanitary Sewer Replacement, Stoystown, PA.

Construction Inspector for the installation of an 8" sanitary sewer and manholes to replace a deteriorated cracked and broken terra cotta sanitary sewer line along N. Walnut Avenue in Stoystown, PA. A portion of the replacement was by slip lining methods. He was responsible to observe that the construction was performed in accordance with the construction drawings, construction specifications and approved shop drawings. Daily report of activities and construction quantities plus photographs were prepared to document construction progress. Contractors estimates were reviewed for conformance with actual measured quantities.

USJMA – Oven Run Sanitary Sewer Relocation, Shade Township, Somerset County, PA.

Construction Inspector for the relocation of an 8" sanitary sewer and manholes to eliminate a damaged sanitary sewer stream crossing. He was responsible to observe and document that the construction was performed in accordance with the construction drawings, construction specifications and approved shop drawings. Daily reports and photographs were prepared to document construction progress. Contractors estimates were reviewed for conformance with actual measured quantities.

Peoples Natural Gas – Various Projects. Project coordinator for the design and permitting of replacement and extensions of natural gas pipelines within their gas distribution system. He was responsible for preparation and review of gas line layouts, material requirements, permit applications, utility coordination, municipal and highway department coordination for construction within their public right-of-ways. Permits included erosion and sedimentation control permits, stream crossing permits, highway occupancy permits, and local roadway opening permits.

Various Gas Well Companies. Developed contour grading plans for the well pads and design of access roadways to the well pads. Performed drainage design, stormwater management design, erosion and sedimentation control plans including sedimentary ponds. Layout of temporary waterlines for fracking well sites. Prepared permit applications for well pads, stream crossing, highway occupancy permits and municipal roadway permits.

Charles A. Hebel*Resident Project Rep / Tech Specialist*

Years of Experience: 19

Certifications:

3-7-2016 -2020 Portable Nuclear Gauge Safety and USDOT Hazmat Certification- American Portable Nuclear Gauge Assoc. (APNGA)
Zoning and Land Use in Pennsylvania
Cingular T1 Carrier Line Installation and Testing Training
AEMC Ground Resistance Testing
Frequency Search and FCC Licensing Training
RSI Radio Frequency Site Safety Awareness
Lyncole XIT Grounding Theory and Practical Applications of Grounding and Bonding
Emergency Number Professional (ENP) Certification 2009 -2013 & 2013 - 2017
Motorola Communication Site Installation Certification (R56) 2013 - 2017

Mr. Hebel has over 19 years of experience in aviation and communication projects, serving in varied capacities as a Resident Project Representative (RPR) and Technical Specialist. He possesses a solid understanding of airport and communication site construction projects. Related experience includes providing project support as a site acquisition / permitting specialist, construction oversight / inspection representative and leasing /agreement negotiator. He has been responsible for securing prerequisite approvals from regulatory and governmental entities (FAA, FCC, state and local entities) in preparation and support of construction projects. Experience includes all phases of site acquisition / site development, ranging from pre-construction planning, through construction oversight and documentation to post-construction assessments, acceptance testing and compliance verification for specifications. Charlie has been responsible for facilitating project co-ordination between clients, vendors, utility providers, contractors, regulatory entities, site /facility owners & other interested parties.

In his capacity as an RPR, Mr. Hebel will be responsible for oversight, documentation and inspection of all onsite construction activities. He will be responsible for ensuring that all work items meet contract specifications, all inspections and testing are properly documented and payments are properly calculated. Recent projects for which Mr. Hebel has afforded either RPR or Technical Specialist services include:

Technical Specialist - Ontario County, NY – Emergency Communications System Design & Development – secured license agreements for leased sites along with permitting and leases for raw land sites, assisted in planning and co-ordination of site development activities, provided post-construction support for ongoing modification and expansion of the radio system.

Technical Specialist – Adams County, PA – 700/800 MHz Radio System Upgrade – negotiated and secured license agreements for leased sites along with permitting and leases for raw land sites, oversight and documentation of site construction, planning and co-ordination of site development activities and provided post-construction inspection and system testing support.

RPR – Reading Airport (PA) - Obstruction Removal (Phase 1) – participated in post-construction documentation and outreach to involved property owners

Technical Specialist – Bucks County, PA – Radio System (multiple phases) – assessed candidate and existing sites for potential use, negotiated and secured license agreements for leased sites, planning and co-ordination of site development activities, oversight and documentation of existing site upgrades and leased site deployments and provided post-construction inspection and system testing support.

RPR – New Garden Flying Field (PA) - Hangar Erection – provided verification and documentation of all aspects of foundation and grounding system installation associated with the development of a new pre-fabricated hangar building.

Technical Specialist – Powhatan County, VA – Public Safety Communication System Assessment / Recommendation Report – participated in auditing and assessment of radio communication sites and dispatch facilities for a proposed upgrade / redesign of the emergency communication radio system.

RPR – Reading Airport (PA) Taxi Lane Construction – provided oversight and documentation for preparation of subgrade and installation of subbase associated with the paving of a new taxi lane and protective manhole for a critical fiber optic cable run.

RPR – New Garden Flying Field – Rehabilitate and Widen Runway 6 -24 – tasked with oversight and documentation responsibility for all aspects of a multi-phased project to rehabilitate and widen the runway, which will also include obstruction removal, drainage and electrical system upgrades, construction of a retaining wall, installation of a new underground commercial electrical service and replacement of all runway markings and lighting.

James R. Marhefka, PG*Senior Geologist*

Years of Experience: 31

Education:

BS, Geology, University of Pittsburgh in Johnstown, 1987

Registrations:1995, PA, Professional Geologist
1994, PA, Underground Storage Tank Inspector
2009, NJ, Underground Storage Tank Inspector
2009, NJ, Subsurface Evaluator**Affiliations:**

Pennsylvania Council of Professional Geologists, National Groundwater Association

Certifications:PennDOT Drilling Inspector, 099-00
NJDEP Cleanup Stars, 2004
OSHA 40 Hour Hazardous Waste Operations & Emergency Response Training
OSHA Hazardous Waste Site Supervisor
OSHA Confined Space Entry & Rescue Certified Operator of NITON XRF Spectrum Analyzer
Advanced Hazardous Materials Management: DOT/IATA/IMO
8 Hr Hazardous Materials Refresher issued May 2017

Mr. Marhefka serves as a Senior Geologist and Project Manager for L.R. Kimball. He is responsible for managing all aspects of efforts including the collection and evaluation of soils and geologic and hydrologic data on geotechnical, environmental assessment, groundwater assessment, remedial action, and storage tank projects. In fulfilling these responsibilities, he routinely performs drill inspections, soil and geologic logging, environmental sampling, hydrogeologic testing of monitor wells, inspection and supervision of remedial and construction contractors, evaluation of soil and water contamination, and supervision of junior level staff. Mr. Marhefka processes field data into verbal and pictorial presentations for reports. He does this by using computer models for slug tests, potentiometric surface contours, geologic cross-sections, boring logs and soil profiles. He incorporates the data and presentations into reports for environmental assessment, fate and transport analysis, subsurface geology, groundwater hydrology, cost estimates, geotechnical and underground storage tank closure reports.

Mr. Marhefka is experienced in various drilling techniques including air rotary, mud rotary, coring, augering, and cable tool methods. This experience was developed during his inspection of subsurface investigations for soil and rock sampling, in-situ testing, monitor well installation, well abandonment, and geotechnical investigations. His inspection experience also includes field testing of soil, water, and rock samples for physical characteristics and presence of petroleum products, organic and inorganic contaminants. Project Experience of Mr. Marhefka includes:

- **Statewide Open-End Engineering and Environmental Services, Pennsylvania Department of Transportation, Harrisburg, PA.** Geologist responsible for the site characterization of a PennDOT Maintenance Facility which utilizes several underground storage tanks for fleet fueling. Activities included managing all aspects of the intrusive field investigation, reviewing and reducing analytical data, and preparing the Site Characterization Report. Geologist for the investigation and design of a remedial action at a site impacted by coal tar residuals. Duties included managing remedial subcontractors and intrusive investigations, evaluating and reducing analytical and geotechnical data, and preparing a site investigation report.
- **Remedial Investigation at Alan & Son Car Care Center, New Jersey Department of Environmental Protection, Branchburg, NJ.** Field Task Manager/Geologist responsible of implementation of Site Specific Work Plan and all portions of field activities associated with a multi-phased remedial investigation at an NJDEP Known Contaminated Site. Duties included supervision and oversight of drilling subcontractor tasked with advancing 28 soil boring, installing 21 bedrock monitoring wells, and well abandonment activities; oversight of down hole geophysical logging subcontractor; collection of soil and groundwater samples; management of on-site temporary storage of remedial derived wastes; and management of several environmental

professions during the course of the project. Responsible for management and shipment of all analytical samples in accordance with IATA Dangerous Goods Shipping regulations.

- **Remedial Investigation at South Brunswick Asphalt Plant, New Jersey Department of Environmental Protection, Toms River, NJ.** Field Task Manager/Geologist responsible for implementation and supervision of remedial investigation activities at a suspected uncontrolled hazardous waste site. Duties included supervision and oversight of remedial contractors tasked with installation of groundwater monitoring wells, advancement of soil borings and test pits and collection of soil and groundwater samples. Responsible for management and handling of samples to be shipped via overnight airline courier in accordance with IATA Dangerous Goods Shipping regulations.



George S. Kopchik, PMP, PS, SP, PLS
Manager, Geospatial Services

Mr. Kopchik's experience and education have provided him with the technical and management skills necessary for completing the most complex mapping projects. Over the past 35 years, Mr. Kopchik has had extensive experience in aerial photography, volume computations, digital orthophotos, GIS, and in producing topographic and planimetric maps. He is responsible for QA/QC activities including the checking and verification of planimetric and topographic maps, digital orthophotos, GIS projects, and stockpile inventories for numerous clients. Since joining L.R. Kimball, Mr. Kopchik has gained valuable knowledge in all phases of photogrammetry and GIS. He has been involved in planning, management, production, and delivery of many mapping projects undertaken by the firm. His knowledge, growth and diversity have allowed him to attain the position of a Senior Project Manager while also serving as the Manager of Geospatial Services. In summary, Mr. Kopchik has served in areas of mapping sciences such as project management, division operations, financial reports, budgets and estimates, technical and cost proposals, marketing, digital orthophotography, ArcInfo, KORK, Atlas, and Intergraph software, GIS applications, planning, and database design concepts, photogrammetry, surveying, data conversion, and stockpile inventories. Mr. Kopchik is also experienced in Microsoft Office.

Role on Project:
Surveys and Mapping Manager

Years of Experience: 35

Education:
Associate, Computer Aided Drafting and Design, Pittsburgh Technical Institute, 1984

Registrations:
1999, NC, Professional Land Surveyor
2003, SC, Professional Land Surveyor
2010, VA, Surveyor Photogrammetrist

Certifications:
- Project Management Professional,
#521453, 4/10/21

Mr. Kopchik is experienced in managing the geospatial components of aviation related projects that require AGIS program specifications in accordance with Advisory Circulars 150/5300 -16A, -17C, and -18B.

Recent projects for which Mr. Kopchik has worked on include:

Cambria County Final Design, SR 0022, Section 005, PADEP. PM for aerial photography, surveying and mapping activities in support of the engineering necessary for improvements to the existing 2-3 lane section to 4-5 lanes with realignment where necessary.

Washington County Airport Authority; Washington County, PA - Project manager overseeing all surveying and mapping related efforts for the obstruction mapping and analysis project. Mr. Kopchik and his team were responsible for coordination and completion of the color aerial photography and ground surveys and also for completion of photogrammetric mapping, orthophotography, and OBS/AAA surveys in accordance with FAA Advisory Circulars 150/5300-16A, 17C, and 18B.

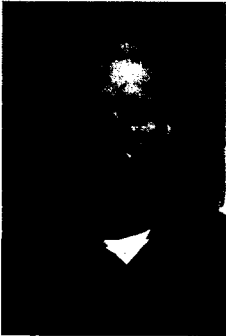
Somerset County Airport, Somerset, PA – AGIS Update Airport Master Plan - Project manager overseeing all surveying and mapping related efforts necessary to provide the airport with an updated master plan. Mr. Kopchik and his team were responsible for coordination and completion of the color aerial photography and ground surveys and photogrammetric mapping in accordance with FAA Advisory Circulars 150/5300-16A, 17C, and 18B.

John Murtha-Johnstown Cambria County Airport, Johnstown, PA –

Taxiway B As-Built Survey - Project manager overseeing all surveying related efforts necessary to provide the airport with an as-built of the Taxiway B Lighting Improvements. Mr. Kopchik and his team were responsible for coordination and completion ground surveys and accordance with FAA Advisory Circular 150/5300 - 18B.

2005-2010 Project Manager for 62 projects over a five period providing the PADEP with photo control, general surveying services, and photogrammetric planimetric/topographic mapping used for remediation engineering of AMD sites. Aerial photography used for mapping was acquired by the PADOT

Fairmont Airport, Fairmont, WV - Project manager overseeing all surveying related efforts for the property boundary survey necessary to establish a perimeter fence. Mr. Kopchik and his team were responsible for coordination and completion of the deed research, property surveys, and the placement of iron pins and flagging on the property corners.



Role on Project
Surveyor

Stephen Landgrebe, PLS
Surveyor

Mr. Landgrebe serves as a Survey Party Chief for L.R. Kimball's Transportation and Environmental Division with nearly 31 years of experience. He has been responsible for various aspects of survey field work, data reduction, and production of the required survey deliverables. His years of experience include horizontal and vertical control networks, geometry, boundary and ALTA/ACSM surveys, right of way surveys, erosion and sedimentation control relating to stakeout of silt fence, etc. along with utility surveying and construction inspection. Since joining L.R. Kimball, Mr. Landgrebe has gained valuable knowledge in various phases of surveying relating to architectural, civil design, photogrammetric mapping, stockpile volumes, and GIS projects.

Years of Experience: 31

Education:

Associate, Surveying, Paul Smith's
College of Arts and Sciences, 1987

Registrations:

WV, Professional Land Surveyor,
2017
PA, Professional Land Surveyor,
2013
NY, Professional Land Surveyor,
1995
TN, Professional Land Surveyor,
2009

Certifications:

HAZWOPER (40 hour)

Affiliations:

Former member of the New York
Association of Professional Land
Surveyors
Former member of the Town of
Palmyra Planning Board

Project Experience of Mr. Landgrebe includes:

- Geotechnical Boring Stakeout, Survey Field Verification, and Subdivision Corner Monumentation for the Armstrong School District, New Junior-Senior High School, Armstrong County, PA
- Horizontal and vertical ground control network, runway centerline and profile surveys, planimetric detail surveying and field verification was completed in accordance with the current FAA AC150-5300 -18B Airport GIS specifications - Lehigh Northampton Airport Authority - 2012 Queen City AGIS Mapping (ALP Update, Obstruction Mapping & Removal).
- Detail planimetric feature surveying was performed for the replacement of existing gas mains within various locations; Peoples Natural Gas - Pipeline Replacement for Western PA
- Performed field survey monitoring of numerous monuments throughout the site and processed GPS data collected to be updated in the monitoring report spreadsheets - Wal-Mart - Kilbuck Wal-Mart Engineering Services, Allegheny County, PA
- Horizontal and Vertical Ground Control network, runway centerline and profile surveys, planimetric detail surveying and field verification was completed in accordance with the current FAA AC150-5300 -18B Airport GIS specifications - Williamsport Regional Airport - 2012 Conduct Environmental Assessment for Runway 9-27 Approach Improvements
- Performed as-built survey of the proposed new road rights-of-way for Chuck Noll Way locating curbs, sidewalks and visible utilities to be included in production of survey plat and legal description - Sports and Exhibition Authority, City of Pittsburgh, PA



Tammy L. Sherwin
Environmental Manager

Ms. Sherwin is an environmental scientist responsible for developing NEPA documentation, including Categorical Exclusion Evaluations (CEE), Environmental Assessments (EA), Environmental Impact Statements (EIS), and Section 4(f) Evaluations. She is also responsible for the following types of studies needed to develop the NEPA documentation: wetland delineations, surface water studies, habitat assessments (terrestrial and aquatic), Section 7 consultation, farmland evaluations, floodplain identification, land use studies, and socioeconomic evaluations. Ms. Sherwin also prepares the applicable permit packages and coordinates agency meetings for each project.

Her public involvement experience includes the creation of project newsletter mailing lists, preparation of project newsletters, organization of public meeting agendas and places of meeting, creation of public meeting displays and surveys, presentation of project materials to the public, and preparation of public meeting response summaries. Ms. Sherwin has also coordinated with Community Advisory Committees (CAC) and conducted Consulting Parties Meetings. Relevant Experience and Qualifications:

Ms. Sherwin utilizes the following FAA orders and guidance:

- FAA Order 1050.1F Environmental Impacts: Policies and Procedures
- FAA Order 5050.4B National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions
- FAA Environmental Desk Reference for Airport Actions

Ms. Sherwin has successfully completed CATEX Forms and EAs for airport projects.

Wilkes Barre / Scranton International Airport, Avoca, PA – Responsible for the completion of the necessary field work and agency coordination to prepare the Environmental Assessment for the Extend Taxiway B project.

Williamsport Regional Airport, Montoursville, PA – Responsible for the completion of the necessary field work and agency coordination to prepare the Environmental Assessment for the Runway 9-27 Approach Improvements.

John Murtha Johnstown-Cambria County Airport, Johnstown, PA - Prepared an FAA Environmental Evaluation Form "C" (Short Environmental Assessment) and Section 404/Chapter 105 Joint Permit for the U.S. Army Reserve 99th Regional Readiness Command Humidity Controlled Storage Facility Project.

Yeager Airport, Charleston, WV - Conducted a stream habitat assessment utilizing the EPA Rapid Bio-assessment Protocols for use in streams and wadeable rivers and preparation of the subsequent report and prepared a Determination of Cumulative Effects for the Section 404 permit for a safety improvement project. Prepared an EA following FAA NEPA guidelines for an obstruction removal project.

Years of Experience: 25

Education:

BS, Biology, Indiana University of Pennsylvania, 1993

Affiliations:

Pennsylvania Association of Environmental Professionals (PAEP) - Board of Directors 06 & 07, Office of Secretary



Joan E. Bentel, PE

Schnabel Engineering – Associate, Project Manager

Msr. Bentel has experience with commercial, residential, and government projects as part of Schnabel Engineering DC, Inc., a wholly-owned subsidiary of Schnabel Engineering. Joan has served as Schnabel's project manager for prominent DC Institutions such as the Martin Luther King Jr. Memorial, the United States Institute of Peace and the 10-acre City Center DC Development. She has extensive experience with government, educational and mixed-use developments projects, and has been involved with out-of-state and international projects.



Bill Khuri, PE

Schnabel Engineering – Principal

Mr. Khouri is currently the Principal of Schnabel Engineering DC, Inc., located in northwest Washington, DC, and was previously the Geotechnical Design Team Leader in Schnabel's Rockville, MD, office. Bill has extensive experience in the design and implementation of foundation engineering studies for recreational, office, residential, and commercial buildings, including subdrainage systems, building underpinning, pavements, towers, and special in situ techniques. He also specializes in slope stability, geogrid reinforced retaining walls, bulkhead design, geotextile landfill design, and slope inclinometer installation and evaluation

3. SIMILAR EXPERIENCE

BRODART WAREHOUSE FACILITY

Williamsport, PA



CLIENT:
City of Williamsport

L.R. Kimball was retained to prepare plans for the demolition of the Brodart Building located on a brownfield site at 1609 Memorial Avenue within the City of Williamsport. The Brodart Building was a former silk textile mill, later served as a book binding factory and a furniture factory. Because of soil contamination, this site underwent an Act 2 Environmental assessment resulting in recommendations for soil remediation and restrictive development covenants. It is the intent of the city to demolish the structures on site and prepare a pad ready site for future development.

The site consists of two parcels of land separated by Oliver Street. Western parcel, containing 0.551 acres consist of a paved parking lot with no buildings. The eastern parcel, containing 2.783 acres and was occupied by the manufacturing building. The manufacturing/warehouse building covered the entire 2.7 acre eastern site. The original 13,000 square foot, four story building that fronted Memorial avenue was expanded numerous times throughout the life of the facility with a 32,000 square foot 2 story addition and a 36,000 square foot one story addition.

L.R. Kimball prepared the demolition plans and specifications for the project and worked closely with Amec, the preparer of the Act 2 documents, to assure the bid documents complied with the remediation recommendations. L.R. Kimball teamed with Professional Services Inc. to provide the asbestos and hazardous material inspection and remediation oversight.

L.R. Kimball prepared the bid documents, advertised the bid, presided over the pre-bid conference, received the bids and provided recommendations for award. During construction L.R. Kimball provided Construction Administration services, reviewed shop drawing, attended by-weekly construction job conferences, provided minutes and reviewed contractor invoices.

WILLIAMSPORT CINEMAPLEX ENGINEERING SERVICES

Williamsport, PA

CLIENT

City of Williamsport

CLIENT REFERENCE

John Grado

Community Development Director

Phone: 570-327-7516

The Williamsport Cinemaplex site comprises one city block made up of thirteen parcels, one parking lot, and one empty lot.

Asbestos and Hazardous Material Survey

L.R. Kimball performed a complete asbestos inspection in accordance with EPA requirements. L.R. Kimball also performed a visual inspection of the buildings for the presence of PCBs; mercury-containing fluorescent lamps (including fluorescent, metal halide, high-pressure halide, high-pressure sodium, and mercury-vapor) and equipment; possible mercury in laboratory drain traps; CFC-containing equipment, such as water coolers and air conditioning units; batteries, such as NiCad and lead-acid, located in exit signs and emergency lighting units; and radioactive sources in both heat and smoke detectors.

Asbestos & Hazardous Materials Abatement Design. L.R. Kimball prepared technical specifications, for the purpose of managing the removal and disposal of ACM and other hazardous materials from the designated areas, and phasing for the project.

Asbestos & Hazardous Materials Abatement Oversight. L.R. Kimball provided daily monitoring of the abatement contractor in order to:

- Verify that the work area containment barriers were properly constructed and maintained
- Confirm compliance with worker protection requirements and specifications
- Perform daily work area and perimeter air monitoring, and laboratory analysis, as required
- Ensure proper decontamination and conduct final clearance testing, as required
- Review contractor transportation and disposal practices which include disposal containers and the waste disposal manifest

Property Survey / Utility Location / Topographic Location Mapping

A boundary survey was prepared of the referenced site in accordance with the minimum standard detail requirements for ALTA/ACSM surveys.

New topography was prepared for the site and adjacent roadways with a 1.0' contour interval. Mapping at a scale of 1" = 30' was generated from the survey and included any signage along the roadways within 100-feet of the site.

L.R. Kimball performed ground surveys to locate visible utilities, including inverts, on accessible structures on the property and adjoining streets.



Demolition Plan Services

L.R. Kimball provided professional engineering services required for the demolition/site remediation of the existing buildings. The demolition package included the removal of the existing buildings and all foundations. All excavations left from the removal of foundations and basements were backfilled with controlled backfill material. Other site remediation work included removal of all paving and miscellaneous items and re-grading the site to match existing contours and elevations.

Prior to the start of demolition, L.R. Kimball conducted meetings with the utility companies to accurately determine which utilities needed to be terminated and at what locations, and what termination details were required by each of the utility companies.

Design Services

L.R. Kimball generated the necessary project documents required for the demolition of the buildings and restoration of the site. Project documents consisted of drawings, technical specifications and construction cost estimates.

L.R. Kimball provided technical support throughout the bidding phase of the project. This support included presence at the pre-bid meeting and furnishing responses to any questions during the bidding phase.

Land Development Plan

L.R. Kimball prepared the Land Development Plan for the approximate 35,000 square-foot cinema and related at-grade parking lot on the site.

- Preliminary/Final Plan prep/mtgs
- Local review meeting attendance
- E&S Control Plans/E&S Permit
- Subdivision/Consolidation Plan
- Preparation of Easements
- Construction Plans and Specifications

Geotechnical Study

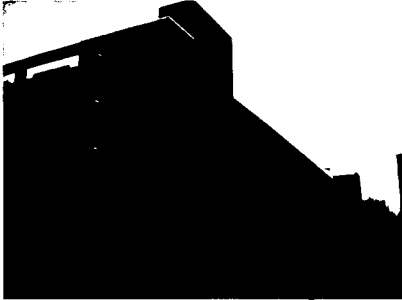
L.R. Kimball conducted a Geotechnical Study for the site to assist in the preparation of site and building design. Ten exploration borings were drilled at the site. Split Spoon Sampling (SPT), bag sampling, Shelby Tube sampling, and other field sampling were performed. Continuous SPT testing to 10-feet were completed in the building area and at 3-foot intervals thereafter to the proposed termination depth. Parking area borings were sampled at 5-foot intervals. Additionally, Shelby tubes were taken in the building area.

Samples were submitted to the L.R. Kimball AASHTO Materials Reference Laboratory (AMRL) accredited laboratory for examination and testing.

L.R. Kimball prepared a Geotechnical report summarizing procedures used in the investigation, the data obtained, and the evaluation. The report contained conclusions and recommendations for use in completing final design of the facility.

TRADE & TRANSIT II

Williamsport, PA



CLIENT:
City of Williamsport

REFERENCE:
Mr. William E. Nichols, Jr.
General Manager
River Valley Transit
1500 West Third Street
Williamsport, PA 17701
Phone: 570-326-2500
E-mail: bnichols@ridervt.com

The Proposed Project is currently under design and is an expansion of the first Trade & Transit Centre, and is designed to meet the changing and expanding needs of the transit system while replacing antiquated infrastructure with a new facility.

- **Proposed Site:**

- Located on the site of the former Mid-Town Parking Deck, between Trade & Transit I and The Cell Block night club.
- The project also includes streetscape improvements to William Street and Pine Street.

- **Proposed Intermodal Facility to include:**

- RVT Bus Transit to accommodate four (4) additional bus stops
- RVT Bus Waiting Area and amenities
- RVT Regional Bus Transit Office facilitating increased services to
 - o Endless Mountains Area (Bradford, Tioga and Sullivan Counties)
 - o Clinton County (Lock Haven)
 - o Union, Snyder, Columbia, Montour, and Northumberland Counties
- RVT Bus Driver Lounge
- Transit Scoop Convenience Store
- 2nd Floor Music Instruction through the Uptown Music Collective
- 3rd Floor Community Room and support spaces.
- 3rd Floor City Training Center & EOC

WILLIAM STREET REDEVELOPMENT

Williamsport, PA

CLIENT

City of Williamsport

CLIENT REFERENCE

Mr. John Grado, PE
Community Development Director
City Hall
245 West 4th Street
Williamsport, PA 17701
T 570.327.7516
CDDirector@cityofwilliamsport.org

This project involved the redevelopment of a mid-town section of the City of Williamsport to make way for retail development.

To clear the development area, several demolition projects were undertaken. These included the demolition of two restaurants, a bank branch office and the school district administrative offices. Prior to demolition, the structures were surveyed for the presences of hazardous material, such as asbestos. A plan was developed for the remediation and disposal of these materials and became part of the demolition bid package. L.R. Kimball provided remediation oversight for the project.

The targeted development area was originally designed as standard city blocks and many of the major utilities feeding the city were present within the streets of these blocks. To accommodate the retail development, these utilities needed to be relocated. Kimball developed the utility relocation plans, coordinated the design with the local utility companies, prepared the bid documents and administered the construction contract. The relocated utilities included underground electric, fiber optic communication, water, sanitary sewer and storm sewer. These plans were also coordinated with the proposed development plans.

In addition to utility relocations, Kimball also developed plans for the relocation of the branch bank and the reconfiguration of an adjoining retail development' parking lot to accommodate the bank. Kimball worked closely with the retail chains, the City Planning Department, adjoining developments, PennDOT and the Lycoming County Conservation District to develop a plan that satisfied the needs of the retail development and meet the requirement of the reviewing agencies.

Landscaping was an important element of the final land development design. Our design needed to reflect the theme already established throughout the City and also incorporate Best Management Practices into the stormwater management plan. Street trees, brick pavers, bioretention and vortex devices were incorporated into the design to improve water quality and infiltrate the increase in volume generated by additional impervious areas.

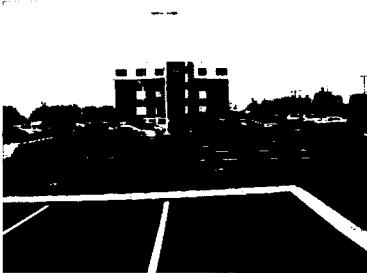
This work was accomplished under four construction contracts which were designed, permitted, and administered by Kimball. Kimball provided construction administration and QA/QC services on the project. Demolition began January 2, 2011 and the retail store was open for business October, 2011.



331 Innovation Boulevard
Centre County, PA

Scope of Work:

L.R. Kimball worked with CB Richard Ellis, GLP IP LLP, and Pfaffmann & Associates to develop the site development construction plans and specifications for the 331 Innovation Park building project. The project was located in Innovation Park within College Township, Centre County, PA. L.R. Kimball provided the geotechnical investigation, survey, and land development plans for the project. The land development plans were submitted to various review agencies including College Township, Centre Region Code, Centre County Conservation District and the PADEP for the site related permits and approvals. L.R. Kimball also worked with Pfaffmann & Associates to develop a silver LEED facility.



Innovation Park is a commercial/business park that houses various types of facilities and is owned by Pennsylvania State University (PSU). Stormwater for the park is being handled via a depression with a sinkhole and outlet weir that is monitored for stormwater flow by PSU. Most of the storms at the park are infiltrated within the depression and sinkhole and never exit the site. As the park is further developed, the depression is evaluated to determine its infiltration capacity with increased impervious area stormwater runoff. For the 331 Innovation Boulevard project site, L.R. Kimball designed an underground detention system to reduce the upstream peak flows prior to entering the downstream depression. Water Quality devices were also added at the project site to clean the stormwater and maximize downstream infiltration. A rain garden and various types of trees were added to the project site to further assist with stormwater management from the site and protect the downstream waterways.

A Master Plan was developed for Innovation Park and updated by L.R. Kimball throughout the development of this parcel and others within the park. The latest update to the Master Plan incorporated additional parking throughout the park to meet the demands and operations of new tenants, trying to utilize more employees within their building space, and the extension of Innovation Boulevard. The parking lot for the 331 Innovation Park Facility was later expanded to meet the tenant needs. The additional parking lot was also

designed by L.R. Kimball. Future development is shown on the Master Plan for Innovation Park.

Ebensburg Medical Office Building
Ebensburg, PA

Scope of Work:

L.R. Kimball performed various due diligence services for the Ebensburg Medical Office Building project including a Phase I Environmental Site Assessment, a wetland delineation, topographical, utility and boundary surveying services and the completion of a traffic study.



Once the due diligence services were completed, L.R. Kimball worked with the architect, the contractor, Keystone Healthcare Development Company, and UPMC to develop plans and specifications for the project. The project was located within the Cambria County Industrial Park. The land development plans were processed through Cambria Township. The NPDES permit, and minor road crossing and utility crossing General Permits were submitted and approved by the Cambria County Conservation District. L.R. Kimball also processed a sewage planning module exemption through Cambria Township and PADEP for the development.

The traffic study was reviewed and approved by PennDOT and Cambria Township

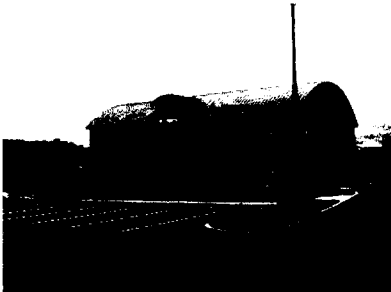
Client:
Keystone Healthcare Development
Company and UPMC

and shoulder improvements and signal timing changes were incorporated into the construction drawings for Zeman Drive and Mini Mall Road.

Once UPMC purchased the Ebensburg Medical Office Building property and assumed control of the development, they retained L.R. Kimball to provide civil/site, geotechnical, and inspection/testing services during construction. These services included reviewing shop drawings, answering contractor questions, compaction, concrete, and steel testing/inspection, meeting attendance, transferring permits, and geotechnical review.

CFS Bank Development
Cecil Township, PA

152200183



Scope of Work:

L.R. Kimball prepared the site design and permitting documents for a new bank located at the eastern corner of the intersection between Technology Drive and Town Center Way in Cecil Township, Washington County, PA. L.R. Kimball processed the land development plans through Cecil Township, the Erosion and Sedimentation Control Plans and NPDES Permit through the Washington County Conservation District, and the sewage planning through the PADEP. The project is located within the Southpointe Business Park.

Client:
CFS Bank

Cambria County Industrial Park Warehouse Expansion
Ebensburg, PA

Client:
McAneny Brothers, Inc.

Scope of Work:

L.R. Kimball provided civil engineering and permitting services for The McAneny Brothers Warehouse Expansion located in the Cambria County Industrial Park, Cambria Township, Cambria County, PA. The scope of work for site design and permitting consisted primarily of the preparation of land development plans and the acquisition of land development permitting for the new building addition, modifications to the existing parking areas, and stormwater management facilities.

Engineering Services for Lowe's Home Improvement Store
Clearfield, PA



Scope of Work:

L.R. Kimball prepared a conceptual site and grading plan for a proposed development located within the Clearfield Industrial Park in Lawrence Township, Clearfield County, PA, east of the existing Clearfield Wal-Mart. L.R. Kimball also prepared a cost estimate based on the conceptual plan. L.R. Kimball presented the information to Jemsite to aid in their evaluation of the site.

Client:
Jemsite Development

Once Jemsite decided to proceed with the site, L.R. Kimball researched deed information and obtained field evidence for the adjacent Holiday Inn property, located in the northwest corner of the proposed development. The survey and

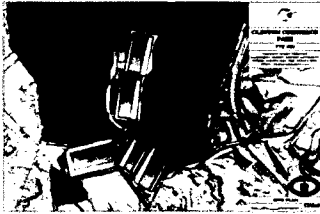
deed information was utilized to prepare a legal description and plat for a portion of the property for purposes of additional property acquisition.

L.R. Kimball completed a Phase I environmental assessment; geotechnical investigation study, including dynamic compaction investigation; and a supplemental survey of the site and surrounding roadways.

In addition to these services, L.R. Kimball completed the land development plans and permitting for the new Lowe's facility and four adjacent outparcels, which included parking lot design, Stormwater management, and landscaping. The permitting included developing plans for review and approval by Lawrence Township, the Clearfield County Conservation District, and the Pennsylvania DEP. L.R. Kimball prepared an acid neutralization plan for the property to comply with the Pennsylvania DEP mining group and completed a traffic study for the development with recommendations for improvements to Industrial Park Road and SR 0879.

Clinton Commerce Park Phase I and Phase II

Findlay Township, PA



Client:
Allegheny County Airport Authority

Scope of Work:

Clinton Commerce Park Phase I was an approximate 75-acre development located adjacent to the Pittsburgh International Airport. The Allegheny County Airport Authority developed their property into various uses, including warehouse, commercial, mixed uses, and high, medium, and low-density residential areas. L.R. Kimball's Phase I services included the design and construction services for the following warehouse site area: 2,000' local access road and multipurpose trail; sanitary, storm, and water services; landscaping; street lights; geotechnical investigation; surveying services; FAA permitting; coal permitting and design for coal mine void removal; erosion and sedimentation controls, stormwater management; planning module for sewage facilities; bidding & construction services, and various management and coordination activities. Additionally, L.R. Kimball designed 2.4 miles of future local access road for the Commerce Park area to connect the Clinton Commerce Park development to another local road. L.R. Kimball also developed grading plans for future phases of this development.

L.R. Kimball's Phase II services consisted of the design of the extension of existing Sweeney Drive approximately 2,300 linear feet north to a proposed cul-de-sac and approximately 3,600 linear feet west to another proposed cul-de-sac, grading of the existing terrain to relatively flat buildable areas in strategic locations to accommodate approximately one million square feet of future buildings, and the design of utilities to service the proposed future development. The utilities included a sewage pump station for the entire development and 4,500 linear feet of 6" sanitary forcemain. Additional services for the development included a Geotechnical Exploration, Permitting for FAA Airspace, Erosion & Sedimentation Controls, NPDES, Stormwater Management, Sewage Pumping stations, PADEP Water Quality Permit, and Findlay Township land development plan processing.

Southpointe II Mixed Use Suburban Business Park
Canonsburg, PA



Client:
Washington County Authority

Scope of Work:

L.R. Kimball was engaged by the Washington County Authority to provide complete engineering, demolition, environmental, mapping, surveying, geotechnical, and land development services for the Southpointe II project. Directly adjacent to the original Southpointe, this project is situated on approximately 255 acres which had been the site of the Western Center School and Hospital. This site is being redeveloped to support a mixed use development including corporate offices and office flex space. It features a new town center and marketplace including specialty commercial, entertainment, and street level retail activities.

L.R. Kimball has provided an array of services, including master planning, demolition consulting services, Phase I and II Environmental Site Assessment, hazardous materials audit, asbestos abatement design and oversight, boundary survey, subdivision planning, topographic mapping, wetland investigation and delineation, and geotechnical investigations of the site soils. Additionally, services for land development plan preparation and permitting were provided for this high profile project, including erosion and sedimentation control plans and permitting; overall stormwater management and design and reports; sewage facilities planning module and Part II permits; highway occupancy plans including traffic signal and lane widening plans; traffic studies; and permitting, construction and inspection phase services.

L.R. Kimball has completed over 6,000 feet of new four lane roadway system in Southpointe II. Additionally, L.R. Kimball completed two final key phases of the project: the Southpointe Boulevard Widening, consisting of widening 5,300 feet of Southpointe Blvd from 2 lanes to 4 lanes to keep up with the increased traffic being generated by the highly successful development; and the extension of WoodCliff Drive (1,200 feet of new roadway) to open up an additional 20 acres of land for commercial development.

Building demolition included preparation of demolition specifications, plans, bid documents and construction services for the demolition of 32 buildings comprising the old Western Center State Hospital site. Included in the demolition package were utility terminations and controlled backfill requirement for backfilling of the excavations left by building removal. Buildings ranged in size from a small single story to a seven-story hospital. Total building demolition was over 650,000 square feet and 5.3 million cubic feet.



Client:
Redevelopment Authority of
Allegheny County

Carrie Furnace Mixed Use Light Industrial Flex Space *Pittsburgh, PA*

Scope of Work:

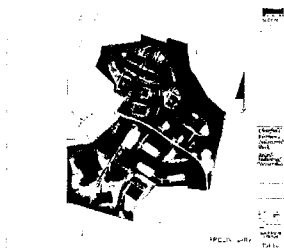
The County of Allegheny, Pennsylvania, played an important role in America's Industrial Revolution. In the late nineteenth and early twentieth centuries, the county was the home of the major iron and steel producers in the world. Among the largest and oldest mills were the Carrie Furnaces, whose tall stacks towered along the shore of the Monongahela River. They are among the few remaining examples of pre-World War II iron-making. Steel baron Andrew Carnegie purchased the furnaces in the early 1900's to produce iron for steel-making at his U. S. Steel Homestead Works. At their peak, the furnaces ran 24/7, producing 2,500 tons of molten iron per day. Laborers worked long hours in 2,600-degree temperatures, never leaving their stations for their entire work shifts in order to watch the furnaces. The Carrie Furnaces closed in 1984 and was designated as a brownfield site. For two decades, plans were discussed over how to best utilize this site. In 2005, the Allegheny County Chief Executive Dan Onorato initiated a plan to reclaim the county's brownfields and so the Redevelopment Authority of Allegheny County (RAAC) purchased the property with the intent of revitalizing the site. L.R. Kimball was awarded a contract to assist in the redevelopment of this important piece of history.

The property is situated in the boroughs of Munhall, Rankin, Swissvale, Whitaker, and the City of Pittsburgh. The access to the site has been one of the most challenging aspects of the project because it is bounded by the river bank, very steep hillsides, active railroad tracks, and an historic area located on-site. Some of the work L.R. Kimball performed for the RAAC included the following:

- Developed multiple conceptual site access routes into the site
- Provided preliminary and final design of site development and site access
- Performed ALTA and boundary surveys for the 168-acre property
- Conducted planimetric and topographic mapping and wetlands assessment
- Performed Traffic Impact Studies for key site access points
- Performed Geotechnical Investigations

Future plans for development of the site are to develop it into Light Industrial Flex Space, a National Park, and Residential Units. Currently the Carrie Furnaces have obtained National Landmark status by the National Park Service, and paperwork has been submitted to the US Congress to make the site a national park in conjunction with the Rivers of Steel National Heritage Area in Homestead. The two Landmarks are planned to be linked by the redevelopment of the existing Carrie Furnace Hot Metal Bridge spanning the Monongahela River.

The site is a PADEP Act 2 brownfield site and we had to import material from approved regulated and clean fill borrow sites which had to meet strict testing requirements.



Client:
The Clearfield Foundation

Clearfield Fireman's Industrial Park Master Site Plan *Clearfield, PA*

Scope of Work:

The project consisted of preparing a Master Plan and associated cost estimate for the development of the approximately 200-acre Clearfield Firemen's Industrial Park located in Lawrence Township, Clearfield County, PA on a former strip mined site.

The scope of work included the identification of existing conditions, environmental factors, and potential limitation to development; identification of current and future goals and objectives for land and business development; and development of a Phase I Environmental Site Assessment.

L.R. Kimball also prepared a comprehensive boundary survey; sequence and scheduling of the phased development; master site grading plan; stormwater management plan; erosion and sedimentation plan; utility analysis; geotechnical exploration; wetlands delineation and assessment; identification of regulatory permits; and cost estimates of all construction alternatives for the development of the mixed-use commercial/industrial park. Services related to the preparation of the Master Plan included marketing assistance, review of development proposals for adjoining projects within the Industrial Park, and assistance with preparation of grant applications. Subsequently, L.R. Kimball prepared subdivision and land development plans for the Clearfield Logistics Facility, a rail-served trans-loading facility, as the initial phase of implementation of the Master Plan.

4. RELEVANT CLIENT REFERENCES

Quality of Projects Previously Undertaken

The best indication of the quality of our previously completed projects is the number of repeat clients. We have been working for several of our clients for many years, often completing a new planning or development project each year.

Our approach is to continuously monitor "total" project costs throughout the life of a project. We need to complete our designs or planning projects within budget and provide the standard of care necessary to provide good project cost estimates. We also take extra care during construction to monitor construction costs to not exceed any budget limitations.

The best measure to judge our experience and quality of work is through the amount of repeat client work we receive. To further substantiate our work quality, we urge you to contact the following client references:

Facility Management, LLC

Bert Cherry

423 Washington Avenue
Bridgeville, PA 15017
(412)-849-8239
bcherryaow@gmail.com

CFS Bank Development,
Part of the Southpointe
Business Park Year Completed:
2015

UPMC Altoona

James DeStefano

Director / Facilities and Plant
Operations
620 Howard Avenue
Altoona, PA 16601
814-889-2456
destefanoj3@upmc.edu

UPMC Ebensburg Medical Office,
Part of the Cambria County Industrial
Park
Year Completed: 2017

GLP Development Company, LLC

Bob Barron

1340 Smith Avenue, Suite 200
Baltimore, MD 21209
(410)-335-4704
rbarron@glpdevelopment.com

331 Innovation Boulevard
Facility, parking lot and parking
lot expansion,
Part of the Innovation Park
Development
Year Completed: 2017

5. SCOPE OF WORK

GENERAL:

It is our understanding that Lycoming County, Pennsylvania (the County) is currently upgrading their radio frequency infrastructure at two sites: Hughesville and Hesker. The Lycoming County Scope of Work & Technical Specifications (SOW) indicate the sites in Hughesville and Hesker Hill may require site grading and land clearing to accommodate a proposed 250 feet tall radio tower, tower pad, and access road(s). The proposed Hughesville tower is located on a hilltop with dense vegetation and forest. The cleared tower pad for the Hughesville site will be approximately 100' x 100'.

The proposed Hesker site is in Jersey Shore, Pennsylvania, and is located on Hesker Hill in an area that appears to require only minimal vegetation clearing. The SOW for the Hesker site is similar to the Hughesville site. The Hesker Hill tower site will be approximately 60' x 60'.

ASSUMPTIONS:

1. Hughesville Water Authority Tower Site
 - a. Latitude: 41-15-16.18 N, Longitude: 76-43-16.45 W
 - b. 279 Reservoir Road, Hughesville, PA
 - c. Wolf Township, Lycoming County, PA
 - d. Plot size: 100' x 100'
 - e. 250' height tower
2. Hesker Hill Tower Site
 - a. Latitude: 41-14-19.1 N, Longitude: 77-14-35.1 W
 - b. 1324 Heskler Hill Road, Jersey Shore, PA
 - c. Piatt Township, Lycoming County, PA
 - d. Plot size: 60' x 60'
 - e. 250' height tower
3. Lycoming County will procure the sites and leases for the properties.
4. All plan review fees will be paid by Lycoming County and included in the cost proposal.
5. Drawings will be provided on 24" x 36" size in AutoCAD 2013 format and provided to Lycoming County. Drawing files will be provided in PDF format for documentation and printing.
6. L.R. Kimball will address agency comments regarding submissions.
7. L.R. Kimball and staff are licensed to perform the subject services in Pennsylvania and are not under investigation by a state board of registration.
8. An initial site visit is included in the project scope of work
9. FAA required filings will be performed.
10. FCC required filings will be performed.

ENGINEERING SERVICES:

Hughesville Water Authority Tower Site

Site Grading/Site Layout

L.R. Kimball will prepare site and grading plans for the new tower location, access drive, and pad for the proposed water tank. The access road is assumed to be approximately 12' wide and will need to be graded to protect the existing shallow water line. We will work with Lycoming County (County) to develop a layout that meets the needs of the County and the owner of the tower. The site plan will include compound details, provided by the owner of the tower, including fencing, electrical and communication service, pads for tanks, generators, and associated tower facilities. A lease area for the site will also be shown on the plans. Detailed tower drawings will be provided by the tower manufacturer.

Stormwater Drainage Design

We assume the disturbed acreage will exceed 1 acre based on the length of site access, the pad areas, and the potential slopes and elevation changes to tie to existing grade and protect the existing waterline. We will develop a stormwater management plan in accordance with Wolf Township Stormwater Management ordinance and PADEP Chapter 102 regulations. We will work with the County to located potential rain gardens and/or stormwater facilities.

Erosion/Sediment Control

Base on the assumption that the development will disturb more than 1 acre of land, we will prepare an Erosion and Sedimentation Control Plan and Details for the project. We will also prepare a Notice of Intent, Lycoming County Conservation District application, and associated Erosion and Sedimentation Control and Post Construction Stormwater Management forms and reports. We will also submit a PNDI form for endangered species in the area. If any endangered species are located, an additional service proposal will be submitted to address the species of concern. Infiltration testing will be conducted as part of the Geotechnical Investigation for the project.

Civil Permitting

L.R. Kimball will prepare a schedule of all land development submittals, and meeting dates related to the land development plan approval process and submit the schedule to the County.

L.R. Kimball will submit the land development plans, application, and associated correspondence to the Wolf Township for land development review. Two meetings total are assumed with the Wolf Township Planning Commission, Supervisors, or engineer. Should additional meetings be required, they will be billed as an additional service on an hourly rate basis. Agency review comments, received on the submission(s), will be addressed with plan re-submissions.

L.R. Kimball will submit an Erosion and Sedimentation Control Plan and Report to the Lycoming County Conservation District for review along with applicable applications and correspondence. Since the site will have more than one acre of earth disturbance, a General NPDES Permit will be required and prepared for the project. L.R. Kimball will address comments, as typically required. The Lycoming County Conservation District will require infiltration testing as part of the submission package. Infiltration testing will be performed by the Geotechnical Firm for the project.

L.R. Kimball will fill out a grading permit application, as applicable, for the project but it will likely need to be submitted by the contractor for the project.

This proposal does not include the preparation of a subdivision plan.

All application, submission, and review fees will be paid by the client and are included in the proposal fee under Deliveries, Copies, Etc (fees).

Should additional services for revisions or work outside of this Scope of Services be required, we will provide a scope of work and fee estimate for those services to the client. We will not commence additional services work until the additional services scope and fee estimate have been approved.

We assume that offsite stormwater design, highway design, studies, and/or associated permitting will not be needed for the project. If required, an additional services proposal will be developed.

This proposal does not include bidding or construction administration services or NPDES inspections or the processing of the Notice of Termination after construction.

This proposal does not include recording the land development plan within the Lycoming County Courthouse, if required.

This proposal does not include obtaining zoning related approvals for the project including, variances, re-zoning, conditional uses or special exceptions. All zoning related approvals will be handled by the County.

Geotechnical

1. Boring locations will be staked by L.R. Kimball survey crews with horizontal and vertical locations determined for each boring. Sufficiently prior to mobilizing to the project site to begin drilling, we will initiate the utility clearance for the site by contacting the Pennsylvania One-Call System (POCS). However, POCS will not generally clear lines on private property.

2. Once various clearances are obtained to proceed onto the site (One-Call, Owner permission, and no obstructions to access), we will mobilize one track-mounted drill rig and support vehicles to the site and drill three Geotechnical Borings within the proposed tower plot. The Geotechnical Borings will be advanced with hollow-stem augers/or drilled casing and Standard Penetration Testing (SPT) to a depth of 35 feet or auger refusal (whichever occurs first) at the discretion of the L.R. Kimball geologist in conjunction with our Geotechnical Engineer (Schnabel Engineering).

If bedrock is encountered before reaching the target depth of 35 feet, the Geotechnical Borings will be advanced beyond auger refusal at the discretion of the L.R. Kimball geologist. The Geotechnical Borings will be advanced a minimum of ten feet into sound rock (defined as recovery of 90% or better) using NQ2 wireline drilling methods, diamond bit, and water to flush cuttings from the boring. Borings will not be terminated in soft or loose soil/rock conditions.

Water levels in the borings will be measured after drilling and again after a duration of 24 hours or longer, if drillers are still on-site and it is safe to leave borings open.

3. For project budget estimate purposes, we assume approximately 113 feet of drilling; 36 feet of SPT sampling, 75 feet of rock coring, and 2 feet of unsampled auger for the four borings. SPT samples will be collected continuously to a depth of 10.5 feet, and then at 5-foot intervals to split-spoon/auger refusal. The infiltration boring will be sampled continuously to a depth of approximately 6 feet. Actual drilled footages may vary based on encountered subsurface conditions. In conjunction with the Geotechnical Engineer, depths and locations may be adjusted by L.R. Kimball based on conditions encountered during the subsurface exploration. Bag samples and undisturbed samples (Shelby Tubes) may be collected at our discretion, in addition to those requested in the project specifications. Soil portions of the borings will be backfilled with auger cuttings and rock core portions of the borings grouted.

4. L.R. Kimball will attempt to minimize site disturbance during drilling operations; however, some disturbance is inevitable when utilizing large drilling equipment. Restoration will be limited to backfilling the borings with auger cuttings/grout and back dragging the affected areas with the bulldozer blade and/or raking deep ruts created from movement of the drilling equipment to match existing conditions. Reseeding/revegetating costs to return affected areas to preexisting condition(s) are not included as part of this proposal.

5. L.R. Kimball will provide a qualified representative to oversee and direct site drilling, soil/rock sampling, and infiltration testing. While on-site, our representative will oversee exploration drilling activities, log borings, collect samples, and be the field liaison between L.R. Kimball's project manager, the drill crew, and the client.

6. Soil and rock samples collected will be returned to our laboratory for possible selection of samples for laboratory testing. We have included laboratory analysis including moisture content, grain size analysis, Atterberg limit tests, chemical analysis suite (corrosion), California Bearing Ratio (CBR), Standard Proctor, and compressive strength tests for rock. The actual laboratory testing schedule may be altered from that listed based on the subsurface conditions encountered during drilling. We anticipate that some correlation of data between borings will be applicable between similar materials found in borings within proximity to one another. Samples collected during our work will be stored at our Ebensburg storage facility for up to 6 months after submission of the Geotechnical Engineering Report, unless directed otherwise by Lycoming County.

The geotechnical scope of services presented herein was developed based on the SOW and email correspondence with L.R. Kimball. Our services will be performed under the supervision of a Professional Engineer licensed in the Commonwealth of Pennsylvania. The geotechnical engineering report deliverable will provide relevant information to the tower manufacturer to support their final foundation design. Our proposed scope includes:

- Develop a recommended lab testing program for samples from the borings.
- Review cross-sections developed by L.R. Kimball from the two borings and provide engineering parameters.
- Estimate subsurface conditions and groundwater levels within the area explored based on data collected in the subsurface exploration.
- Field resistivity survey results, including a location plan, and written discussion of the data collection methods, conditions encountered, and results. We will provide resistivity measurements of the soil, including results in both tabular and graphical format in a data report.
- Foundation recommendations for spread footings, including a net ultimate and allowable soil bearing pressure, bearing grades, estimated total and differential settlements, minimum dimensions, and frost depth.
- Foundation recommendations, including evaluation of various deep foundation alternatives. Preliminary deep foundation recommendations for feasible foundation systems, including a range of capacities.
- Foundation recommendations for drilled shafts, including ultimate side friction and end bearing values for compression and uplift for each soil or rock stratum encountered, and estimated tip or bearing grades, if necessary.
- Determine Seismic Site classification in accordance with IBC 2015 for use in foundation design.
- General earthwork recommendations for construction, including an assessment of on-site soils for use as fill and subgrade preparation.
- Evaluate corrosion potential and chemical attack to concrete.
- Construction considerations related to construction of shallow and/or deep foundations.

SCHEDULE: We estimate approximately six (6) days of drilling to complete the borings and infiltration testing. If our field crew encounters unexpected conditions that causes the drilling to exceed the six (6) days, units invoiced may increase. Laboratory testing will begin after the completion of drilling and testing could take up to four weeks depending on the quantity and type of tests scheduled. To meet project deadlines, we understand that a preliminary evaluation of the foundation types for the tower and building within a week or two after completion of the borings will be required. The Geotechnical Engineering Report will be provided within four weeks of drilling completion, assuming all laboratory testing is completed within a two-week timeframe.

STANDARD OF CARE: L.R. Kimball will perform our services using that degree of care and skill ordinarily exercised under similar conditions by reputable members of our profession practicing in the same or similar locality at the time of services. No warranty, expressed or implied, is made or intended by our proposal or by our oral or written reports.

Geotechnical Boring Stakeout

The boring locations will be staked to establish their location and surface elevation by field survey methods in conjunction with other field surveying activities for the project.

Construction Stakeout

Prior to construction, L.R. Kimball surveyors will provide construction stakeout for such features as the tower bases, fences, buildings, sidewalks, and access roads to the site. Two days of labor plus travel expenses have been estimated for each site. Construction stakeout that is necessary beyond two days per site will be charged at a daily rate.

Soil Resistivity Test

The SOW requests soil resistivity testing for the site. Plans for proposed soil resistivity testing locations were not provided at the time of this proposal; therefore, we will identify the location for the soil resistivity testing in accessible areas within the approximate vicinity of the site. Available geologic information indicates the proposed Hughesville Tower location is underlain by the Trimmers Rock Formation that consists of siltstone and shale.

Schnabel personnel will conduct soil resistivity testing in general accordance with the ANSI/IEEE Std 81-1983 and ASTM G57 using the Wenner four-electrode array. The SOW indicates that the length and spacing of the resistivity intervals should be every 30 feet out to 300 feet. Because the specific "a" spacings are not defined, we recommend "a" spacings of 5, 15, 30, 60, 90, 120, 150, 180, 210, 240, 270, and 300 feet. We will conduct measurements along two of the arrays that will be oriented approximately perpendicular to each other, or at angles as space allows.

We have considered that we will be able to hammer the electrodes into the soil with hand tools, and that there is not pavement or shallow obstructions in the proposed soil resistivity testing areas. The locations of the arrays and the electrode spacings will be adjusted while on site to avoid transmission lines, underlying storage facilities, underground utilities, or other obstructions. We will record endpoints and center points of the arrays using a GPS unit with sub-meter accuracy. For purposes of this proposal, we have considered one day on site for the resistivity data testing.

It should be noted that the effectiveness of geophysical methods in subsurface investigations is dependent on many environmental factors such as stray electrical currents, cultural features, soil saturation conditions, and known or unknown buried utilities. Results from these methods may vary depending on actual site conditions. Our services will be performed under the supervision of a Professional Geologist licensed in the Commonwealth of Pennsylvania.

Preliminary and Final Construction Drawings

Once a conceptual site plan, is agreed upon by the County and Tower owner, L.R. Kimball will prepare plans, reports, and other documents in accordance with the requirements of Wolf Township. In general, the plans and other documents will include the following:

1. Civil Cover Sheet
2. Existing Conditions Plan
3. Site Plan - the initial site plan will be developed with the Site Grading/Site Layout Phase
4. Site Grading Plan- the initial site plan will be developed with the Site Grading/Site Layout Phase
5. Site Utility Plan - Includes electrical and communication service and potential revisions to the existing water line
6. Erosion and Sedimentation Control Plan and Details- the initial Erosion and Sedimentation Control plans and details will be developed with the Erosion/Sediment Control Phase
7. Construction Details
8. Electrical and Communication Site Plan and Details

L.R. Kimball will incorporate regulatory review comments, tower owner/County comments, and QA/QC comments into the construction document plan set.

Utility Coordination

L.R. Kimball will prepare a Design One Call that will augment the One Call established with the surveying operations. L.R. Kimball will send letters, as appropriate, to the utility companies affected with the project along with a letter to the communication and electrical companies requesting confirmation of the availability or location and capacity of required utilities based on utility demands. An easement plat will be developed for the electrical or communications extension, if required.

Extension of electrical and communication facilities to the tower site will be coordinated with the utility companies and the required facilities will be included on construction plans along with construction details for the required construction. It is assumed that the tower company and building designer will provide the necessary electrical loads and communication requirements.

Zoning Information

The County will perform all zoning functionality for the two tower sites so no work associated with zoning is included in this proposal. The zoning information including zoning district, set-backs, lot sizes, existing and proposed use and other required information will be provided on the drawings for agency submission.

FAA/FCC

FAA Form 7460 Notice to Construct will be prepared along with necessary attachments and submitted to the FAA for their review and approval. Comments received will be addressed. FAA requirements for lighting and painting will be provided to the owner for communication to the tower company.

L.R. Kimball will provide a 2C letter accurate within the FAA Horizontal Accuracy Code 2, (+/- 50 feet) and the elevation provided is accurate within FAA Vertical Accuracy Code C, (+/- 20 feet). This letter will be provided after the towers are erected when L.R. Kimball surveyors can return to each site and verify the height and elevation of each tower.

FCC form 660 will be prepared along with required information and submitted to the FCC for their review and approval. Comments received will be addressed.

SURVEYING SERVICES – Field Surveying/Courthouse Research

For the Hughesville Water Authority Tower site, L.R. Kimball will provide field surveying and survey related office work. L.R. Kimball intends to verify the metes and bounds of the parent parcels for each lease area by performing deed research and attempting to locate several property corners for each parent parcel. We do not intend to conduct a complete boundary survey, but rather, gather enough information to determine if the parcel boundaries are as described in the available deeds. As per the information contained in Addendum #3, question #16, we do intend to survey the lease areas, provide a written description of the lease areas, and mark the corners with iron pins and caps.

From the information gained through deed research and GPS field surveys, we will orient the boundaries for each parent parcel and show any easements and/or rights-of-way that we discover. The existing easements and rights-of-way will be shown graphically on the map(s) and will also be described as per the deed. Likewise, proposed lease parcels and proposed easements will also be shown if the information is provided to L.R. Kimball. All legal names and widths of any adjoining streets or dedicated public rights of way shall be shown. The survey map will include a North Arrow showing deed bearing north, magnetic north and geographic true north.

All tax maps, blocks and lot numbers and the deed book and page numbers will be researched using publicly available data and shown for the parent parcels and adjoining parcels within 100 feet.

The location and description of all structures, including abandoned structures, within 50 feet of the proposed site will be shown.

The location and description of visible and accessible above ground utilities including power and telephone poles, overhead wires, wells, pipes, valves, and towers will be located and shown. L.R. Kimball will place a OneCall and collect the marked underground utilities that exist within 25 feet of the proposed construction area. These utilities will be collected and shown on the map. The utility companies or other owners will be labeled and shown if that information is available.

The corners of the proposed lease parcels and easements will be monumented with iron pins not less than 18 inches in length and 1" in diameter. Elevations shall be field measured and shown to within 1.0 feet of the NAVD 88 datum when not in a special flood hazard zone. Where a particular benchmark is used as the starting point, its description, location and elevation will be noted on the drawing. If no benchmarks are found in the area, a new and permanent benchmark shall be set in the immediate vicinity of the proposed new construction and shown on the map.

L.R. Kimball will provide ground-surveyed topographic coverage that will include the surrounding area within 100 feet of the proposed lease area for each site. Access and utility easements will be shown. Where the terrain has a slope of 6% or more, a profile of the access easement centerline will be surveyed and shown on the map. Contours with a 2-foot vertical interval will be shown over the full area of coverage.

Survey Plan

The survey plan will include a title block that will contain L.R. Kimball information and other appropriate data. The survey plan scale shall be 1"=20' or 1"=30' and 24" x 36" in size. A key map at a scale of 1"=2000' will be included in the area designated on the standard drawing format sheet (upper right-hand corner) and will consist of a reproduction of the U.S.G.S. 7.5-minute quadrangle map with the site location noted in heavy outline and circled for clarity.

The original drawings will bear the signature of the supervising Professional Land Surveyor.

Environmental Investigation

No additional environmental investigations are anticipated beyond those specifically included in the scope of work.

Infiltration Testing

In conjunction with the Geotechnical drilling one Infiltration Boring for the purpose of an infiltration test, utilizing the Maryland Method D procedures consistent with Pennsylvania Department of Environmental Protection Best Management Practices, will be conducted within the proposed site plot to evaluate potential soil infiltration. The Infiltration Basin Boring will be advanced using hollow-stem augers and continuous SPT to a depth of approximately 6 feet, to evaluate subsurface conditions for the presence of limiting zones (shallow groundwater or bedrock). If no limiting zones are encountered, a 5-inch, inside-diameter casing will be installed in an unsampled, offset boring drilled to a depth of approximately 2 feet, and the infiltration test conducted. A 24-hour presoak period will be required prior to performing the infiltration test.

Wetland and Stream Delineation

The scope will include an on-site field investigation and documentation of field findings including mapping. The area to be investigated is approximately 1 acre in size. The purpose of the wetland and surface water investigation is to determine the presence/absence and the extent of palustrine wetland(s) and surface waters that are suspected of being present in this vicinity. Following the completion of the field investigation, a report will be prepared which summarizes the findings of the field investigation.

The following items are not included with this proposal:

- Jurisdictional Determination
- Wetland functions and values assessment
- Detailed stream assessments
- Water obstruction and encroachment pre-application permit meeting with applicable agencies
- Water obstruction and encroachment permit application
- Detailed threatened and endangered species, and cultural resource surveys
- Wetland mitigation sighting, design, construction and monitoring
- Stream mitigation sighting, design, construction and monitoring

Field Investigation: The wetland and surface waters field investigation will be conducted within the noted area of interest. If wetland systems extend outside of the area of interest, they will be denoted as open-ended and will not be delineated beyond these extents. Wetland boundaries will be delineated in accordance with the USACOE Wetland Delineation Manual (1987), Routine On-Site Determination Methodology and the USACOE Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont (Version 2.0) (April 2012). Wetland systems will be classified in accordance with the US Fish and Wildlife Service Classification of Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979). Wetland data sheets and representative wetland photographs will be collected. Upland data sheets will also be completed to identify the wetland / upland boundary.

Perennial and intermittent streams found during the wetland investigation will be classified through visual observations of physical habitat characteristics and aquatic life forms as defined by the Pennsylvania Department of Environmental Protection (PADEP) Chapter 87 Surface Mining of Coal guidelines. The ordinary high-water mark of intermittent and perennial streams

will be identified in accordance with the US Army Corps of Engineers Regulatory Guidance Letter No. 05-05 Ordinary High Water Mark Identification (2005). The presence of ephemeral streams will also be identified utilizing this guidance. Information regarding the stream management classifications and critical usage according to PA Code Title 25, Chapter 93 Water Quality Standards and Pennsylvania Fish and Boat Commission listed wild and trout stocked stream limits will be provided. Results of the investigation will be presented within the Wetland and Surface Waters Findings Letter Report.

Wetland boundaries will be visually delineated in the field with surveyors flagging. The coordinates of the delineated wetland boundaries and recorded sample points will be fixed with the use of a Trimble PathFinder[®] Global Positioning System (GPS) unit during the wetland delineation. For estimate purposes, we anticipate satellite reception will be possible at the time of the delineation. After the GPS locations are secured in the field, the survey data will be differentially corrected and placed onto the digital base mapping utilizing Trimble Pathfinder Office.

Wetland and Surface Waters Report

The Wetland and Surface Waters Findings Report will include a Project description, individual wetland and surface water descriptions, wetland and upland data forms, and photographs. L.R. Kimball will prepare and submit one (1) copy of the memo to the client for recordation.

Mapping depicting Waters of the United States will be completed under this task. This mapping will indicate the area of investigation, photograph locations and the location of identified resources. The purpose of the mapping is to allow for avoidance of any identified resources and/or indicate potential impacts.

Project Management

Activities included under this task include coordination with project managers and clients as necessary. Quality Assurance/Quality Control of all field procedures and outgoing documents is also included under this task.

Phase 1 Investigation and Report

L.R. Kimball will conduct the Phase I Environmental Site Assessment in accordance with Environmental Protection Agency (EPA) 40 CFR Part 312 Standards and Practices for All Appropriate Inquiries and the basic elements of the ASTM E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Process as well as consideration and/or identification of "business environmental risk issues" as defined in ASTM E1527-13. All activities will be conducted under the direct supervision of an Environmental Professional.

The intent of a Phase I ESA is to identify, to a feasible extent dictated by the methodologies, recognized environmental conditions connected to the subject property. The Scope of Services that comprise a Phase I ESA includes four major components:

- **Records Review** – Review of available background information and records from applicable Federal, State, and Local sources, as well as property owner records.
- **Site Reconnaissance** – Assessment of the present use and conditions at the site by physical and visual observation made during a site visit. Also includes photo-documentation.
- **Interviews** – Conduct interview(s) with property owner and/or representatives, and neighbors of adjoining properties.
- **Report** – Preparation and submission of a Phase I Report which presents acquired data, conclusions, and opinions of the Site's environmental condition.

L.R. Kimball will review the pertinent information applicable to the subject property. Typically, records of interest may include, but are not limited to:

- Aerial photographs (historical and current)
- Maps (street, topographic, hydrogeology, etc.)
- Legal descriptions
- Environmental lien search
- Permits and permit applications
- Engineering design reports and drawings (new construction, alteration, and repair projects)
- Regulatory compliance history
- Sanborn Fire Insurance maps
- Environmental survey reports

L.R. Kimball will review surrounding land use within the ASTM required minimum search distances. We will also obtain and review available public records including Federal and state databases. The extent of this effort will be directly dependent on the availability and location of the records.

L.R. Kimball will visit the site with the prior permission of the current owner(s) and will interview the site owner(s) or other authorized representatives. L.R. Kimball will also inspect the site for visible evidence of potential environmental issues. On-site information to be gathered includes:

- Current and former activities on the site
- Specialized knowledge or experience on the part of previous or current owners
- General description of structures, utilities (water, sewer, power, etc.), and roadways
- Current and former space usage, manufacturing processes, environmental controls
- Drinking water supply
- Waste disposal

L.R. Kimball will look for visible evidence of:

- Soil, surface water, or air contamination
- Waste and regulated material storage, evidence of spillage, or on-site disposal
- Hazardous material storage or spillage
- Underground/Aboveground storage tanks
- Pesticide and herbicide usage along with stressed vegetation

Adjacent sites will be visually inspected, from a vantage point on the project site or public right-of-way, for evidence of observable or potential environmental problems that may affect the project site, such as:

- Outside waste storage
- Outside material storage
- Maintenance areas
- Water supplies and water users
- Discharge points
- Interviews with landowners (if the adjacent landowners are not available at the time of the site visit several attempts will be made to contact them via phone).

At the conclusion of the site visit, findings may be verbally reported, if requested. A written report will then be prepared. The report will provide documentation describing the Phase I ESA process, the findings, and the conclusions/recommendations.

The components of the Phase I ESA Report will, at a minimum, include:

- Summary of applicable information reviewed
- A listing of observations noted and information collected from the assessment
- Findings including potential environmental concerns associated with various site features or conditions
- Business environment risk considerations
- Background information
- Recommendations with industry resources and knowledge to estimate any and all remediation and/or other environmental costs or environmental liability associated with recognized environmental concerns that have impacted the property.

L.R. Kimball proposes to submit an electronic copy (.pdf file) of the Draft Phase I ESA to Lycoming County for review and comment. Upon approval, L.R. Kimball will submit one electronic copy of the Final Phase I ESA Report to the client.

We assume that the site visit for the Phase I ESA for this property will be conducted concurrently (one mobilization) with the site visit for the Phase I ESA for the Hesker Hill Tower Site.

Hearing Attendance (If Needed)

A representative knowledgeable with the project will be available to attend a hearing as needed.

Phase 2 Investigation and Report (If Needed)

L.R. Kimball is pleased to present a scope of work and cost estimate for conducting a Phase II Environmental Site Assessment (ESA) at a site located at 279 Reservoir Road, Hughesville, PA, referred to as the Hughesville Water Authority Hill Tower Site. This site contains approximately 0.25 Acres. Review of the aerial imagery of the site indicates that the proposed tower site is located atop a steep ridge dominated by undisturbed woodland vegetation and heavy timber.

It is our belief that environmental concerns associated with this site would be unlikely, but may include but not limited to, surface releases of petroleum products (motor fuels and lubricating oils) associated with historic logging operations or ATVs passing through the area. Based to the location of the site in relation to surface water bodies and the elevation of the site, it is unlikely that groundwater and/or surface water impacts would be realized at the site. Therefore, this Phase II ESA proposal is limited to assessing surface soils within two feet of ground surface at the site.

The following are assumptions upon which our proposed scope of work is based:

- Results of the Phase I ESA will dictate if a Phase II ESA is warranted, and if so, the nature and complexity of Phase II ESA activities.
- Lycoming County representatives are responsible for providing access to the site during Phase II ESA investigation activities, (if required).
- Phase II activities will be limited to sampling of surface soil within the proposed tower plots.
- Sampling of groundwater or other media (bedrock, surface water, etc.) will not be warranted.
- Investigations associated with historical or archeological sites, and wetlands are not part of this work.

The information contained in this section represents our understanding of the project and is an important part of the scope we have developed for this project. If our understanding is incorrect, or if additional information is available, we should be given the opportunity to review our proposed scope in light of the new information. Results of the Phase I ESA will be used to determine if Phase II ESA activities are warranted for this site.

Phase 2 Environmental Site Assessment Scope: L.R. Kimball will conduct the Phase II Environmental Site Assessment in accordance with Pennsylvania Department of Environmental Protection Technical Guidance Documents. All activities will be conducted under the direct supervision of a licensed Pennsylvania Professional Geologist.

The intent of a Phase II ESA is to confirm, sample, and assess recognized and/or potential environmental conditions connected to the subject property, based on the results of the Phase I ESA. The Scope of Services that comprise a Phase II ESA includes two major components:

- *Site Investigation* – Assessment of the present use and conditions at the site by physical and visual observation made during a site visit conducted during Phase I ESA activities followed by intrusive sampling activities to evaluate the potential for environmental impacts to various media which may have been affected by past or current usage of the property.
- *Report* – Preparation and submission of a Phase II Report which presents observations made during sampling activities, results of laboratory analysis of soil, conclusions, and opinions of the Site's environmental condition.

Sample locations will be located in the field by measuring from known reference points by L.R. Kimball personnel on the day of sampling or by use of hand-held GPS equipment.

1. Once various clearances are obtained to proceed onto the site (Owner permission, and no obstructions to access), we will mobilize and select two sampling locations covering the area to provide a general overview of surface and shallow subsurface (less than two feet) soil conditions, as determined by the finding of the Phase I ESA. The observed presence of suspected contaminated surface materials will dictate the actual depths at which the samples are collected.
2. Soil samples will be collected using clean, decontaminated hand augers or shovels. Samples soils will be screened with a photoionization detector (PID) for the presence of volatile organic compounds. The soils will also be inspected for possible indications of contamination including visible staining, petroleum product, cinders/ash, discoloration, or odors. One soil sample from each selected sampling location (for a total of two soil samples) will be collected from the interval producing the highest PID readings, or visible indicators of suspected contamination, and packaged in laboratory supplied bottles. If no PID readings or visible indicators or contamination are identified, the selected soil sample will be collected from the interval between the ground surface and 0.5' below ground surface. The soil samples will be labeled and placed into an iced chest cooled to 4°C. The samples will be maintained by L.R. Kimball personnel under strict Chain of Custody protocols until relinquished to the analytical laboratory for testing.
3. L.R. Kimball will provide a qualified representative to conduct soil sampling. While on-site, our representative will screen the recovered soils using a PID, log soil sampling locations, collect samples, and be the field liaison between L.R. Kimball's project manager and the client.
4. Two soil samples collected from the selected sampling locations, along with one trip blank, will be returned to our subcontract laboratory for analysis of PADEP Leaded and Unleaded Gasoline/Diesel Fuel/Lubricating Oil/Used Motor Oil parameters, Herbicides and Pesticides. The trip blank will accompany the empty sample bottles from the laboratory to the job site and return with the filled bottles to the laboratory. The trip blank will be analyzed for volatile organic compounds to ensure that the samples bottles were not compromised during transport to the site to returning to the lab.

Construction Stakeout

Prior to construction, L.R. Kimball surveyors will provide construction stakeout for such features as the tower bases, fences, buildings, sidewalks, and access roads to the site. Two days of labor plus travel expenses have been estimated for each site. Construction stakeout that is necessary beyond two days per site will be charged at a daily rate.

Soil Resistivity Test

The SOW requests soil resistivity testing for the site. Plans for proposed soil resistivity testing locations were not provided at the time of this proposal; therefore, we will identify the location for the soil resistivity testing in accessible areas within the approximate vicinity of the site. Available geologic information indicates the proposed Hesker Hill Tower location is underlain by the Trimmers Rock Formation that consists of siltstone and shale.

Schnabel personnel will conduct soil resistivity testing in general accordance with the ANSI/IEEE Std 81-1983 and ASTM G57 using the Wenner four-electrode array. The SOW indicates that the length and spacing of the resistivity intervals should be every 30 feet out to 300 feet. Because the specific "a" spacings are not defined, we recommend "a" spacings of 5, 15, 30, 60, 90, 120, 150, 180, 210, 240, 270, and 300 feet. We will conduct measurements along two of the arrays that will be oriented approximately perpendicular to each other, or at angles as space allows.

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Preliminary and Final Construction Drawings

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SURVEYING SERVICES – Field Surveying/Courthouse Research

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Wetland boundaries will be visually delineated in the field with surveyors flagging. The coordinates of the delineated wetland boundaries and recorded sample points will be fixed with the use of a *Trimble PathFinder™* Global Positioning System (GPS) unit during the wetland delineation. For estimate purposes, we anticipate satellite reception will be possible at the time of the delineation. After the GPS locations are secured in the field, the survey data will be differentially corrected and placed onto the digital base mapping utilizing *Trimble Pathfinder Office*.

Wetland and Surface Waters Report

The Wetland and Surface Waters Findings Report will include a Project description, individual wetland and surface water descriptions, wetland and upland data forms, and photographs. L.R. Kimball will prepare and submit one (1) copy of the memo to the client for recordation.

Mapping depicting Waters of the United States will be completed under this task. This mapping will indicate the area of investigation, photograph locations and the location of identified resources. The purpose of the mapping is to allow for avoidance of any identified resources and/or indicate potential impacts.

Project Management

Activities included under this task include coordination with project managers and clients as necessary. Quality Assurance/Quality Control of all field procedures and outgoing documents is also included under this task.

Phase 1 Investigation and Report

L.R. Kimball will conduct the Phase I Environmental Site Assessment in accordance with Environmental Protection Agency (EPA) 40 CFR Part 312 *Standards and Practices for All Appropriate Inquiries* and the basic elements of the ASTM E1527-13 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Process* as well as consideration and/or identification of "business environmental risk issues" as defined in ASTM E1527-13. All activities will be conducted under the direct supervision of an Environmental Professional.

L.R. Kimball will look for visible evidence of:

- Soil, surface water, or air contamination
- Waste and regulated material storage, evidence of spillage, or on-site disposal
- Hazardous material storage or spillage
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Adjacent sites will be visually inspected, from a vantage point on the project site or public right-of-way, for evidence of observable or potential environmental problems that may affect the project site, such as:

- Outside waste storage
- Outside material storage
- Maintenance areas
- Water supplies and water users
- Discharge points
- Interviews with landowners (if the adjacent landowners are not available at the time of the site visit several attempts will be made to contact them via phone).

At the conclusion of the site visit, findings may be verbally reported, if requested. A written report will then be prepared. The report will provide documentation describing the Phase I ESA process, the findings, and the conclusions/recommendations.

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- A listing of observations noted and information collected from the assessment
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- Business environment risk considerations
- Background information
- Recommendations with industry resources and knowledge to estimate any and all remediation and/or other environmental costs or environmental liability associated with recognized environmental concerns that have impacted the property.

L.R. Kimball proposes to submit an electronic copy (.pdf file) of the Draft Phase I ESA to Lycoming County for review and comment. Upon approval, L.R. Kimball will submit one electronic copy of the Final Phase I ESA Report to the client.

We assume that the site visit for the Phase I ESA for this property will be conducted concurrently (one mobilization) with the site visit for the Phase I ESA for the Hughesville Water Authority Tower Site.

Hearing Attendance (if Needed)

A representative knowledgeable with the project will be available to attend a hearing as needed.

Phase II Investigation and Report (If Needed)

L.R. Kimball is pleased to present a scope of work and cost estimate for conducting a Phase II Environmental Site Assessment (ESA) at a site located at 1324 Hesker Hill Road, Jersey Shore, PA, referred to as the Hesker Hill Tower Site. This site contains approximately 0.13 Acres. Review of the aerial imagery of the site indicates that the proposed tower site is located within an undeveloped agricultural field.

It is our belief that environmental concerns associated with this site may include, but not limited to, surface releases of petroleum products (motor fuels and lubricating oils) associated with farm machinery and the use of pesticides and herbicides within the agricultural fields surrounding the proposed site. Due to the location of the site in relation to surface water bodies and the elevation of the site, it is unlikely that groundwater and/or surface water impacts would be realized at the site. Therefore, this Phase II ESA proposal is limited to assessing surface soils within two feet of ground surface at the site.

The following are assumptions upon which our proposed scope of work is based:

- Results of the Phase I ESA will dictate if a Phase II ESA is warranted, and if so, the nature and complexity of Phase II ESA activities.
- Lycoming County representatives are responsible for providing access to the site during Phase II ESA investigation activities, (if required).

Phase II activities will be limited to sampling of surface soil within the proposed tower plots. Sampling of groundwater or other media (bedrock, surface water, etc.) will not be warranted. Investigations associated with historical or archeological sites, and wetlands are not part of this work.

The information contained in this section represents our understanding of the project and is an important part of the scope we have developed for this project. If our understanding is incorrect, or if additional information is available, we should be given the opportunity to review our proposed scope in light of the new information. Results of the Phase I ESA will be used to determine if Phase II ESA activities are warranted for this site.

Phase II Environmental Site Assessment Scope: L.R. Kimball will conduct the Phase II Environmental Site Assessment in accordance with Pennsylvania Department of Environmental Protection Technical Guidance Documents. All activities will be conducted under the direct supervision of a licensed Pennsylvania Professional Geologist.

The intent of a Phase II ESA is to confirm, sample, and assess recognized and/or potential environmental conditions connected to the subject property, based on the results of the Phase I ESA. The Scope of Services that comprise a Phase II ESA includes two major components:

- Site Investigation* – Assessment of the present use and conditions at the site by physical and visual observation made during a site visit conducted during Phase I ESA activities followed by intrusive sampling activities to evaluate the potential for environmental impacts to various media which may have been affected by past or current usage of the property.
- Report* – Preparation and submission of a Phase II Report which presents observations made during sampling activities, results of laboratory analysis of soil, conclusions, and opinions of the Site's environmental condition.

Sample locations will be located in the field by measuring from known reference points by L.R. Kimball personnel on the day of sampling or by use of hand-held GPS equipment.

1. Once various clearances are obtained to proceed onto the site (Owner permission, and no obstructions to access), we will mobilize and select two sampling locations covering the area to provide a general overview of surface and shallow subsurface (less than two feet) soil conditions, as determined by the finding of the Phase I ESA. The observed presence of suspected contaminated surface materials will dictate the actual depths at which the samples are collected.
2. Soil samples will be collected using clean, decontaminated hand augers or shovels. Samples soils will be screened with a photoionization detector (PID) for the presence of volatile organic compounds. The soils will also be inspected for possible indications of contamination including visible staining, petroleum product, cinders/ash, discoloration, or odors. One soil sample from each selected sampling location (for a total of two soil samples) will be collected from the interval producing the highest PID readings, or visible indicators of suspected contamination, and packaged in laboratory supplied bottles. If no PID readings or visible indicators or contamination are identified, the selected soil sample will be collected from the interval between the ground surface and 0.5' below ground surface. The soil samples will be labeled and placed into an iced chest cooled to 4°C. The samples will be maintained by L.R. Kimball personnel under strict Chain of Custody protocols until relinquished to the analytical laboratory for testing.

3. L.R. Kimball will provide a qualified representative to conduct soil sampling. While on-site, our representative will screen the recovered soils using a PID, log soil sampling locations, collect samples, and be the field liaison between L.R. Kimball's project manager and the client.
4. Two soil samples collected from the selected sampling locations, along with one trip blank, will be returned to our subcontract laboratory for analysis of PADEP Leaded and Unleaded Gasoline/Diesel Fuel/Lubricating Oil/Used Motor Oil parameters, Herbicides and Pesticides. The trip blank will accompany the empty sample bottles from the laboratory to the job site and return with the filled bottles to the laboratory. The trip blank will be analyzed for volatile organic compounds to ensure that the samples bottles were not compromised during transport to the site to returning to the lab.
5. L.R. Kimball personnel will prepare a report to document the methodologies employed in the field for during collection of the soil samples, provide an overview of published geologic information for the site, provide observations made during the sampling activities, provide sample logs with PID readings of the recovered soil samples, provide a sample location map using existing site mapping, present results of the laboratory testing, provide a discussion of the laboratory results in comparison to Pennsylvania Department of Environmental Protection (PADEP) criteria, provide photographs of the investigation activities, and to present conclusions and recommendations of additional investigations, if warranted. The report will be presented in electronic .pdf format.

STANDARD OF CARE: L.R. Kimball will perform our services using that degree of care and skill ordinarily exercised under similar conditions by reputable members of our profession practicing in the same or similar locality at the time of services. No warranty, expressed or implied, is made or intended by our proposal or by our oral or written reports.

NEPA/SHPO Services

HAI will assist L.R. Kimball in preparing the required SHPO Project Notification Form and with any necessary coordination with those agencies.

Archaeology: Per federal and state guidelines, the area of potential effects (APE) for each tower site will be the footprint of anticipated ground disturbing activities, the roughly 0.25 acre tower site and the access road. Within this area HAI will complete Phase I archaeological survey to SHPO guidelines (PHMC 2017). We anticipate the placement of 50 cm shovel test pits (STPs) at 15-25 m (50-82 ft) intervals at the tower site and along the access road. Each STP will be excavated through the A horizon at least 10 cm into the B horizon of the upland soils present at each of the tower sites. All excavated soil will be passed through 0.25 in mesh hardware cloth to facilitate artifact recovery. All STP locations will be located with GPS units and plotted on appropriate mapping.

The results of the survey will be presented in a report meeting the standards of the SHPO (PHMC 2017). If archaeological sites are found, they will be reported on Pennsylvania Archaeological Site Survey (PASS) forms and summarized and evaluated in the report, with recommendations regarding their significance and the need, if any, for avoidance or further studies.

Above-Ground Historic Resource Studies: HAI will perform identification and evaluation studies for above-ground historic properties in accordance with the FCC Nationwide Programmatic Agreement (September 2004) and the SHPO's Guidelines for Projects with Potential Visual Effects in Pennsylvania (April 2020). Based on the Programmatic Agreement and SHPO Guidelines, proposed communications towers with a height of 200-400 feet should have an initial APE for visual effects with a radius of .75-mile from the tower site. The APE can later be refined through view shed analysis that takes topography and vegetation into account.

The above-ground resource studies will be performed in three phases. The first phase will include: 1) examination of the SHPO's CRGIS database to identify previously-recorded historic properties within the initial APE; 2) comparison of current and historic aerial photos to assess potential for a rural historic district; 3) completion of background research and field survey to identify and document all properties over 50 years old; 4) preparation of abbreviated survey forms (or equivalent CRGIS data entry) for properties that are more than 50 years old; and 5) preparation of an identification/reconnaissance report that contains a map of the APE, aerial mapping of the towers and identified resources, and photographs of the APE and any

previously recorded resources. Following the completion of the first phase, HAI will consult with the SHPO to review the results and determine the need for additional more detailed survey. During the second phase, any properties that warrant further study because of the project's potential to affect their significance will be documented on Pennsylvania Historic Survey forms (or equivalent CRGIS data entry). In the third phase HAI will assess project effects on any National Register eligible properties within the refined APE.

Deliverables will include PDFs and two paper copies (if required) of the following:

- an identification/reconnaissance report which covers both towers;
- abbreviated survey forms (or equivalent CRGIS data entry) for properties in the APE over 50 years old (assume a combined total of 40 forms);
- Pennsylvania Historic Survey forms (or equivalent CRGIS data entry) for selected properties (assume a combined total of 3 forms).
- a criteria of effect report for any National Register-eligible properties in the refined APE.

Deliveries, Copies, Etc. (fees)

Copies of drawings and report, delivery fees, permit and review fees as well as some expenses are included in this cost item.

6. REQUIRED FORMS

The following pages contain the additional completed required forms based on the RFP requirements.

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal Surveying and Engineering for Hughesville Water Authority Tower Site and Hesker Hill Tower Site

State of Pennsylvania

County of Cambria

I state that I am Vice President (Title) of CDI-Infrastructure, LLC dba L.R. Kimball (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. CDI-Infrastructure, LLC dba L.R. Kimball (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

N/A

I state that CDI-Infrastructure, LLC dba L.R. Kimball (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

A statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: Edward J. Jones, PE
Signature: *Edward J. Jones*
Title Vice President

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 18th DAY
OF August, 2020

Rosemarie E. Brennen
Notary Public

My Commission Expires: August 17, 2024

Commonwealth of Pennsylvania - Notary Seal
Rosemarie E. Brennen, Notary Public
Cambria County
My commission expires August 17, 2024
Commission number 1209404
Member, Pennsylvania Association of Notaries

EXCEPTION FORM

Section Number	Explanation
	<p>CDI-Infrastructure, LLC dba L.R. Kimball representatives have reviewed the request for proposal thoroughly. Upon selection, L.R. Kimball requests the opportunity to negotiate mutually beneficial terms and conditions.</p>

Price Proposal

For

Hughesville Water Authority Tower Site & Hesker Hill Tower Site

Prepared for: Lycoming County

Submitted by: R K Webster, LLC

Total Estimated Cost (Including Subconsultants)

Hughesville Water Authority Tower Site Subtotal (including subconsultants)	\$84,738.00
Hesker Hill Tower Site Subtotal (including subconsultants)	<u>\$65,862.00</u>
Grand Total Lump Sum Engineering Fee	\$150,600.00

A detailed breakdown by task is shown below using the Price Proposal table of Cost Elements provided in the RFP.

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	\$5,456
Stormwater Drainage Design	\$7,712
Erosion/Sediment Control	\$3,764
Civil Permitting*	\$7,712
Geotechnical	\$8,880
Geotechnical Boring Stakeout	\$846
Construction Stakeout	\$2,632
Soil Resistivity	\$4,000
Preliminary and Final Construction Drawings (CDs)	\$7,666
Utility Coordination	\$3,888
Zoning Information	\$2,256
FAA/FCC	\$470
Field Surveying/Courthouse Research	\$5,764
Survey Plans	\$1,188
Environmental Investigation	\$2,450
Infiltration Testing	\$3,384
Wetlands/Stream Delineation	\$900
Phase 1 Investigation and Report	\$3,200
Hearing Attendance (If Needed)	\$2,320
Phase 2 Investigation and Report (If Needed)	\$3,900
NEPA/SHPO Services	\$4,000
Deliveries, Copies, Etc.	\$2,350
SUBTOTAL FOR HUGHESVILLE	\$84,738

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	\$3,292
Stormwater Drainage Design	\$4,640
Erosion/Sediment Control	\$2,884
Civil Permitting*	\$2,320
Geotechnical	\$8,880
Geotechnical Boring Stakeout	\$658
Construction Stakeout	\$1,692
Soil Resistivity	\$4,000
Preliminary and Final Construction Drawings (CDs)	\$5,410
Utility Coordination	\$3,888
Zoning Information	\$2,256
FAA/FCC	\$470
Field Surveying/Courthouse Research	\$4,352
Survey Plans	\$1,000
Environmental Investigation	\$2,450
Infiltration Testing	\$2,192
Wetlands/Stream Delineation	\$900
Phase 1 Investigation and Report	\$3,200
Hearing Attendance (If Needed)	\$1,128
Phase 2 Investigation and Report (If Needed)	\$3,900
NEPA/SHPO Services	\$4,000
Deliveries, Copies, Etc.	\$2,350
SUBTOTAL FOR HESKER HILL	\$65,862
GRAND TOTAL FOR BOTH SITES	\$150,600

The undersigned, as Bidder, hereby declares that the total project costs as indicated above, includes all necessary work to complete this project in full according to the general specifications contained in the RFP. Products and services not specifically mentioned, but are necessary to provide the functional capabilities shall be listed and included as part of the cost elements.

The undersigned further understands and agrees that if the County accepts the bid, no additional funds will be allowed beyond the stated total project costs.

Company Name: R K Webster, LLC

Address: 513 Jordan Avenue Montoursville, PA 17754


Point of Contact: Randall K. Webster, P.E.

Phone Number: (570) 435-3489

Fax Number: N/A

Email Address: rwebster@rkwebster.com

Name of person submitting proposal: Randall K. Webster, P.E.

Signature: 

Date: 8/21/2020

Project Reimbursable Permit & Application Fees

Section 5, subsection *Miscellaneous A. Expenses* requests a list of all reimbursable expenses in addition to the Lump Sum Engineering cost. This section addresses the need to satisfy various application, permit, and review fees that will be required for the project.

Description	Issuing Agency	Approximate Fees		Remarks
		Hughesville Tower Site (NPDES)	Hesker Hill Tower Site (E&S Plan only)	
E&S Plan and/or NPDES Permit	PA DEP/Lycoming County Conservation District	\$400	\$250	NPDES Permit Required for >1 Acre of earth Disturbance
		\$500	n/a	E&S Plan Review Fee
		\$500	n/a	General NPDES Permit Fee
		\$600	n/a	Disturbed Acre Fee
Zoning Variance	Wolf Township	\$600	n/a	Fee required to advertise for, and hold the zoning hearing.
Special Exception	Lycoming County Planning Commission	n/a	\$300	
Land Development Application Fee	Lycoming County	\$35	\$35	
Land Development Application Fee	Wolf Township	\$200	n/a	Escrow required up front to cover all fees.
Engineer's Review	Wolf Township	\$2,500	--	Escrow required up front to cover all fees; Township Engineer; Dan Vassallo, P.E.
Engineer's Review	Piatt Township/LCPC	--	\$750 to \$1,500	County Review Engineer; Century Engineering, Eric Lundy, P.E.
Financial Security	Wolf Township	Letter of Credit	n/a	110% of project site construction; a letter of credit can be provided as financial security
Zoning Permit	Wolf Township/Lycoming County	\$300	\$500	
Reimbursable Fees Budget		\$4,675.00	\$2,585.00	

Permit and application fees are typically determined by a number of variables, such as: area of disturbance, overall size/cost of the project, etc. Since much of this information is unknown at this point, and the fees can vary significantly, it is in the County's best interest to budget accordingly for these costs based on the totals above.

Hughesville Water Authority & Hesker Hill Tower Sites

Technical Proposal to provide Professional Engineering Services

Prepared for: Lycoming County
Submitted by: R K Webster, LLC
Date: August 21, 2020



R K Webster, LLC
Civil Engineering Consultants

August 21, 2020

48 West Third Street
Williamsport, PA 17701

Re: Hughesville Water Authority Tower Site & Hesker Hill Tower Site Project Proposal

Dear Consultant Selection Management Team,

R K Webster Engineering (RKW) is excited to present this proposal to you for the Hughesville Water Authority and Hesker Hill Tower Sites Project. Randall Webster will serve as the Project Manager and single point of contact for the project. Mr. Webster has over 30 years of engineering experience, and over 25 years of project management experience. He founded RKW January of 2012, which has been serving municipalities throughout Lycoming County for over 8 years.

RKW is a small local firm, which has earned the respect of the Lycoming County by providing quality professional services for county projects, and by providing solid, responsive engineering solutions for many municipalities throughout the county. RKW has teamed with other small local firms to provide the services required for your project. The RKW Team includes:

- ***R K Webster, LLC*** – Prime Consultant – Project Management and Lead Design.
- ***Rue Environmental, LLC*** – Subconsultant – NEPA & cultural Environmental Services.
- ***Cedar Run Environmental Services*** – Subconsultant – Wetland and Stream Delineation.
- ***Hilles-Carnes Geotechnical Engineering*** – Subconsultant – Core Borings & Geotechnical Engineering services.
- ***Gavitt Surveying and Mapping, LLC*** – Subconsultant – Professional surveying services.

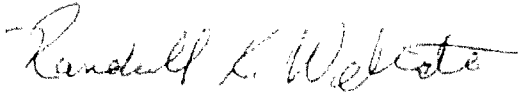
Smaller, local firms that are successful, remain successful mainly because they understand the value of delivering quality services, on time and within budget. They also know that their success depends on effective communication and maintaining a good reputation. The success of any project depends on the team's ability to communicate effectively and make good decisions in a timely manner. Sometimes a team of smaller firms can communicate more effectively than a large "one stop shop". When you call any of the four offices listed above, you are likely speaking directly to a principal of the firm the first time you call. This keeps the communication at the first level, which minimizes the "lost in translation" effect that phone messages can sometimes have. Additionally, the RKW Team has a company Principal responsible for their area of expertise. This arrangement helps to ensure the highest level of commitment to exceed your expectations, and ensure your project's success.

The best team for this project, is the team that:

- Understands the local Permitting & Design process.
- Understands PA DEP Permits.
- Has established working relationships with the project stakeholders and reviewers.
- Is known for delivering quality, professional solutions on time and within budget.

The R K Webster Engineering Team is that team. This team is how we get things done every day to provide innovative, low-cost solutions for clients throughout Lycoming County and the region beyond. Thank you for the opportunity to present our vision for your project. We look forward to serving you to make your project a success.

Sincerely,

A handwritten signature in cursive script that reads "Randall K. Webster".

Randall K. Webster, P.E.
R K Webster, LLC

Staffing Plan / Professional Qualifications

The RKW Team is committed to making your project a success by delivering quality services and added value through effective communication and sound engineering. Having specialized team members and longstanding working relationships allows for an environment to clearly define project responsibilities. Each subconsultant has a firm principal in responsible charge of an area of their particular expertise. Your project's success is their success.

Quality Assurance/Quality Control (QA/QC) is a vital part of every successful project. RKW has a simple, yet solid, approach to QA/QC. The RKW Team has a "hands on" firm principal in four clearly defined roles, which provides an inherent QA/QC overlay:

- **R K Webster Engineering** – Prime Consultant (Montoursville, PA)
 - Mr. Randall Webster, PE (30+ yrs exp) - Project Manager, overall Project QA/QC.
- **Rue Environmental, LLC** - Subconsultant
 - Mr. David Rue, PhD (30+ yrs exp) – Cultural Resource QA/QC.
- **Hillis-Carnes Engineering Associates** - Subconsultant
 - Mr. Nathaniel Lauver, PE (18 yrs exp) – Geotechnical Services QA/QC.
- **R K Webster Engineering** – Prime Consultant (Montoursville, PA)
 - Mr. Joel Reiff, PE (9+ yrs exp) – Technical Design/Daily Activities QA/QC.
- **Gavitt Surveying & Mapping, LLC** – Subconsultant (Hughesville, PA)
 - Mr. Joshua Gavitt, PLS (20+ yrs exp) – Land Survey Activities QA/QC.

Mr. Webster has extensive project management experience with numerous, successful Land Development projects. He will oversee the project development process and keep things on track relative to the project scope, schedule and budget.

Mr. Rue will lead the cultural resources and NEPA investigations to ensure the tower sites are cleared on time.

Mr. Gavitt will provide QA/QC on the boundary survey tasks, which includes surveying for and setting the monuments for the two respective tower sites that are to be leased. Mr. Gavitt grew up in the area, and currently resides in Hughesville. He has a vested interest in this local project, which is literally in his backyard. He has over 20 years of survey experience, and has the ability to confidently lead this area of the project.

The RKW Team has a "hands-on" firm Principal in each of the main areas of design for this project. These principals are personally involved in the daily design effort, and have a personal commitment to this project to maintain their reputation and their livelihood. This project's success is literally their personal success. This level of experience and commitment ensures a commitment to the Quality of all aspects of the project. All projects have issues that need to be addressed. RKW is committed to open, honest communication early and often throughout the project to address the issues promptly as they arise. This will minimize the potential negative

effect that some issues may bring. Mr. Webster will lead the charge by establishing weekly internal team meetings, project-wide meetings at appropriate times.

The RKW Team's organizational chart, as well as key staff resumes are provided below.

Randall Webster, PE
Project Manager
R K Webster Engineering

Karen Webster
Administrative Assistant
R K Webster Engineering

Joel Reiff, PE
Project Engineer
R K Webster Engineering

2 Eng. Support Staff
R K Webster Engineering

Steve Bason, PWS
Environmental Services
Cedar Run Environmental

David Rue, PhD
Cultural Resources
Rue Environmental

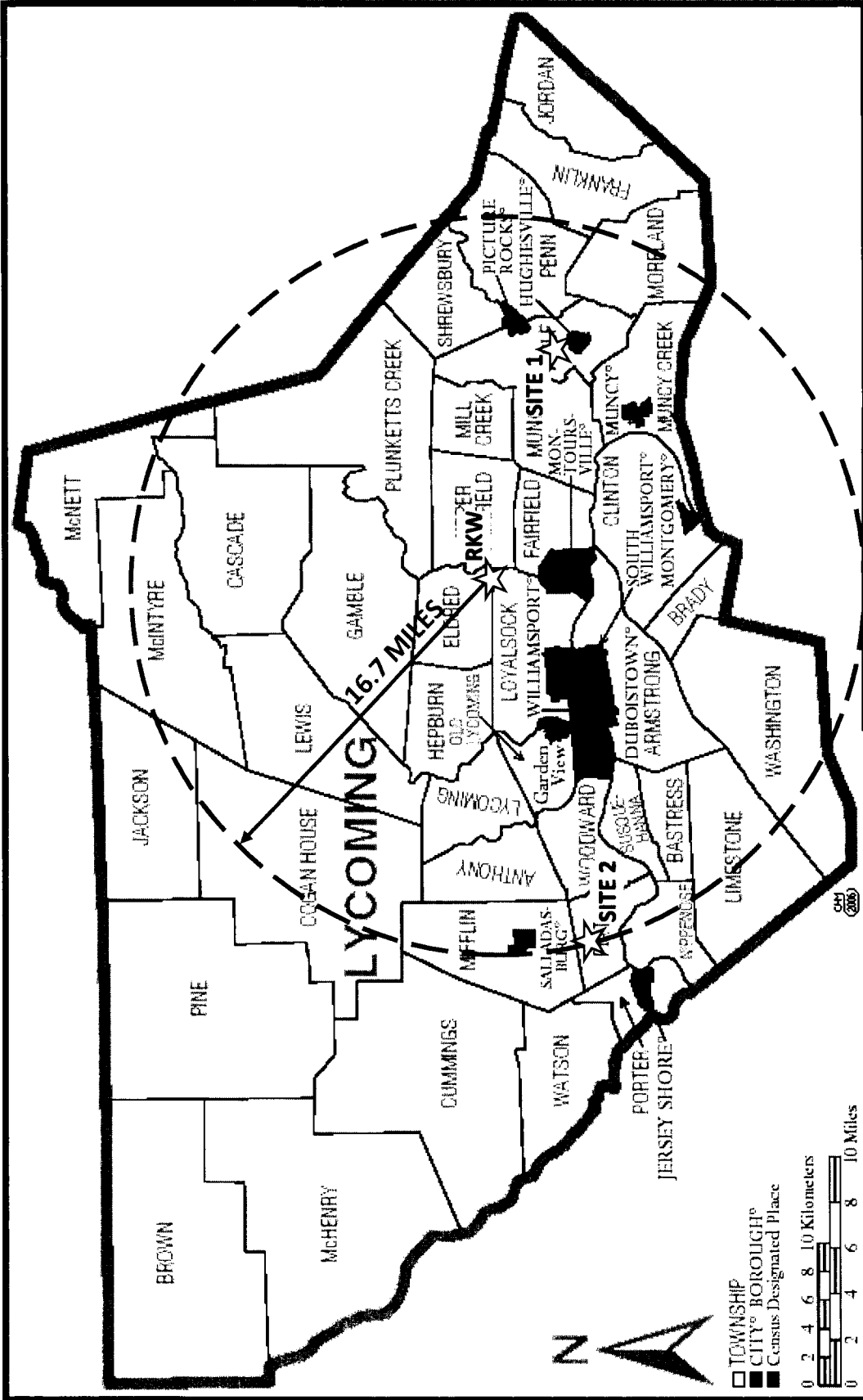
Nathaniel Lauver, PE
Geotechnical Engineer
Hilles-Carnes

Josh Gavitt, PLS
Boundary Survey
Gavitt Surveying

Support Staff
Rue Environmental

Support Staff
Hilles-Carnes

R K Webster, LLC
Civil Engineering Consultants



R K WEBSTER OFFICE IS CENTRALLY LOCATED BETWEEN THE TOWER SITES

LEGEND
 SITE 1 = HUGHESVILLE WATER AUTHORITY TOWER SITE
 SITE 2 = HESKER HILL TOWER SITE
 RKW = R K WEBSTER ENGINEERING

R K Webster, LLC
 Civil Engineering Consultants
 513 Jordan Avenue
 Montoursville, PA 17754
 Ph (570) 435-3489

Randall K. Webster, P.E.
Professional Civil Engineer



Jan 2012 – Present: Randall Webster founded **R K Webster, LLC** (RKW) in January of 2012 to provide personal and professional engineering services to clients in Pennsylvania. He believes in delivering attention and quality that exceeds his client's expectations. RKW started out as a 1-man operation providing professional engineering services to private and municipal clients. Now RKW employs three full-time engineers, one part-time engineer and a part-time administrative assistant. Mr. Webster manages this office which provides services in the areas of Land Development and Municipal engineering.

Aug 2008 – Dec 2011 - As co-founder of **Wentz & Webster, LLC**, Mr. Webster was personally responsible for several municipal improvement projects. As founder of R K Webster Engineering, he has managed several successful land development projects in the past seven years.

Feb 1990 – 1995 & 2002 – 2008: He has over 13 years of experience with the **Pennsylvania Department of Transportation** holding titles of Engineer Trainee, Civil Engineer, Project Manager and Acting Plans Engineer. As project manager for 5 years he also acted as the ***District Erosion & Sediment Pollution Control/NPDES Permit Coordinator***. Mr. Webster supervised a staff of four technicians and engineers tasked with designing transportation improvement projects, producing construction plans, details and support drawings, as well as associated plans for Erosion Control, Right-of-Way acquisition and Traffic Control, etc. These projects included numerous transportation improvement projects that required Erosion & Sediment Control Plans and NPDES Permits.

1995 – 2002: Mr. Webster also has over 7 years of experience with a **Larson Design Group, Inc.**, a private consulting firm in Williamsport, PA. He held titles of Senior Engineer and Project Manager. Here he managed all aspects of numerous projects from small studies and municipal transportation improvement projects to major 4-lane highway designs ranging in construction cost from \$5,000 to \$50 million. He was the engineer responsible for several PennDOT transportation improvement projects, many included bridges, and local/municipal transportation improvement projects.

Mr. Webster has over 30 years of civil engineering experience, and has built a reputation of delivering quality, on-time engineering solutions. A selective list of recent projects is provided below to show the range of bridge projects that Mr. Webster has managed throughout his career.

Selected Projects:

Site #5 Communications Tower: RKW completed the Stormwater Management design and Erosion & Sedimentation Control Plan for Site #5 in Elk Township, Clarion County, PA. RKW's client was Mission 1 Communications. The work was completed in the fall of 2018.

Lycoming County NPDES Permits: RKW has completed numerous Land Development projects in Lycoming County, that included E&S Plans with NPDES Permits, Stormwater Management Plans, Utility Coordination, and other related tasks. Some of these projects include:

- ***Bio-Secure Truck Wash*** for Harris Trucking – Jackson Township, Lycoming County. Included zoning hearing for Special Exception, NPDES Permit, Significant Stormwater Management Plan, Water Quality Management Permit, Utility Coordination, Grading Plan and Land Development Plan.

- ***Euro Optic*** – Borough of Montoursville, Lycoming County (next to Lowe’s). Included zoning hearing, NPDES Permit, Significant Stormwater Management Plan, Utility Coordination, Grading Plan and Land Development Plan.
- ***Kriner Plaza*** - Borough of Montoursville, Lycoming County (next to Wendy’s). Included an NPDES Permit, Stormwater Management Plan, Utility Coordination, Grading Plan and Land Development Plan.
- ***Grey Fox Plaza (Phase 1 & 2)*** – Fairfield Township, Lycoming County. Each Phase included an NPDES Permit, Stormwater Management Plan, Utility Coordination, Grading Plan and Land Development Plan. RKW also completed several Land Development plans for the commercial sites as they were sold and developed.
- ***Centre Storage*** – Clinton Township, Lycoming County. Included Stormwater Management Plan, Utility Coordination, Grading Plan and Land Development Plan.
- ***Halls Marine*** – Muncy Creek Township, Lycoming County. Included an NPDES Permit, Stormwater Management Plan, Utility Coordination, Grading Plan and Land Development Plan.
- ***JW Measurement*** – Muncy Creek Township, Lycoming County. Included an NPDES Permit, Stormwater Management Plan, Utility Coordination, Grading Plan and Land Development Plan.

Education:

The Pennsylvania State University B.S. in Civil Engineering December 1989

Professional License: (Professional Engineer License #048158-E)

The State of Pennsylvania Professional Engineer March 1995

Professional Affiliations:

Pennsylvania Society of Land Surveyors (PSLS)

Township Engineers Association

Joel D. Reiff, P.E.
Project Engineer



May 2016 – Present: Mr. Reiff has over 4 years of experience with a **R K Webster, LLC**. He holds the title of Civil Engineer. He is responsible for managing the technical details of various projects on a daily basis. This includes overseeing the design, calculations and drafting of final construction drawings and specifications. He assists in managing the projects by maintaining client relations, as well as their project schedules and budgets. The project types include commercial and residential land development, roadway design, including curbs and sidewalks, municipal engineering, and others. He directs the work of support staff including engineers and administrative staff. Mr. Reiff is also responsible for coordinating the work of RKW’s subconsultants on a daily basis.

May 2011 – May 2016: Mr. Reiff also has over 5 years of experience with **McTish, Kunkel & Associates** holding the title of Civil Engineer. Here he assisted in managing projects as well as designing and permitting natural gas projects, such as pipelines, compressor stations and other above ground facilities. These tasks included producing permitting and construction plans, details and support drawings, producing permitting documents for ESCGP-2 and General Permits, bid documents, design services during construction, and site visits. He also assisted in the design and permitting for several commercial projects, which included producing permitting and land development plans, details and support drawings, permitting documents for NPDES permits, and bid documents.

Selected Projects:

Site #5 Communications Tower: Mr. Reiff was the Project Engineer for this Communications Tower Project, known as Site #5, located in Elk Township, Clarion County, PA. Mr. Reiff was instrumental in completing the Stormwater Management design and Erosion & Sedimentation Control Plan for this Mission 1 Communications project. The work was completed in the fall of 2018.

Lycoming County NPDES Permits: Mr. Reiff has completed numerous Land Development projects in Lycoming County, that included E&S Plans with NPDES Permits, Stormwater Management Plans, Utility Coordination, and other related tasks. Some of these projects include:

- ***Grey Fox Plaza (Phase 1 & 2)*** – Fairfield Township, Lycoming County. Each Phase included an NPDES Permit, Stormwater Management Plan, Utility Coordination, Grading Plan and Land Development Plan. Mr. Reiff also completed several Land Development plans for the commercial sites as they were sold and developed.
- ***Centre Storage*** – Clinton Township, Lycoming County. Included Stormwater Management Plan, Utility Coordination, Grading Plan and Land Development Plan. As the Project Engineer, Mr. Reiff was responsible for the technical development of the plans, reports and other supporting documents for the success of this project.

Education:

Pennsylvania College of Technology	A.A.S. in Surveying Technology	December 2009
Pennsylvania College of Technology	B.S. in Civil Engineering Technology	May 2011

Professional License: (Professional Engineer License PE086340)

The State of Pennsylvania	Professional Engineer	May 2017
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RUE ENVIRONMENTAL LLC
David J. Rue, Ph.D.
Project Manager

Education:

Ph.D. Anthropology, Geology Minor, 1986, The Pennsylvania State University. M.A. Anthropology, 1982, The Pennsylvania State University.
B.A. Sociology/Anthropology, History, 1978, Clarion State College.

Experience:

Dr. Rue owns and operates Rue Environmental LLC. Dr. Rue has 30 years experience as a participant in cultural resource projects. He has supervised preparation of over 200 technical reports, and has provided management for large, multi-disciplinary environmental projects. His background has been multi-regional, and his client base has been diverse (gas pipelines, highways, fiber optics, federal facilities, power, and more). Before forming Rue Environmental LLC in 2010, Dr. Rue developed and managed two highly successful cultural resources management programs, including WAPORA from 1987-1990, 3D/ESI from 1990-1993, then joined A&HC from 1993-2010.

Dr. Rue was featured in a PBS television series on archaeology, titled "Out of the Past". Dr. Rue is a paleoecologist and palynologist, and has published a variety of academic papers, including: "Early Agriculture and Early Postclassic Maya Occupation in Western Honduras", *Nature* 326:285-286, 1987. Dr. Rue was co-recipient of a grant from the National Oceanic and Atmospheric Administration (NOAA) to study processes of environmental change and human impacts in Central America through lake sediment cores.

Representative Project Experience:

Project Manager, Phase I Survey for Proposed 6.4-Mile Seneca-Tenn Natural Gas Pipeline, a Marcellus Shale Project, in Elk and McKean Counties, Pennsylvania, for Wilson Ecological Services and EOG, Inc.

Project Manager, Phase I Archaeological Survey for Proposed Chestnut Flats Wind Power Project, in Blair and Cambria Counties, Pennsylvania for L.R. Kimball and Gamesa Energy.

Project Manager, Phase I Archaeological Survey for Intersection Improvements at US 9 and SR 30, Hudson Road, and Dairy Farm Road, Sussex County, Delaware, for Delaware Department of Transportation.

Project Manager, Phase III Data Recovery of Site 7K-F-11 for SR 1, Frederica North Grade Separated Intersection Project in Kent County, Delaware, for Delaware Department of Transportation.

Co-Project Manager, Phase II Testing of 20 Urban Historic Sites for proposed SR 51 Improvements portion of Mon-Fayette Expressway Project, Allegheny County, Pennsylvania for Mackin Engineering and the Pennsylvania Turnpike Commission.

Project Manager, Phase I Survey Team (with Gray & Pape, inc.) for 300-Mile Pennsylvania Segment of El Paso Natural Gas' Northeast Passage Project in Pennsylvania, for ENSR.

Project Manager, Phase III Data Recovery at Site 36BL106 for Walters Business Park Access Road Project, Blair County, Pennsylvania for the Pennsylvania Department of Transportation (PennDOT).

Project Manager, Phase II Testing at Four Late Eighteenth/Early Nineteenth Century Sites, Maryland Route 16 Improvements, Church Creek, Dorchester County, Maryland, for Maryland State Highway Administration.

Project Manager, Phase III Data Recovery at Site 36BK870 for SR 61, Section 15S Improvements Project, Berks County, Pennsylvania for Mackin Engineering and Pennsylvania Department of Transportation (PennDOT).

Project Manager, Phase I Archaeological Survey for T-301 Bridge over Spring Creek Replacement Project, Elk County, Pennsylvania for Joseph P. Lehman Engineering and PennDOT.

Phase I Archaeological Survey for SR 26 Bridge over Yellow Creek Replacement Project, Bedford County, Pennsylvania for the Markosky Group and PennDOT.

Project Manager, Phase I Archaeological Survey for SR 2033 Bridge Replacement Projects, Montgomery County, Pennsylvania for Pennoni Associates, Inc. and PennDOT.

Project Manager, Phase I Archaeological Survey for Granite Run Development Project, Lancaster County, Pennsylvania, for Berkshire Development LLC.

Project Manager, Phase I Archaeological Survey for two Wetland Replacement Areas associated with Turnpike Reconstruction in Lawrence County, Pennsylvania for McTish, Kunkel & Associates and the Pennsylvania Turnpike Commission.

Steven J. Bason, PWS

Statement of Professional Qualifications

Steven J. Bason is a private consultant with thirty (30) years of experience in natural resources management and wetland science. He holds a Bachelor of Arts degree in Natural Sciences/Biology from Lock Haven University (1989) and has received formal training on the use and extensive experience on the application of the *1987 Corps of Engineers Wetland Delineation Manual*.

Mr. Bason's experience in applied environmental science began with employment with the Pennsylvania Fish Commission as a fisheries biologist aide and an internship with the Pennsylvania Department of Environmental Resources (PADER), Bureau of Dams and Waterways Management Williamsport Regional Office. His work with PADER included investigation of stream and wetland encroachments and interpretation and enforcement of various aspects of 25 PA Chapter 105 (relating to Dam Safety and Waterway Management).

Mr. Bason also has been employed as the manager of a regional office of an environmental consulting firm headquartered in northeastern Pennsylvania. In this capacity, he managed daily office activities and acted as the regional office's primary consultant for wetlands related work. Mr. Bason has owned and operated his own private consulting firm located in central Pennsylvania for the last 28 years. In this capacity, he has completed thousands of wetland delineations encompassing tens of thousands of acres. Many of these delineations have been field verified by the U.S. Army Corps of Engineers (USACOE) and have received formal USACOE letters of Jurisdictional Determination. He has extensive experience in the preparation and filing of Pennsylvania Department of Environmental Protection (PADEP) General Permits and Joint Permit Applications and has received permit approvals for numerous wetland related projects.

Mr. Bason has prepared numerous wetland mitigation plans to provide compensation for unavoidable wetland encroachments. These mitigation plans have been reviewed and subsequently approved by regulatory agencies that include the U.S. Fish & Wildlife Service, the U.S. Environmental Protection Agency, the USACOE, and PADEP.

Mr. Bason is also experienced in the preparation of erosion and sedimentation control plans that meet guidelines established in 25 PA Code Chapter 102. In 2012, Mr. Bason worked as the Resource Conservationist with the Clinton County Conservation District, administering the Chapter 102 and 105 programs, with an emphasis on the NPDES program.

Mr. Bason received his formal training on the *1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands* at the Cook College of Rutgers University in May of 1990. His instructors were Mr. Ralph Tiner and Dr. Peter Veneman. He has also attended numerous technical training sessions and seminars that include the following:

USDA NRCS. 2010 Field Indicators of Hydric Soils in the United States, Version 7.0.
June, 2011, sponsored by the PA Association of Professional Soil Scientists and US Army Corps of Engineers, Baltimore District, Hesston, PA.

Professional Qualifications

Interim Regional Supplement to the Corp of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region, June 2011, sponsored by the PA Association of Professional Soil Scientists and US Army Corps of Engineers, Baltimore District, Hesston, PA.

Regional Supplement to the Corp of Engineers Wetland Delineation Manual: Northcentral and Northeast Region Workshop, April 2010, sponsored by the PA Association of Professional Soil Scientists and US Army Corps of Engineers, Baltimore District, LaPorte, PA.

Hydric Soils and Use of Field Indicators of Hydric Soils in the United States Workshop, October 2005, sponsored by the Dept of Agriculture, Natural Resources Conservation Service and US Army Corps of Engineers, Baltimore District.

Low Impact Design Workshop, March 2005, sponsored by the Centre County Conservation District and the Centre County Planning Office.

Problem Area Wetlands / Atypical Situations, May 2000, sponsored by the Pike County Conservation District and the USACOE.

Managing Water Levels for Fish and Wildlife, April 1999, sponsored by the U.S. Fish and Wildlife Service, PA Game Commission, and Ducks Unlimited, Inc.

Principles of Wetland Design, August 1998, sponsored by the Pennsylvania State University and the PSU Cooperative Wetland Center.

Mr. Bason is certified as a Professional Wetland Scientist through the Society of Wetland Scientist Certification Program, Inc. (Certification Number 000186 – issued in 1994). He is also an associate member of the Pennsylvania Association of Professional Soil Scientists. He has participated as a speaker at numerous local and regional technical workshops for municipal officials and engineering consultants and has also been an invited lecturer at local universities. He has also given expert witness testimony in legal proceedings involving wetlands. He received the 1993 Commendation from the Clinton County Conservation District for Volunteer Service in Conservation Education. In June of 1995 he was appointed to a review panel for the proposed 1995 Federal Wetland Delineation Manual. In August of 1998 he received the Special Conservation Service Award from the Pennsylvania Association of Conservation Districts. Mr. Bason served two terms (1996 - 2000) on the Pennsylvania Wetlands Protection Advisory Committee as an appointee of the Secretary of the Pennsylvania Department of Environmental Protection. He currently owns and operates Cedar Run Environmental Services, Inc. of Mill Hall, Pennsylvania.

NATHANIEL J. LAUVER, PE

GEOTECHNICAL ENGINEER



EDUCATION

B.S. in Civil Engineering,
Lehigh University, 2002

PROFESSIONAL CERTIFICATIONS/ REGISTRATIONS

- Pennsylvania PE #074285
- PennDOT Certified Level II Drilling Inspector #04-2-002
- Nuclear Density/Moisture Gauge Operator (Troxler)

PROFESSIONAL SUMMARY

Mr. Lauver has over 16 years of experience in all aspects of Geotechnical Engineering as well as a Professional Engineer throughout Pennsylvania. Major responsibilities include managing geotechnical design staff and efforts for both public and private projects of various scopes and complexities, and coordinating geotechnical staff to efficiently and effectively complete design efforts of multiple projects at a time. In addition, Mr. Lauver has experience in analyzing various retaining wall types from a geotechnical and constructability standpoint to justify wall type during the conceptual planning stage of a project, coordinating and performing all geotechnical related efforts for design/build projects in both preliminary design/project specification development and final design as part of the contractor's design/build team. Mr. Lauver has developed and managed Geotechnical Engineering programs covering shallow/deep foundations, slope stability design/assessments, geophysical techniques including resistivity and conductivity surveys, as well as ground improvement methods.

SPECIAL PROJECT EXPERIENCE

Harrisburg International Airport Parking Garage/Terminal Expansion - Dauphin County, PA: Mr. Lauver served as the Project Engineer performing geotechnical and drilling services for the terminal expansion and parking garage located at the Harrisburg International Airport. The services performed consisted of boring and test pit inspections, preparation of field boring and test pit logs, the coordination of the laboratory testing program, and assisting in the preparation of foundation reports for both the terminal expansion and parking garage. Due to the scope of the program, the field testing was extensive with the geotechnical drilling spanning to an eight month time frame.

Derry Township Wastewater Treatment Plant Upgrade - Dauphin County, PA: Mr. Lauver served as the Project Engineer performing geotechnical services for the Wastewater Treatment Plant upgrade project. The services performed consisted of the coordination of the drilling efforts, boring inspections, the preparation of field boring logs, the coordination of the laboratory testing program, and preparation of the foundation report and earthwork recommendations for the wastewater treatment plant upgrade. Specialty provisions and recommendations were incorporated due to the underlying Karst geology.

I-83/PA 581 Bottleneck Safety Interchange - Cumberland County, PA: Mr. Lauver served as the Lead Geotechnical Engineer on this project in which he developed and coordinated both the geotechnical drilling and laboratory testing program for the Lowther Street over I-83 Bridge, and associated new ramp geometry. As an early action phase of the project, the boring and laboratory testing work for the Lowther Street Bridge were performed ahead of the ramp work. After the borings and laboratory testing was complete, Mr. Lauver performed accelerated foundation design for the proposed Lowther Street structure to accommodate construction schedule and phasing.

Emergency Bridge Replacement Projects - Susquehanna County, PA: Mr. Lauver served as the Project Engineer for the emergency bridge replacement project consisting of three bridge structure locations. After extensive flooding in the area, geotechnical engineering services for this PennDOT emergency contract involved the replacement of three bridge structure locations on State Route (S.R.) 0029, S.R. 2026, and S.R. 3025. Due to the bridge closures caused by the flooding, the project required an accelerated schedule with all work to be completed in six weeks. The geotechnical services included the coordination of geotechnical drilling and laboratory testing programs, boring inspections, and preparation of foundation reports for the design/build bid package.

Joshua A. Gavitt, P.L.S.

50 Bartlow Drive

Hughesville, PA 17737

Phone: (570) 584-5977

E-mail: gavittsurveying@gmail.com

EDUCATION:

May 1994

**Associate Degree in Surveying Technology
Penn State University / Wilkes-Barre Campus**

**PROFESSIONAL
EXPERIENCE:**

March 2007 - Present

Keystone Precision Instruments:

Geospatial Products Sales and Support

This is a self-motivated position which requires extensive knowledge of all types of modern surveying equipment including primarily Nikon and Trimble total stations, Spectra Precision and Trimble data collection solutions, Trimble GNSS solutions and Trimble Terrestrial Scanning Solutions. Responsible for demonstrating new equipment, providing formal training and unlimited support to the customer after the purchase. This position also requires constant interaction with customers, designing appropriate survey equipment solutions to meet customer's needs, price quoting survey equipment packages and forecasting potential sales.

August 2000 – Present

Gavitt Surveying and Mapping, LLC

Self-employed in a part-time surveying business serving Lycoming and Sullivan Counties. Types of surveys performed include the following:

- Boundary retracement surveys
- Major and minor subdivisions
- Flood elevation certification
- Land development
- Building construction stakeout

April 2003 - March 2007

**Pennsylvania Department of Transportation:
Transportation Survey Technician Supervisor**

Employed as a first-level supervisor overseeing a 3-4 person survey crew responsible for the collection and reduction of survey data used to create three-dimensional, digital design files for various Penn DOT highway and bridge projects in a nine county district based out of Montoursville, PA. Three dimensional topographic surveys make up approximately 75% of the surveys performed. Other types of surveys performed include the following:

- Aerial control surveys
- Excess right of way surveys
- Highway right of way / centerline reconstruction and stakeout
- Core boring stakeout
- Property line placement within project limits
- Bridge stakeout

Various tools and equipment used for the above described surveys include the following:

- Electronic total stations.
- Robotic total stations.
- Electronic data collectors.
- Digital automatic levels.
- Trimble GNSS equipment and software.
- Various computer software, data collection and CADD programs

August 1998-April 2003

**Pennsylvania Department of Transportation:
Transportation Survey Technician**

Employed on a 3-4 person survey crew as an instrument man or rod man to collect survey data in order to prepare three-dimensional, digital design files for various Penn DOT highway and bridge projects.

June 1994-August 1998

Malcolm R. English, PLS

Employed as a party chief overseeing a 2-3 person crew performing retracement surveys, major/ minor subdivisions, and topographic surveys in north central PA.

**PROFESSIONAL
LICENSURE:**

August 2000

Granted a certificate of registration as a Professional Land Surveyor in the State of Pennsylvania in August, 2000, license number SU-054875-E.

**PROFESSIONAL
DEVELOPMENT:**

Attended the PSLS Surveyors' Conference at Hershey in 1995 - 1997, 2000, 2001, 2003 – 2018.

Attended Trimble Dimensions at Las Vegas, Nevada in November 2007 & 2011.

Attended Trimble Survey Controller Advanced training at Westminster, Colorado in April 2008.

Attended Trimble University at Westminster, Colorado in April 2009.

Attended Trimble Survey Boot Camp at Dayton, Ohio in May 2010.

Led many GNSS surveying training sessions, both in the field and classroom settings.

**VOLUNTEER
EXPERIENCE:**

August 2016 – Present

Head Coach for Hughesville High School Cross Country coaching both Junior High and Varsity teams

March 2000 – June 2011

Certified coach and referee in the American Youth Soccer Organization and NorCenPenn Soccer League, coaching soccer to children from 6 – 17 years of age.

January 2005 – 2007

A member of the Board of Trustees for Christ United Methodist Church in Hughesville, PA.

June 2005 – 2007

A member of the Hughesville Borough Planning Comm.

References

RKW has provided professional services for several projects in Lycoming County and the surrounding counties, which include Survey, E&S, NPDES and other DEP Permits, as well as other related tasks.

1. Lycoming County Reviewers

Contact: Joshua Billings, Subdiv. and Land Dev. Administrator – Phone (570) 320-2148

Contact: David Hubbard, Zoning Administrator – Phone (570) 320-2144

Description: Through the regular course of business, RKW has coordinated projects with Mr. Hubbard and Mr. Billings for various projects over the years. Both of these people will be involved in coordinating and reviewing the plans for this project. RKW encourages the County proposal review team to ask these folks their honest opinion of our character, knowledge and professional abilities.

2. Wolf Township Engineer & Zoning Officer

Contact: Victor Marquardt, Zoning Officer – Phone (570) 547-2821

Contact: Dan Vassallo, P.E. P.L.S., Township Engineer – Phone (570) 322-6266

Description: Through the regular course of business, RKW has coordinated projects with Mr. Marquardt and Mr. Vassallo for various projects over the years. Both of these people will be involved in coordinating and reviewing the plans for this project. RKW encourages the County proposal review team to ask these folks their honest opinion of our character, knowledge and professional abilities.

3. Mission 1 Communications - Communications Tower

Contact: Donald Hoefelmeyer, Project Manager – Phone (206) 436-3922

Description: RKW provided professional design services that included Topographic Survey, E&S Design, and Stormwater Management Design and Plans for Site #5 in Elk Township, Clarion County. Randall Webster managed the project for RKW and Mr. Joel Reiff was the Project Engineer.

4. S J Holdings – Multiple projects in Lycoming County

Contact: Mr. M. Jon Jahanshahi – Phone (570) 279-0111

Description: RKW has completed several projects for Mr. Jahanshahi throughout Lycoming County. The projects have ranged from small feasibility studies to full blown land developments. Many included Boundary & Topographic Survey, E&S Design, NPDES Permits, Stormwater Management Design, Utility design and coordination, and related tasks.

5. Grey Fox Plaza – Multiple Projects in Lycoming County

Contact: Mr. Tom Krouse – Phone (570) 748-9296

Description: RKW has completed several projects for Mr. Jahanshahi throughout Lycoming County. The projects have ranged from small feasibility studies to full blown

land developments. Many included Boundary & Topographic Survey, E&S Design, NPDES Permits, Stormwater Management Design, Utility design and coordination, Construction stakeout and Construction Consultation, and other related tasks.

6. **Lewis Township**, Northumberland County

Contact: Lucinda Bomberger, Secretary – Phone (570) 649-5371

Description: As the Township Engineer, RKW has provided various professional engineering services for Lewis Township on several occasions. The main tasks include: Engineering Review, to Design and Permitting for a roadway relocation, PennDOT HOP Permit, Topographic Survey, E&S Design, Stormwater Management Design, Construction stakeout and Construction Consultation.

7. **Anthony Township**, Montour County

Contact: Penny Rishel, Secretary – Phone (570) 437-4270

Description: RKW has provided professional engineering services for Anthony Township on several occasions. The scope of services ranges from Engineering Review, to Design and Permitting for roadway cross pipe and Box Culvert replacement projects. Many included Topographic Survey, E&S Design, GP-7 Permits, Stormwater Management Design, Construction stakeout and Construction Consultation.

Project Understanding

Lycoming County is upgrading their existing radio system to better serve residents, businesses, tourist and public safety agencies of the county. The County is seeking proposals from qualified firms to provide professional surveying and engineering services to allow them to develop two separate sites for new communication tower construction.

1. Hughesville Water Authority tower site

- a) Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
- b) Street address: 279 Reservoir Road, Hughesville, PA
- c) Township: Wolf
- d) County: Lycoming
- e) Size of site plot: 100'x100'
- f) Height of tower: 250'

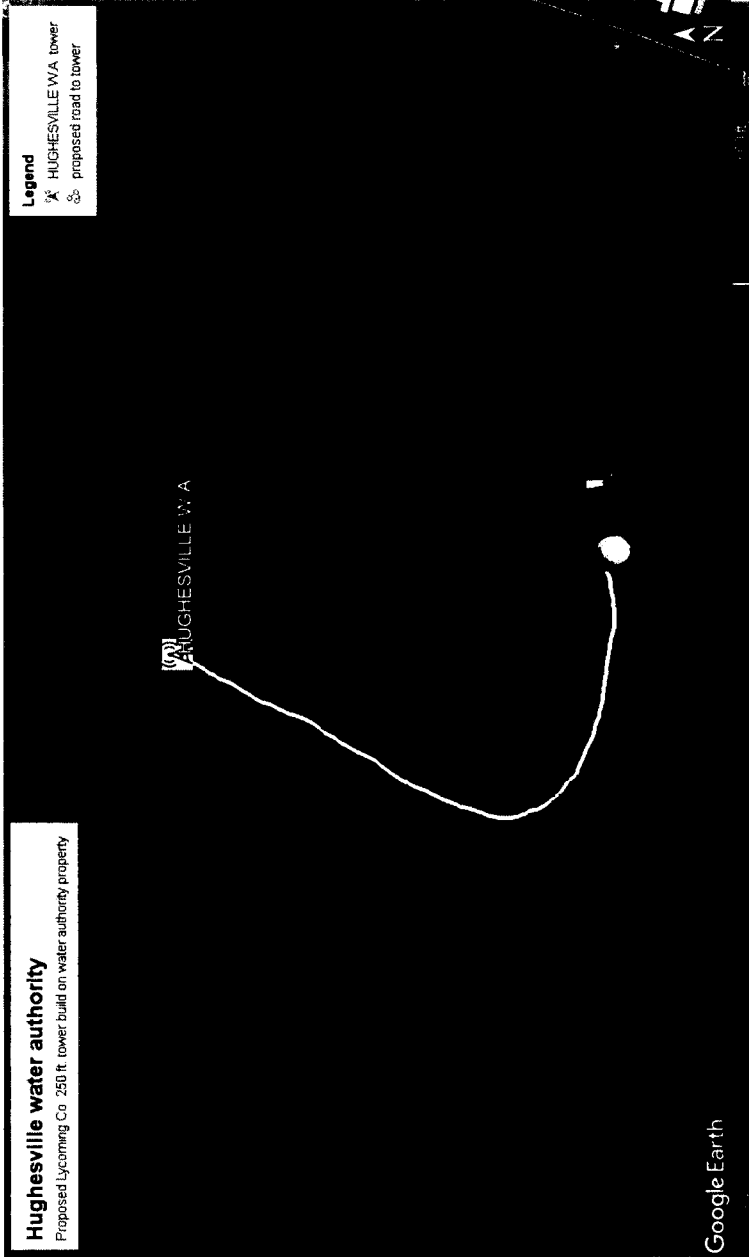
Hughesville Water Authority land which is to be cleared (not developed) for Water Authority use:

- a) Street address: 279 Reservoir Road, Hughesville, PA
- b) Township: Wolf
- c) County: Lycoming
- d) Approximate size of plot to be cleared for the Water Authority: 100'x100'

2. Hesker Hill Tower Site:

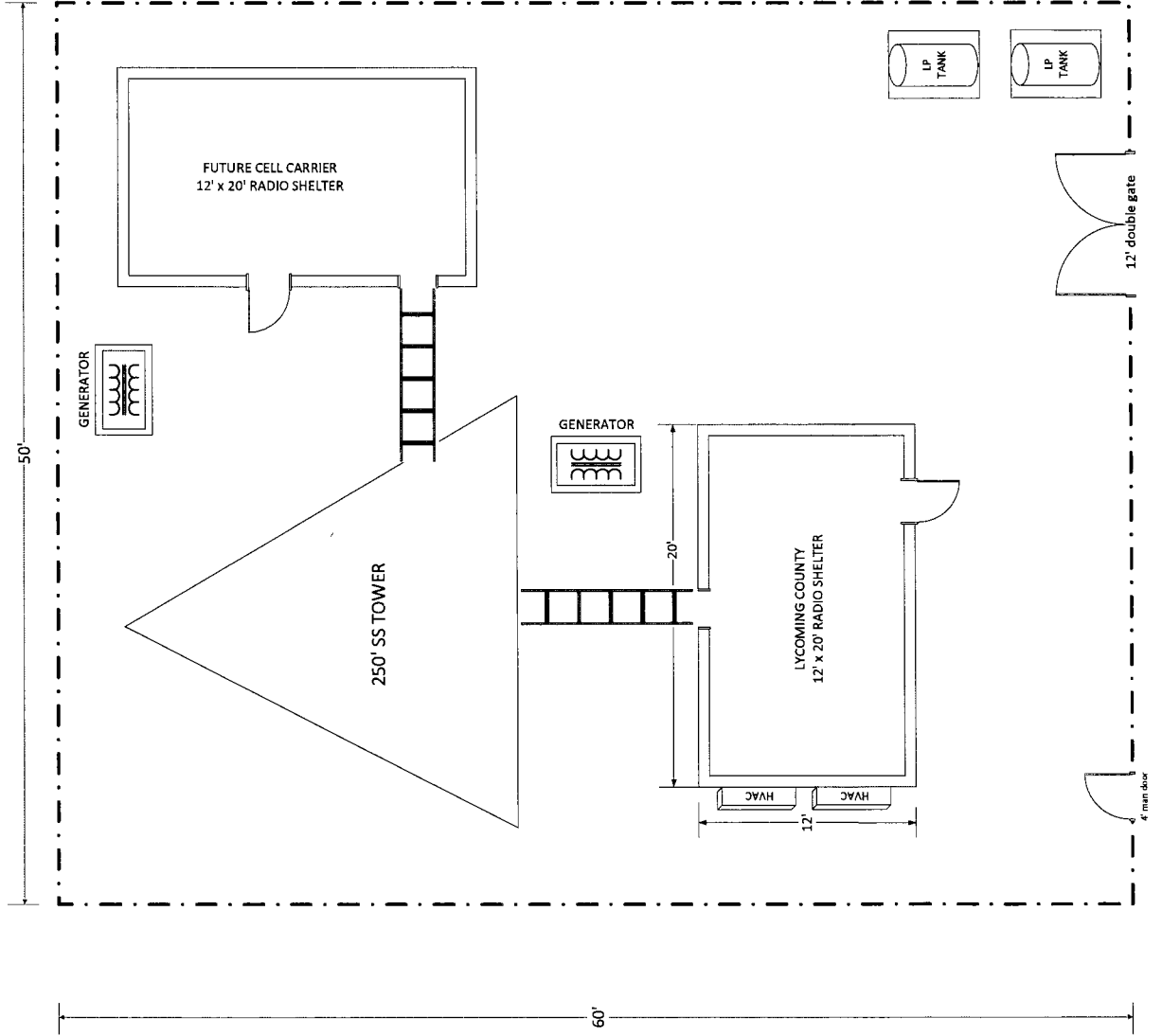
- a) Latitude: 41-14-19.1 N, longitude: 77-14-35.1 W
- b) Street address: 1324 Heskler Hill Road, Jersey Shore, PA
- c) Township: Piatt
- d) County: Lycoming
- e) Size of plot: 75'x75'
- f) Height of Tower: 250'

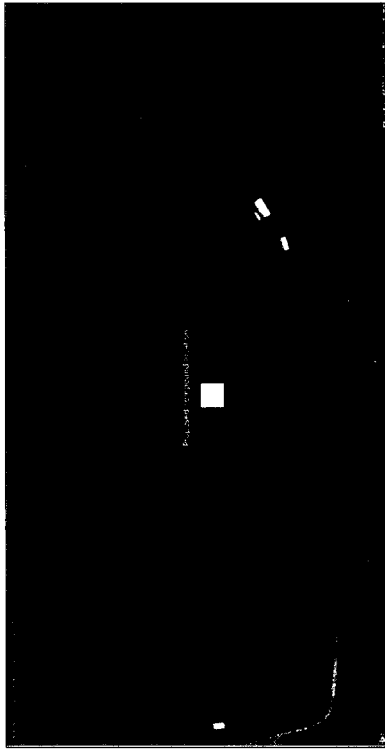
The County will procure these sites and lease them for the respective communications towers. Therefore, the County is seeking a "turnkey" approach for the required professional services. This proposal is based on the County's RFP, Addendum 1, the Questions and Answers posted on the County website, and the maps and sketches provided by the County.



Proposed Hughesville compound layout

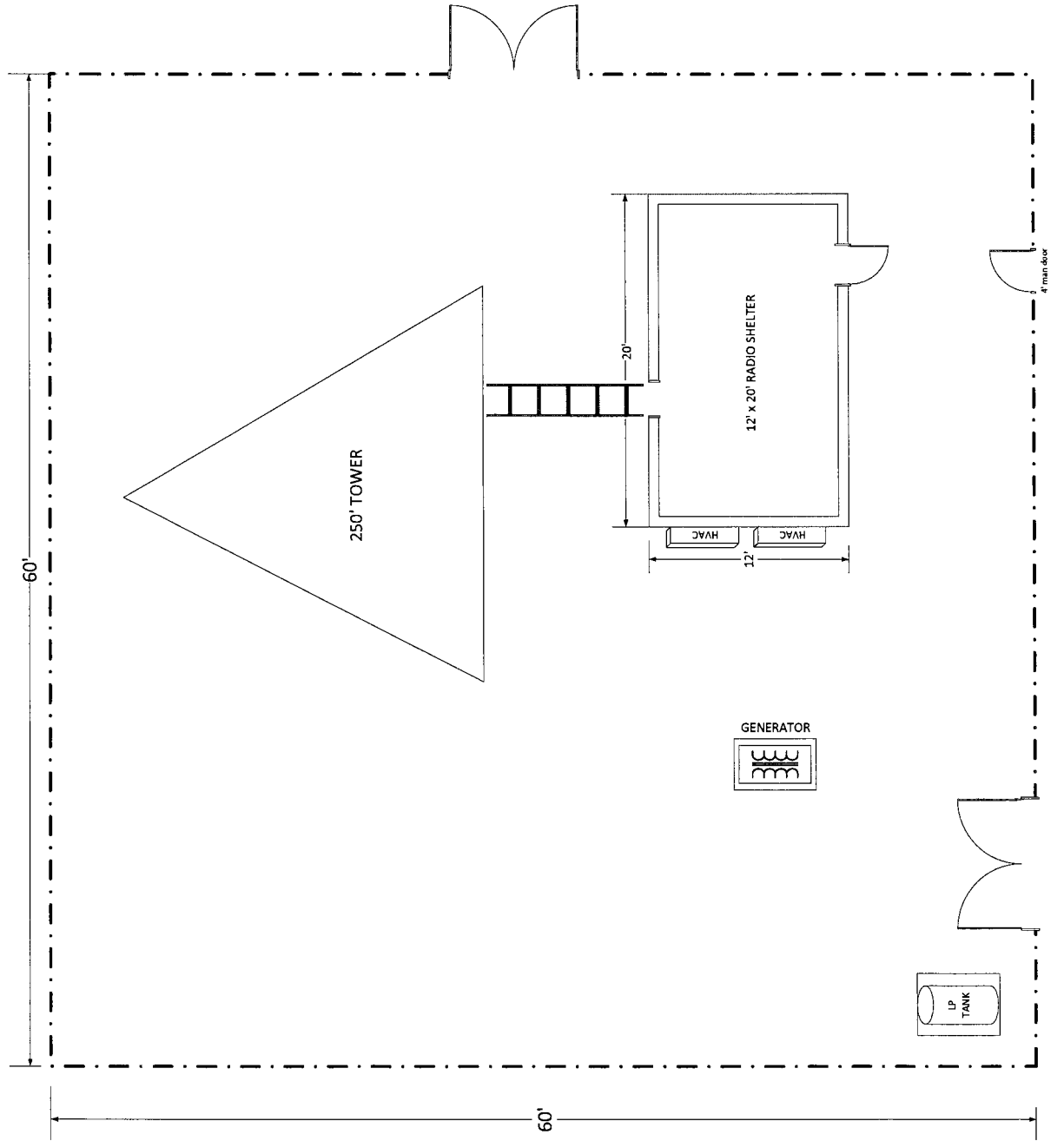
Hughesville Water Authority
279 Reservoir Rd., Hughesville, Wolf Twp.
41-15-16 N 76-43-15 W





Proposed Hesker Hill
compound layout

Hesker Hill
1342 Hesker Hill Rd., Jersey Shore, Piatt Twp.
41-14-15.7 N 77-14-33.8 W



Technical Proposal

Project Management

Randall Webster, P.E. will serve as your project manager. With over 30 years of engineering experience, and over 25 years of project management experience, Mr. Webster will skillfully handle the project management tasks. He is accustomed to coordinating with the subconsultants on the RKW team, and they function as an extension of the RKW office. Mr. Webster has spent 100% of his career working for government and/or local consultant companies based in Lycoming County, and has established working relationships with the Lycoming County Planning Office, Lycoming County Conservation District, PA DEP Northcentral Regional office in Williamsport, and other local project stakeholders. He understands the project development process, and will put his experience to work for the County to ensure a successful project.

Field Survey

As soon as the Notice To Proceed is issued, RKW will perform one design PA One Call for each site so any underground utilities can be marked by their respective owners and located during field survey for inclusion on the existing conditions plan. RKW will provide 3-D topographic survey for the project area that will horizontally reference PA State Plane Coordinates, North Zone, the North American Datum of 1983 (NAD83) and vertically reference the North American Vertical Datum of 1988 (NAVD88). This includes the location of existing ground features, manmade features, and the public roads adjacent to the project area. The project area for topographic survey is defined as each respective Tower Site including leaving room for the required access, grading and stormwater facilities to make the site work. Details of the required survey effort for each respective includes:

Hughesville Water Authority Site - Partial boundary retracement survey of a parcel of land located in Wolf Township, Lycoming County recorded in the name of Hughesville Borough in Lycoming County deed book 555, page 230 and containing approximately 67 acres. The parcel is located at 279 Reservoir Road, Hughesville, PA and is identified as tax parcel #59-354-174.

Included:

- Partial boundary retracement survey of the above-mentioned parcel of land focusing on the boundaries nearest to the proposed tower site to confirm easement location with respect to the closest boundaries.
- Inter-visible pairs of GPS control points set on site.
- A **benchmark** will be established at an agreed upon location for future use during construction.
- The perimeter of the proposed 100 ft. x 100 ft. easement area will be monumented with 1"x30" rebar
- A narrative legal description will be prepared for the easement area.
- Easement plat for the 100 ft. x 100 ft. easement.
- Paper plan copies will be provided as well as an AutoCad .dwg file.

Hesker Hill Tower Site - Partial boundary retracement survey of a parcel of land located in Piatt Township, Lycoming County recorded in the name of Dean L. Edwards in Lycoming County deed book 4548, page 219 and containing approximately 89 acres. The parcel is located at 1324

Hesker Hill Road, Jersey Shore, PA and is identified as tax parcel #45-366-155. Only enough boundary retracement will be performed to accurately establish the legal lease area for the tower site. 3D Topographic survey will be provided for the tower site, proposed access to the tower site from the existing water tank area, and the proposed water tank area.

Included:

- Partial boundary retracement survey of the above-mentioned parcel of land focusing on the boundaries nearest to the proposed tower site to confirm easement location with respect to the closest boundaries.
- Inter-visible pairs of GPS control points set on site.
- A **benchmark** will be established at an agreed upon location for future use during construction.
- The perimeter of the proposed 100 ft. x 100 ft. easement area will be monumented with 1"x30" rebar
- A narrative legal description will be prepared for the easement area.
- Easement plat for the 100 ft. x 100 ft. easement.
- Paper plan copies will be provided as well as an AutoCad .dwg file.

The above described survey information will be used to create an existing conditions plan and a 3D terrain model that will serve as the base plan for all final designs and plans. The limits of this existing conditions plan will be determined based on the project scope, which will be worked out as described above. Accurate survey information will allow the design engineer to locate the construction limits of the proposed work, which facilitate better construction cost estimates and minimize work orders. Other items that will be incorporated with the field survey information described above so the results can be included in the base plan include:

Perform PA One Call – engineer will obtain the design public utility information for inclusion in the base plan. When available the underground utilities will be marked before the topographic survey is completed so they can be picked up at the same time.

Perform PNDI Search – engineer will perform the required search for species of special concern through the state web portal.

Review Applicable Ordinances – engineer will review the applicable ordinances to determine how they may affect the proposed project.

Review Soils and Floodplain limits – engineer will obtain the soils information from the web soil survey and the floodplain limits from FEMA.

Zoning Coordination

Both locations may require some formal zoning coordination before the projects can be approved. It is critical that the zoning coordination effort begin immediately at the start of the project to minimize its effect on the project schedule.

The **Hughesville site** is located in Wolf Township, and according to a review of the ordinance and a discussion with Victor Marquardt, Zoning Officer, a **variance may be required** for relief

from a couple requirements: Tower Height over 150' High, Use Variance to allow the communications tower in the residential zone. The need for a variance and the items requiring relief will depend on how the use is officially defined, which will be coordinated as soon as it is appropriate to try and minimize this effort to shorten the project schedule. RKW has worked through similar situations in various municipalities where Mr. Marquardt is the Zoning Officer. RKW is confident we can navigate this project through this zoning effort successfully.

The **Hesker Hill site** is located in Piatt Township. Piatt Township does not have its own zoning ordinance, so it is under the jurisdiction of the Lycoming County Zoning Ordinance. Per the ordinance, a **Special Exception will be required**. RKW has worked through a similar situation, and successfully obtained a Special Exception from the Lycoming County Zoning Hearing Board a few years ago for the Harris Trucking project in Jackson Township. RKW is confident we can navigate this project through this zoning effort successfully.

Environmental Investigations

This task includes the Wetland and Stream Delineations, as well as the Environmental Site Assessments (ESA) and NEPA/SHPO services. Again, it is paramount that these services be started immediately upon receiving the Notice To Proceed. The physical features need to be identified prior to beginning the field survey so they can be picked up on site performing the boundary and topographic survey tasks. These features are essential part of the initial base plan for the project. The ESA and NEPA/SHPO tasks need to begin immediately, since some of these items require a comment period before the approval/clearance can be issued. These tasks could be the critical path on the project schedule and control the final project approval date. So, these tasks need to start immediately as well.

Cedar Run Environmental will perform the wetlands/stream investigations upon receiving Notice To Proceed. The findings will be summarized in a report to be provided as part of the project supporting documentation for various project submissions.

Rue Environmental will take the lead on the ESA and NEPA/SHPO effort. Rue will perform an Environmental Survey and complete the FCC NEPA Environmental Checklist report. Rue will conduct an environmental field visit which entails photographing and documenting any environmental concerns in the field as related to NEPA regulation. The field visit will involve an analysis of potential endangered species habitat, historic sites, and potential wetland impacts among other things. Field results will be summarized in a report and Rue will coordinate results with federal agencies such as the FCC and the DOI.

Rue will perform Phase I Environmental Site Assessment, and potentially a Phase II Environmental Site Assessment if necessary (not likely). The scope of the ESA work is based on the four components of the Phase I ESA: a records review, a site reconnaissance, interviews, and the report. Rue will also perform a records review using Environmental Data Resources, Inc. (EDR). Rue will review historical records consisting of aerial photographs, fire insurance maps, U.S. Geological Survey (USGS) topographic maps, and local street directories from the present back to 1940 to identify prior uses of the property that may indicated potential uses that may have resulted in recognized environmental conditions. The Site reconnaissance will include a visual inspection of the property, as made accessible by the Site Contact, in order to identify

conditions indicating the likelihood of the presence of recognized environmental conditions. Rue will obtain copies of any on-site environmental files, geotechnical reports, architectural drawings, any previous ESA reports, and any reports regarding on-going environmentally-related studies as are made available at the time of the reconnaissance. Rue will conduct interviews as required to comply with the AAI Standards. Interview subjects are anticipated to include the property owner or owner's representative, the local fire department, the local building department, and as applicable, the local government entity that has jurisdiction over hazardous waste management, storage tanks, and environmental permitting. Following the conclusion of the Site reconnaissance, a draft report will be prepared generally following the suggested ASTM E-1527-13 report format. The report will include an executive summary and will describe the findings from the on-site reconnaissance, the database search, and regulatory agency contacts, present photographs taken during the reconnaissance, and provide site layout and vicinity maps. The report will provide an opinion regarding the presence of recognized environmental conditions from either current or historical on-site or off-site sources.

If necessary, Rue will also conduct a Phase II ESA, which may involve additional Geophysical Survey, Soil Investigations, Groundwater Investigations, and Volatile Organic Compound (VOC) Assessment. The purpose of the Phase II ESA Survey would be to gain a better understanding into the location and attributes of hazardous waste sites previously identified.

Cultural resource services are required as part of the environmental permitting activities associated with Proposed services include coordination with the Pennsylvania State Historic Preservation Office (SHPO), completion of a Phase I archaeological survey, and preparation of an FCC Form 620 for each tower site. Rue will assist with the Project Review Form to be submitted to the SHPO and handle SHPO coordination in general. In the Phase I survey, shovel test pits measuring 50 cm x 50 cm will be excavated by hand in each project area. A Phase I archaeological report or Negative Results Form will be submitted. The relevant Federally recognized tribes will be contacted with their responses documented. Coordination with the tribes involves fees which are difficult to estimate based on current state of the project. They vary. We assume \$2,400 for each Tower. It is assumed that no form will be needed for historic farm resources.

Erosion & Sedimentation Control Plan (NPDES Permit & Stormwater)

This plan is required to show how potential erosion and sedimentation (E&S) will be minimized on the project site. Two E&S Plans will be required, one for each tower site. They will be prepared in accordance with the applicable ordinances and DEP Chapter 102 regulations.

Since the earth disturbance at the Hughesville site will be more than 1 acre, a General NPDES Permit will be required.

The Hesker Hill site will most likely be less than one acre, and requires only an E&S Plan (NO NPDES Permit required).

The E&S Plan and Report will be reviewed by the Lycoming County Conservation District (both sites), and the Wolf Township review engineer (Hughesville Site) to ensure compliance

with the DEP regulations, and local ordinances respectively.

The General NPDES Permit application and checklist package will be completed and submitted for the Hughesville site. A complete E&S Narrative with support calculations (to verify the size and placement of various E&S controls and swales, etc.) will be provided per DEP Chapter 102 for both sites.

A Post Construction Stormwater Management (PCSM) plan is required for both sites, and will be reviewed by Wolf Township (Hughesville site) and the County Conservation District (both sites). Both PCSM plans will be prepared in accordance with the applicable municipal ordinances as well as the PA Department of Environmental Protection (DEP) policies and regulations.

The NPDES Permit requires runoff volume and water quality design and calculations. This stormwater task includes the calculations to satisfy these requirements. Rain gardens or some other kind of vegetated infiltration area will most likely be needed to meet the water quality requirements. This task includes infiltration testing as required to support the runoff volume mitigation calculations.

Note: Engineer will coordinate a backhoe and operator for the client to dig the test holes for the infiltration testing at both sites. The cost for the backhoe and operator is included in this proposal.

A PCSM report is required to document the pre and post stormwater conditions. This report provides calculations and logic to indicate that the rate and volume of stormwater runoff is adequately planned in the project to control runoff and avoid negative impacts to downstream properties. This information will be reviewed by the township review engineer for the Hughesville site to ensure compliance with the local stormwater management ordinances. The Hesker Hill site PCSM will be reviewed by the County Review engineer.

RKW has completed numerous successful projects that were reviewed by Dan Vassallo, P.E., P.L.S. (Wolf Township Engineer) and Eric Lundy, P.E. (Lycoming County Review Engineer). RKW is confident that we can streamline this review process with both reviewers.

Geotechnical Borings and Resistivity Testing

Hillis-Carnes Engineering Associates (HCEA) will provide the core borings and perform the soils resistivity testing. The services provided by HCEA will involve exploring the site of work, the performance of laboratory tests, engineering analyses, and preparation of a geotechnical report. The main tasks include:

1. Consulting available published geologic and project references.
2. Exploring and test in-situ conditions at boring locations.
3. Performing laboratory tests on representative samples of soil.
4. Analyzing the results of our office, field, and laboratory studies.
5. Developing design criteria for foundations and related geotechnical considerations.
6. Examining the relative merits of alternative methods of geotechnical designs.

In order to accomplish these objectives, a subsurface exploration program is consisting of three (3) Standard Penetration Test (SPT) soil borings at each tower site. For the purposes of this proposal, we have assumed the borings will be drilled to a maximum depth of 35 feet below existing site grades. If bedrock is encountered at a shallow depth and will be utilized for support of the tower footings, rock cores will be taken at the direction of the Geotechnical Engineer. Actual boring depths will be based on the subsurface conditions encountered during our investigation and may differ from those proposed.

The proposed borings will be advanced through the soils using hollow-stem augers and split-spoon samplers. Standard Penetration Testing (ASTM D1586) will be performed continuously to a depth of 20 feet and then at 5-foot intervals until auger refusal is achieved or the termination depth of the borehole is met. If unusual subsurface conditions are encountered or if more detailed information is required within certain intervals of depth, then additional split barrel sampling will be performed in lieu of the interval sampling proposed. If required, bedrock will be cored using diamond core drilling in general accordance with the procedures in ASTM D2113 "Standard Method for Diamond Core Drilling for Site Investigation".

Laboratory testing will be performed to establish the physical and strength characteristics and design parameters of the soils. This proposal includes laboratory testing consisting of two (2) full classification series tests which include sieve analysis, Atterberg Limit tests, and natural moisture content tests.

As required by law, HCEA will contact and coordinate with the Pennsylvania One Call System (PA One Call) at least 72 hours prior to drilling operations. HCEA personnel will field mark the proposed boring locations prior to performing the PA One Call. Existing ground surface elevations of the borings can be estimated from topographic survey information and available site grading plans if provided to us by others. The borings should be staked to allow time to obtain utility location clearance prior to our mobilization to the site.

The test borings will be backfilled with auger cuttings following completion and the measurement of water levels. Patching of the boring locations, site restoration, seeding, sodding, leveling of rutted ground, and the determination of 24-hour groundwater levels are not included in our proposed scope and fee. If requested, HCEA can provide these services for an additional fee. Drill crew delay time, if unable to access borings for reasons out of HCEA's control, will be billed at \$200.00/hour.

This proposal assumes that there will be no special conditions or restrictions on our field activities such as drilling permits pedestrian control, limited or restricted working hours, limited access, environmental monitoring, or safety requirements beyond Level D PPE.

After completion of all field exploration and laboratory testing, a geotechnical engineering report will be prepared and submitted. The report will include the logs of all test holes and a summary of the laboratory testing program results. The report will include the required engineering analyses and recommendations for the geotechnical design associated with the proposed tower structures.

As requested, Soil Resistivity testing will be provided at each tower site. Two (2) line tests will be provided at each site. The length and spacing of the resistivity intervals will be every 30' out to 300'. Upon completion of the filed work, the soil resistivity results will be compiled in a report that can be used for the respective site grounding design.

Utility Plans

RKW will provide a separate Utility Plan which shows the layout for the **electric power supply, fencing and grounding**. This plan will also include the location of the required **communications conduit**. The building details (location, size, footprint, etc.) will be provided from the tower manufacturer. This information will be used to show all the required towers, buildings, generators, etc. on the site and utility plans. The need for electric power and communications conduit will be coordinated with the project stakeholders to ensure the final plan satisfies the requirements of the project. This may include conduit for **surveillance** equipment that the County plans to install after construction.

Site Plan – Design, Grading and Land Development

Using the project base plan as described above, Engineer will prepare a sketch plan for the client's review based on the results of the Due Diligence effort above and the client's building footprints and project needs. By integrating the due diligence results and the client's goals, the Project Requirements will be determined. These include items such as:

- Land Use.
- Lot size requirements.
- Building coverage and impervious coverage requirements.
- Setbacks for buildings and parking areas.
- Landscaping and Lighting requirements.
- Required permits.

The sketch plan will ensure that the scope of the project is understood so we can represent your best interest in developing your project. This will help to see if there are any other existing or future issues that may impact the proposed development. We can also request waivers (if desired/required) based on this sketch plan to save on the overall design effort. Overall a sketch plan typically ensures a successful project that meets your needs and desires, and it is the first step in preparing the Land Development Plan and/or Site and Grading plan. Engineer will meet with the client to ensure their satisfaction with the sketch plan before moving forward. Once the client accepts the sketch plan, it will be used to complete the final plans.

Both tower sites are non-residential development, and therefore require a Land Development submission. The Land Development plan and submission is required for review and approval by the respective township and Lycoming County. This plan will be prepared for the client's review and input. Engineer will meet with client to review and further define the proposed development. The plan will be prepared in accordance with the applicable ordinances. These will include the Subdivision and Land Development (SALDO) & applicable zoning requirements. This plan will show existing features as well as proposed improvements including but not limited to:

- Proposed buildings.
- Building setback/zoning requirements.

- Driveway.
- Parking areas.
- Proposed grading.
- Stormwater management facilities.
- Site Grading.
- Proposed utilities.
- Project Site Construction Cost Opinion for budgeting and financial security calculation.

This plan/submission represents the final construction drawings integrating all of the information and design accumulated in the other various tasks in this proposal. These plans and all supporting documentation will be provided to the County as hard copies, as well as electronic copies for their use to bid the project. This includes providing the AutoCAD files in a compatible format as requested.

PROPOSAL FORM

Important note to Bidders: It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to: Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 21, 2020. **This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: R K Webster, LLC
Company Address: 513 Jordan Avenue
Montoursville, PA 17754
Main Telephone: (570) 435-3489 Main Fax: N/A

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Randall K. Webster / Managing Member
Contact Telephone: (570) 435-3489 Fax: N/A
Contact Email: rwebster@rkwebster.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Randall K. Webster, P.E.
Office Address: 513 Jordan Avenue
Montoursville, PA 17754
Telephone: (570) 435-3489 Fax: N/A
Email: rwebster@rkwebster.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	<u>1</u>	Date	_____
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

Company Type (check one):

- Sole Proprietorship Partnership Corporation Joint Venture

Bidder attests that:

1. He/she has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements;
2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor and material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

R K Webster, LLC		46-1657282		
Company Name		Federal ID#		
513 Jordan Avenue		Montoursville	PA	17754
Street Address	PO Box	City	State	Zip
(570) 435-3489		n/a		
Telephone #		Fax #		

WITNESS:

Karen S. Webster
Signature (see below)

Karen S. Webster
Name (print)

Administrative Assistant
Title (print)

COMPANY:

Randall K. Webster P.E.
Signature (see below)

Randall K. Webster, P.E.
Name (print)

Managing Member
Title (print)

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal Lycoming County Hughesville Water Authority Tower Site

State of Pennsylvania

County of Lycoming

I state that I am Managing Member (Title) of R K Webster, LLC (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. R K Webster, LLC (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:
N/A

I state that R K Webster, LLC (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

A statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: Randall K. Webster, P.E.

Signature: *Randall K. Webster, PE*

Title Managing Member

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 18 DAY
OF August, 2020



Notary Public

My Commission Expires: 5-17-2023

Commonwealth of Pennsylvania - Notary Seal
Thomas E. Reed, Notary Public
Lycoming County
My commission expires May 17, 2023
Commission number 1351951
Member, Pennsylvania Association of Notaries

Legal Ad
Sun Gazette
To Be Run: July 30th and August 3rd

NOTICE TO BIDDERS

ADDENDUM NO. 1 RFP FOR ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE

The additions and/or deletions contained in this Addendum shall be made a part of the plans and specifications and contract documents for the above-referenced solicitation, and shall be subject to all applicable requirements thereunder, as if originally shown and/or specified. In case of any conflict between the specifications, and this Addendum, this Addendum shall govern.

This Addendum must be returned with your bid as acknowledgment of its receipt. Bidders may obtain the Addendum on the County website at www.lyco.org and Request for Bids.

The following modification is made to the text for the referenced solicitation:

The scope of the project has changed from one (1) tower site to two (2) tower sites, resulting in a number of changes to the RFP issued. Please see the following changes for the Lycoming County RFP for E&S services.

1. Change from "Hughesville Water Authority Tower Site" to "Hughesville Water Authority Tower Site and Hesker Hill Tower Site: (1) on the cover page, (2) on Notice to Bidders page 1-1, second paragraph, and (3) on Section 2, page 2-2, paragraph 2.9, third line.

2. Change to Scope of Work & Technical Specifications, Introduction, page 5-1 is as follows:

Lycoming County is currently upgrading our existing radio system to better serve the residents, businesses, tourists and public safety agencies of the county. In order to achieve the overall plan, Lycoming County will be contracting for the construction of two (2) raw lands to finish tower sites to improve RF coverage for our first responders. Additionally, on the one site, a second plot of land is to be cleared for the water authority to use (no further development of the second plot is required).

3. Changes to Scope of Work & Technical Specifications, General Requirements, item 1, page 5-1 are as follows:

1. The names and locations of the two (2) new proposed tower sites are:

- a. Hughesville Water Authority tower site
 - i. Latitude: 41-15-16.18 N, longitude: 76-43-16.45 W
 - ii. Street address: 279 Reservoir Road, Hughesville, PA
 - iii. Township: Wolf
 - iv. County: Lycoming
 - v. Size of site plot: 100'x100'
 - vi. Height of tower: 250'

Hughesville Water Authority land which is to be cleared (not developed) for water authority use is:

- i. Street address: 279 Reservoir Road, Hughesville, PA
- ii. Township: Wolf
- iii. County: Lycoming
- iv. Approximate size of plot to be cleared for the water authority: 100'x100'

- b. Heskler Hill tower site
 - i. Latitude: 41-14-19.1 N, longitude: 77-14-35.1W
 - ii. Street address: 1324 Heskler Hill Road, Jersey Shore, PA
 - iii. Township: Piatt
 - iv. County: Lycoming
 - v. Size of site plot: 75'x75'
 - vi. Height of tower: 250'

The County will be responsible for procurement of site and leasing of property.

4. Change to Mandatory Site Walk on Notice to Bidders, page 1-1, paragraph 4 is as follows:

A mandatory site walk will be held on Wednesday, August 5, 2020, at 10:00 AM for the two (2) tower sites, starting at the Hughesville Water Authority site located at 279 Reservoir Road, Hughesville, PA.

5. Change to Price Proposal, section 6.1 Cost Elements is as follows:

Hughesville Water Authority Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final	

Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	
Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HUGHESVILLE	

Hesker Hill Site E&S	Cost (\$)
Site Grading/Site Layout	
Stormwater Drainage Design	
Erosion/Sediment Control	
Civil Permitting*	
Geotechnical	
Geotechnical Boring Stakeout	
Construction Stakeout	
Soil Resistivity	
Preliminary and Final Construction Drawings (CDs)	
Utility Coordination	
Zoning Information	
FAA/FCC	
Field Surveying/Courthouse Research	
Survey Plans	
Environmental Investigation	
Infiltration Testing	

Wetlands/Stream Delineation	
Phase 1 Investigation and Report	
Hearing Attendance (If Needed)	
Phase 2 Investigation and Report (If Needed)	
NEPA/SHPO Services	
Deliveries, Copies, Etc.	
SUBTOTAL FOR HESKER HILL	

GRAND TOTAL FOR BOTH SITES	
-----------------------------------	--

ACKNOWLEDGEMENT

I hereby acknowledge receipt of this Addendum for the above noted project.

Signature *Samuel R. Watts* Date *8/21/2020*



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

08/18/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Fischer Insurance Agency 1735 East Third St Williamsport PA 17701		CONTACT NAME: Danielle Weaver PHONE (A/C, No. Ext): (570)323-3600 E-MAIL ADDRESS: Daniellw@fischeragency.com FAX (A/C, No.): (570)323-1799															
INSURED R K Webster LLC 513 Jordan Ave Montoursville PA 17754-2309		INSURER(S) AFFORDING COVERAGE <table border="1"> <tr> <th>INSURER</th> <th>NAIC #</th> </tr> <tr> <td>INSURER A: Erie Insurance Exchange</td> <td>26271</td> </tr> <tr> <td>INSURER B: Flagship City Ins Co</td> <td>35585</td> </tr> <tr> <td>INSURER C: Hiscox Ins Co Inc</td> <td>10200</td> </tr> <tr> <td>INSURER D:</td> <td></td> </tr> <tr> <td>INSURER E:</td> <td></td> </tr> <tr> <td>INSURER F:</td> <td></td> </tr> </table>		INSURER	NAIC #	INSURER A: Erie Insurance Exchange	26271	INSURER B: Flagship City Ins Co	35585	INSURER C: Hiscox Ins Co Inc	10200	INSURER D:		INSURER E:		INSURER F:	
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INSURER D:																	
INSURER E:																	
INSURER F:																	

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER			Q971947245	10/15/2019	10/15/2020	EACH OCCURRENCE \$ 1000000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1000000 MED EXP (Any one person) \$ 5000 PERSONAL & ADV INJURY \$ 1000000 GENERAL AGGREGATE \$ 2000000 PRODUCTS - COMP/OP AGG \$ 2000000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY			Q080132655	8/1/2020	8/1/2021	COMBINED SINGLE LIMIT (Ea accident) \$ 1000000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB OCCUR CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
B	<input type="checkbox"/> WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	Q946500420	10/15/2019	10/15/2020	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 100000 E.L. DISEASE - EA EMPLOYEE \$ 100000 E.L. DISEASE - POLICY LIMIT \$ 500000
C	Professional Liability			ANE2374542.19	10/15/2019	10/15/2020	Each Claim Limit \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

Lycoming County
 330 Pine St. Suite 404
 Williamsport, PA 17701

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Fax: Email:

ACORD 25 (2016/03)

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PROPOSAL FORM

Important note to Bidders: It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to: Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 21, 2020. **This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: ATC Group Services

Company Address: 23 N. Derr Drive, Suite 28
Lewisburg, PA 17837

Main Telephone: 570-500-0282 Main Fax: N/A

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Joshua C. Owens, PE - Senior Project Manager/Office Manager

Contact Telephone: 570-500-0282 Fax: N/A

Contact Email: joshua.owens@atcgs.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Joshua C. Owens, PE - Senior Project Manager/Office Manager

Office Address: 23 N. Derr Drive, Suite 28
Lewisburg, PA 17837

Telephone: 570-500-0282 Fax: N/A

Email: joshua.owens@atcgs.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	_____ 1 _____	Date	_____
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

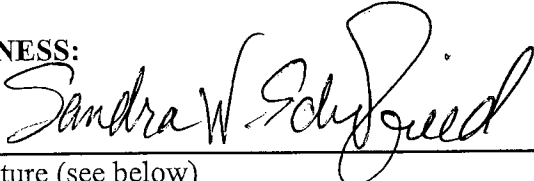
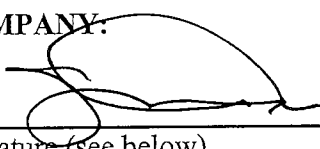
Company Type (check one):

- Sole Proprietorship Partnership Corporation Joint Venture

Bidder attests that:

1. He/she has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements;
2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor and material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

<u>ATC Group Services, LLC</u>		<u>46-0399408</u>		
Company Name		Federal ID#		
<u>Dept. 2630</u>	<u>P.O. Box 11407</u>	<u>Birmingham</u>	<u>AL</u>	<u>35246-2630</u>
Street Address	PO Box	City	State	Zip
<u>337-234-8777</u>		<u>337-235-6777</u>		
Telephone #		Fax #		
WITNESS: 	COMPANY: 			
Signature (see below)	Signature (see below)			
<u>Sandra Schofield</u>	<u>John J. Devine, VP</u>			
Name (print)	Name (print)			
<u>Project Admin</u>	<u>Branch Manager</u>			
Title (print)	Title (print)			

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal Hughesville Water Authority Tower Site and Hesker Hill Tower Site

State of Pennsylvania

County of Lycoming

I state that I am Vice President (Title) of ATC Group Services (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
5. ATC Group Services (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:

I state that ATC Group Services (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

A statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: John J. Devine

Signature: _____

Title Vice President

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 17th DAY
OF August, 20 20

Sandra W. Schofield

Notary Public

My Commission Expires: August 9, 2024

Commonwealth of Pennsylvania - Notary Seal
Sandra W. Schofield, Notary Public
Montgomery County
My commission expires August 9, 2024
Commission number 1146866
Member, Pennsylvania Association of Notaries

 COPY

ATC
—AN ATLAS COMPANY—

ENGINEERING AND SURVEYING SERVICES FOR HUGHESVILLE WATER AUTHORITY TOWER SITE and HESKER HILL TOWER SITE



Professional Engineering Services
Request for Proposals
August 21, 2020

Clarks Summit Office

Richard Kresge, Jr. P.E.
ATC Group Services
1001 Lackawanna Trail
Clarks Summit, PA 18411
Phone: + 1 570 587 3339
Richard.Kresge@atcgs.com

Lewisburg Office

Joshua Owens, P.E., LO
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23 N. Derr Drive, Suite 28
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Plymouth Meeting Office

Jeffrey Skinner, PLS, P.E.
BCM Engineers
920 Germantown Pike
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Phone: +1 610-3100
Jeffrey.Skinner@atcgs.com



23 N. Derr Drive, Suite #28
Lewisburg, PA 17837
Telephone 570.500.0282
www.atcgroupservices.com

August 21, 2020

Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, Pennsylvania 17701

Re: Letter of Transmittal
Request for Proposals – RFP for Engineering and Surveying Services for Hughesville Water Authority Tower Site and Hesker Hill Tower Site
Lycoming County, Pennsylvania

Dear County Supervisors,

We are pleased to provide you with the following Proposal in response to your Proposal Request for the Engineering and Surveying Services for Hughesville Water Authority Tower Site and Hesker Hill Tower Site, which was advertised on July 20, 2020.

ATC Group Services (an Atlas Company) is one of the foremost diversified environmental firms in the United States. Over the past 30 years, ATC has become one of the leading national providers of environmental and engineering support services nationwide. We are a full service firm specializing in hazardous materials management, industrial hygiene, safety and compliance, environmental remediation, geotechnical and construction material testing, laboratory services, health & safety training, landscape architecture, municipal, water, wastewater, and stormwater engineering services.

Clients turn to ATC for help navigating complex engineering challenges because of our reputation for integrity, responsiveness, and innovation.

ATC maintains over 115 offices throughout the United States with over 1,900 employees providing our clients' access to a diverse group of qualified professionals with an in-depth knowledge of local, state and federal regulatory standards. Our professionals have managed thousands of projects, providing safe, effective solutions for many varied projects with unique challenges.

ATC has highly qualified professionals in our Clarks Summit, Plymouth Meeting and Lewisburg, PA offices that will be available for this Project. Our intent is to provide the experience of a local staff with personalized service and then, should the need arise, back it up with the resources of over 45 engineers, scientists, designers, and support staff serving the municipal, water, wastewater and stormwater profession. Our professional staff have worked together with Lycoming County on a previous project and developed a good working relationship with the County.

We have provided you a description of our Firm, resumes of key personnel who will be supporting this Project, contact information for similar clients that ATC represents, and other information we felt would aid in your decision to choose ATC as the consultant for this Project.

ATC has a large portfolio of projects similar in size and nature to the work identified in this RFP. If you wish for us to provide additional information, we can provide that at your request.

Please do not hesitate to contact me if you have any questions via email at Joshua.Owens@atcgs.com or via phone at 570.500.0282.

Sincerely,
ATC Group Services



Joshua C. Owens, P.E., LO
Sr. Project Manager

cc: J. Devine
R. Kresge, P.E.
J. Skinner, PLS, PE



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Appendix B – Standard Hourly Rates

Appendix C – Organizational Chart

1.0 INTRODUCTION

1.1 Firm Information

ATC Group Services (an Atlas Company) is a multi-service engineering firm. For more than 30 years, ATC has provided our clients with the highest quality professional engineering, planning, financial, scientific, and environmental services necessary to meet their water needs. We think that this mix of experience and personnel offers our clients the highest value for this work. Our engineering experience encompasses client representation, planning, wastewater treatment design, pumping stations, collection system design, financial planning, permitting and operation assistance. ATC is pleased to submit this *Proposal for Engineering Services* for the Hughesville Water Authority Tower Site and Hesker Hill Tower Site. The following is the pertinent information on our firm:



1.2 Project Manager

ATC is pleased to offer Mr. Joshua C. Owens, PE, LO as the Client/Project Manager for this Project. He will attend design meetings as needed, construction meetings and will provide quality control review from our Lewisburg, PA Office. Mr. Owens has over 19 years of experience providing Design Engineering services to a broad range of clients. His experiences comprise a broad range of Water, Wastewater, Municipal and Stormwater Engineering Services. He has been deeply involved in the study, planning, funding, permitting, regulatory compliance, design and construction of a wide array of Projects. Mr. Owens has been ATC project manager for Lycoming County's recent Susquehanna River Walk Extension Project in the City of Williamsport.



2.0 SCOPE OF SERVICES

2.1 GENERAL REQUIREMENTS

Locations

The location of the sites are as follows:

- a. Hughesville Water Authority Tower Site
Latitude: 41-15-16.18N
Longitude: 7643-16.45W
Street Address: 279 Reservoir Road, Hughesville, PA
Township: Wolf
County: Lycoming
Size of site plot: 100' x 100'
Height of tower: 250'

- b. Hughesville Water Authority land (to be cleared, not developed)
Street Address: 279 Reservoir Road, Hughesville, PA
Township: Wolf
County: Lycoming
Approximate size of plot to be cleared for water authority: 100' x 100'

- c. Hesker Hill Tower Site
Latitude: 41-14-19.1N
Longitude: 77-14-35.1W
Street Address: 1259 Hesker Hill Road, Jersey Shore, PA
Township: Piatt
County: Lycoming
Size of site plot: 60' x 60'
Height of tower: 250'

2.2 ENGINEERING SERVICES

The following engineering services shall be provided as part of this Proposal.

A. Civil Site Engineering

- ATC shall design a gravel access road to the proposed parking area and tower pad. Design is subject to change based on site and layout.

- ATC shall design Post Construction Stormwater Management to meet applicable local and state design and permitting requirements.

- ATC shall design Erosion and Sediment Controls to meet local and state design and permitting requirements for permit acquisition and construction purposes.

- ATC shall prepare and submit all Permitting documents, including but not limited to:
 - City and County E&S and PCSM Permits
 - Site Specific E&S Applications
 - NPDES Permit Submittals including Notice of Intent
 - Local Grading Permits
 - Highway Occupancy Permits
- ATC shall perform geotechnical testing and prepare report for the tower design by the tower manufacturer.
 - ATC assumes depths of 35-feet below grade.
 - ATC assumes three (3) bores required.
- ATC shall prepare soil resistivity testing and report by a qualified professional.

B. Site Design

All site design activities shall be completed in compliance with existing regulatory codes, industry standards and FAA/FCC Regulations.

- ATC shall provide preliminary legible drawing of the proposed site that shall include:
 - compound layout with all applicable facilities, shelter, propane tank, generator, construction details and tower drawings.
 - Lease area of site
 - Fencing, grounding and electrical plan and details
- ATC shall be responsible for utility coordination, including:
 - Submission of PA-One Calls
 - Coordination of site walks with appropriate utility firms for utility routing
 - Preparation of ROW required for utility corridors
- ATC shall prepare construction drawings based on all the information collected and agreed upon during the site walks. Construction drawings will also incorporate results based on geotechnical and soil resistivity reports, tower drawings, foundations, shelter, propane tank and generator, FAA Notice, permitting and site survey.
- The facilities required at each of the tower sites are power and communications.

C. Shelter and Tower Designs

Shelter and tower designs shall be completed by tower manufacturer and under a separate Scope of Work.

2.3 SURVEYING SERVICES

The following surveying services shall be provided as part of this Proposal.

- ATC shall verify the metes and bounds of the parent parcel of interest given by bearing to the nearest whole second and distance to the nearest hundredth of a foot
- Easements and/or rights of ways shall be shown graphically and described, as well as the proposed lease parcel and proposed and existing easements.
- All legal names and widths of any adjoining streets or dedicated public rights of way shall be shown.
- The survey map will include a north arrow showing deed bearing north, magnetic north and geographic true north.
- All tax maps, blocks and lot numbers and the deed book and page numbers shall be verified and shown for the parent parcels and adjoining parcels within 100 feet.
- Location and description of all structures within 50 feet of the proposed site shall be shown, will also include any abandoned structures.
- Location and description of all above ground utilities including power and telephone poles, overhead sires and other items shall be shown.
- Underground utilities shall also be shown and noted within 25 feet of proposed construction area.
- Any and all utility firms or other owners shall be labeled and shown.
- All corners of proposed lease parcels, easements and other boundaries shall be permanently marked with iron pins or pipes not less than 18 inches in length and 1" in diameter.
- Elevations shall be field measured and shown to within 1.0 feet of the U.S.G.S. datum or NGVD 88 datum when not in a special flood hazard zone.
- Where a particular benchmark is used as the starting point, its description, location and elevation shall be noted on the drawing.
- Topographic coverage will include a minimum area within 100 feet of the new construction including all access and utility easements.

- Where the terrain has a slope of 6% or more, a profile of the access easement centerline will be required.
- Contours shall be shown over the full area of requested coverage at 2-foot intervals.
- A permanent benchmark shall be set in the immediate vicinity of the proposed new construction.
- ATC shall provide a 2C letter accurate within the FAA Horizontal Accuracy Code 2, (+/- 50 feet) and the elevation provided is accurate within FAA Vertical Accuracy Code C, (+/- 20 feet).

A. Survey Plan

- ATC shall provide specific title block for the survey plan.
- The survey plan scale shall normally be 1"=20' or 1"=30' if necessary and 24 inches in depth by 36 inches in width.
- A key map at a scale of 1"=2000' will be included in the area designated on the standard drawing format sheet (upper right-hand corner) and shall usually consist of a reproduction of the U.S.G.S. 7.5-minute quadrangle map with the site location in heavy outline and circled for clarity.
- The original drawings shall bear the signature of the Supervising Professional Land Surveyor.

2.4 ENVIRONMENTAL SURVEYING

A. Wetland and Stream Delineation and Permitting

- ATC shall provide a site-specific Wetland, Stream and Natural Resources investigation complying with local, state and national procedures.
- ATC shall be responsible for conveying wetland, stream and natural resource finding with the client and advising a viable permitting solution for any field finding that will require mitigation, permitting, or site re-design.
- ATC shall prepare all applicable environmental permit submittals for construction of the proposed project, if applicable.

2.5 ADDITIONAL SERVICES

The following additional services may be required based on site specific issues. ATC shall advise the County as issues and unforeseen circumstances arise.



A. SHPO Compliance Permitting

- ATC will complete State Historic Preservation Office (SHPO) compliance permitting and submittals.
- ATC will be responsible for all compliance with the Pennsylvania State Historic Code, PHMC Submissions, FCC Form 620 and all applicable compliance permitting.

B. Coordinate/Prepare Phase I and II Site Assessments

- ATC perform the Phase I ESA, which is required.
- ATC will perform the Phase II ESA, if it is required.

C. Zoning Permitting

- ATC will include zoning drawings, zoning package submittal and attend any required zoning hearings.
- All information shall be compliant with county and city zoning requirements.

2.6 MISCELLANEOUS

A. Expenses

- A list of all reimbursable expenses and rates are included in Appendix B.
- ATC shall document and bill all reimbursable costs with a 0% markup.

B. Change in Scope of Work

- An hourly fee rate sheet is included in Appendix B.

4.0 PROJECT SCHEDULE

A schedule is obviously contingent upon receiving requisite information from the County and the Agencies in a timely fashion.

ATC is confident we can meet this schedule to have the work completed by February 21, 2020 for the following reasons:

- We possess the manpower and ability to perform this project and we will begin work **immediately** upon receiving authorization to proceed.
- Our project team is fully committed for the duration of the project. The team members can "hit the ground running" because they have actively participated in the preparation of this proposal and have worked as a team in the past.
- Our staff is enthusiastic and excited about this project. They are willing to work the necessary overtime to produce a quality project on time and within budget.

5.0 PROPOSAL INFORMATION

5.1 COMPANY EXPERIENCE

ATC's Engineers have completed hundreds consulting and engineering projects. An organization chart has been provided in Appendix C.

5.2 PROJECT TEAM

ATC has assembled a **highly qualified and diverse** project team to work on this Project for Lycoming County. The project team consists of skilled professionals with technical experience in the areas of survey, site grading and stormwater design. They have all worked together on numerous similar successful projects and, therefore, have developed a good working relationship with each other as well as with the clients to whom they have provided their services. All team members are available for immediate assignment to the County's project and are committed to serve for the project's duration.

5.3 KEY PROFESSIONAL STAFF

Joshua C. Owens, P.E., LO, Office Manager/Senior Project Manager

Mr. Owens has more than 19 years of experience and has been intimately involved in both the management and design of numerous projects. It has been his responsibility to guide projects from the conceptual phase to the startup phase. He has been responsible for the preparation of contract documents to allow for bidding and construction of various facilities. He has a wide range of experience from specialty remediation and hazardous cleanup work to sanitary, mechanical, civil and environmental engineering tasks relating to both large infrastructure projects and private industry projects. Mr. Owens is highly experienced in the design and construction of water, wastewater, industrial, stormwater facilities and project management.

Richard J. Kresge, Jr., PE, Senior Project Manager

Mr. Kresge has over 25 years of experience in the study, planning, regulatory compliance, and design of various land development and water/wastewater projects. Land development projects include a wide variety ranging from small-scale curbing and sidewalk replacement to large-scale development, involving thousands of building square footage. The water/wastewater projects range in size from small-scale water distribution and sewage collection systems to complex water and sewage treatment facilities for both public and private clients.

Jeffrey Skinner, P.E., PLS Senior Project Manager

Mr. Skinner has more than 28 years of architectural, civil engineering and surveying experience for municipal and industrial projects. His work experience has included sanitary conveyance systems design, potable water conveyance systems design, site and building design, subdivision/land development design, stormwater management design, drainage and roadway design, specifications and bid document preparation, legal descriptions, project and construction estimating, erosion and sedimentation control design, PADEP general permitting applications, NPDES and sewage facilities planning module permit applications, PennDOT HOP and driveway access permitting applications, and construction surveying.

John Rapp, P.E. Structural Engineer

Mr. Rapp has more than 40 years design experience and provides structural engineering for infrastructure facilities design projects and also building sciences and environmental services projects. He primarily designs structures for water and wastewater treatment facilities including reinforced concrete tanks, pumping stations, circular tank foundations, masonry and wood frame buildings, equipment foundations, structural steel frames for buildings and pipe supports, and pre-engineered buildings. His experience also includes structural evaluation of existing facilities, design of small bridges/culverts and retaining walls, architectural concerns of buildings and structures, and design of industrial facilities. His responsibilities include site investigations, reports, preparation of calculations and specifications.

5.4 SUB-CONSULTANTS

ATC will utilize Wetlands & Ecology, LLC for the wetlands and stream delineation work. ATC will utilize Martz Technologies, LLC for the utility coordination and design.

5.5 EXCEPTIONS

ATC takes no exception to any of the other items listed in the Request for Proposal for this project. ATC has not included cost to clear Hughesville Water Authority Tower Site of trees or brush.

6.0 FEES

ATC proposes to provide the outlined services described herein. A copy of Lycoming Price Proposal can be found in **Appendix A** and at the beginning of this Proposal. The fees include all labor, expenses, travel, management, and costs related to the services rendered for the project. Costs for additional out of scope services requested to be performed will be based upon our current Schedule of Billing Charges in effect at the time services are provided.



APPENDIX A
Price Proposal
Proposal Form
Non-Collusion Affidavit
Exception Form



**HUGHESVILLE WATER AUTHORITY TOWER SITE
PRICE PROPOSAL**

6.1 **Cost Elements.** Services not specifically mentioned in this RFP, but are necessary to provide the functional capabilities described, shall be included as part of the cost elements. Bidders should utilize this table below to justify costs.

HUGHESVILLE WATER AUTHORITY SITE E&S	COST (\$)
Site Grading/Site Layout	\$ 8,400.00
Stormwater Drainage Design	\$ 2,320.00
Erosion/Sediment Control	\$ 2,000.00
Civil Permitting	\$ 1,840.00
Geotechnical	\$ 10,000.00
Geotechnical Boring Stakeout	\$ 845.00
Construction Stakeout	\$ 845.00
Soil Resistivity	\$ 2,500.00
Preliminary and Final Construction Drawings (CDs)	\$ 4,320.00
Utility Coordination	\$ 6,480.00
Zoning Information	\$ 1,360.00
FAA/FCC	\$ 2,680.00
Field Surveying/Courthouse Research	\$ 8,170.00
Survey Plans	\$ 4,400.00
Environmental Investigation	\$ 2,150.00
Infiltration Testing	\$ 4,800.00
Wetlands/Stream Delineation	\$ 1,040.00
Phase I Investigation and Report	\$ 3,200.00
Hearing Attendance (If Needed)	\$ 500.00
Phase II Investigation and Report (If Needed)	\$ 9,580.00
NEPA/SHPO Services	\$ 1,120.00
Deliveries, Copies, Etc.	\$ 940.00
SUBTOTAL FOR HUGHESVILLE	\$ 79,490.00

**HESKER HILL SITE
PRICE PROPOSAL**

6.1 Cost Elements. Services not specifically mentioned in this RFP, but are necessary to provide the functional capabilities described, shall be included as part of the cost elements. Bidders should utilize this table below to justify costs.

HESKER HILL SITE E&S	COST (\$)
Site Grading/Site Layout	\$ 5,500.00
Stormwater Drainage Design	\$ 2,320.00
Erosion/Sediment Control	\$ 2,000.00
Civil Permitting	\$ 1,360.00
Geotechnical	\$ 8,550.00
Geotechnical Boring Stakeout	\$ 895.00
Construction Stakeout	\$ 895.00
Soil Resistivity	\$ 2,500.00
Preliminary and Final Construction Drawings (CDs)	\$ 3,180.00
Utility Coordination	\$ 4,980.00
Zoning Information	\$ 1,360.00
FAA/FCC	\$ 2,480.00
Field Surveying/Courthouse Research	\$ 2,420.00
Survey Plans	\$ 2,860.00
Environmental Investigation	\$ 2,150.00
Infiltration Testing	\$ 4,975.00
Wetlands/Stream Delineation	\$ 1,040.00
Phase I Investigation and Report	\$ 3,200.00
Hearing Attendance (If Needed)	\$ 500.00
Phase II Investigation and Report (If Needed)	\$ 9,100.00
NEPA/SHPO Services	\$ 1,120.00
Deliveries, Copies, Etc.	\$ 500.00
SUBTOTAL FOR HESKER HILL	\$ 63,885.00
GRAND TOTAL FOR BOTH SITES	\$ 143,375.00

The undersigned, as Bidder, hereby declares that the total project costs as indicated above, includes all necessary work to complete this project in full according to the general specifications contained in the RFP. Products and services not specifically mentioned, but are necessary to provide the functional capabilities shall be listed and included as part of the cost elements.

The undersigned further understands and agrees that if the County accepts the bid, no additional funds will be allowed beyond the stated total project costs.


Company Name: ATC Group Services

Address: 23 N. Derr Drive, Suite 28, Lewisburg, PA 17837

Point of Contact: Joshua C. Owens, PE Phone Number: 570-500-0282

Fax Number: N/A Email address: joshua.owens@atcgs.com

Name of person submitting proposal: Joshua C. Owens, PE

Signature:  Date: 8/21/2020

When submitting a bid, place the bid form sheet as the top page of the bid package and the bid price schedule as the second page of the bid package.

PROPOSAL FORM

Important note to Bidders:

It is essential that submitted proposal complies with all of the requirements contained in the RFP. The undersigned Bidder agrees, if this proposal is accepted, to enter into an agreement with the County on the form included in the Contract Documents to perform and furnish all equipment, labor, materials, services, goods or products, hereafter referred to as WORK, as specified or indicated in the contract documents.

This proposal is submitted to:

Lycoming County Controller's Office
Lycoming County Executive Plaza Building
330 Pine Street, 2nd Floor
Williamsport, PA 17701

This proposal is submitted on August 21, 2020. **This proposal is valid for 60 days from the date of the public opening of the proposals.**

This proposal is submitted by:

Company Name: ATC Group Services
Company Address: 23 N. Derr Drive, Suite 28
Lewisburg, PA 17837
Main Telephone: 570-500-0282 Main Fax: N/A

Communications and questions concerning this proposal are to be directed to:

Contact Name / Title: Joshua C. Owens, PE - Senior Project Manager/Office Manager
Contact Telephone: 570-500-0282 Fax: N/A
Contact Email: joshua.owens@atcgs.com

In the event your company is awarded a contract as a result of the RFP, the following individual will serve as project liaison/manager:

Name / Title: Joshua C. Owens, PE - Senior Project Manager/Office Manager
Office Address: 23 N. Derr Drive, Suite 28
Lewisburg, PA 17837
Telephone: 570-500-0282 Fax: N/A
Email: joshua.owens@atcgs.com

Receipt of Amendments (if applicable)

In submitting this proposal, Bidder represents that they have received and examined the following RFP Addendums:

Addendum No	_____ 1 _____	Date	_____
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____
Addendum No	_____	Date	_____

Delivery Schedule

Bidder commits that services will be completed no later than February 28, 2021.

Proposal Pricing

Unless items are specifically excluded in the proposal, the County shall deem the proposal to be complete and shall not be charged any costs above and beyond the proposal amount as set forth by Bidder herein.

Prices as stated herein shall remain firm throughout the life of the contract.

Authorized Signature of Bidder

The proposal form must be signed by an individual with actual authority to bind the company.

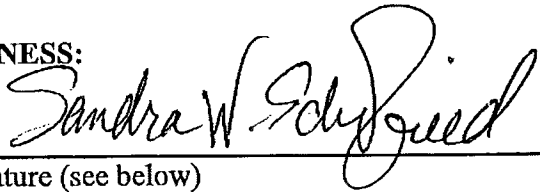
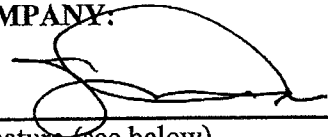
Company Type (check one):

- Sole Proprietorship Partnership Corporation Joint Venture

Bidder attests that:

1. He/she has thoroughly reviewed the County's RFP and that this proposal is submitted in accordance with the RFP requirements;
2. He/she are familiar with the site facilities, site conditions, the pertinent state and local codes, state of labor and material markets, and has made due allowance in the proposal for all contingencies.

Corporations: The proposal must be signed by the President or Vice President and the signature must be attested by the Corporate Secretary or Treasurer. If any employee other than the President or Vice President signs on behalf of the corporation, or if the President's or Vice President's signature is not attested to by the Corporate Secretary or Treasurer, a copy of the corporate resolution authorizing said signature(s) must be attached to this proposal. Failure to attach a copy of the appropriate authorization, if required, may result in rejection of the proposal.

<u>ATC Group Services, LLC</u>		<u>46-0399408</u>		
Company Name		Federal ID#		
<u>Dept. 2630</u>	<u>P.O. Box 11407</u>	<u>Birmingham</u>	<u>AL</u>	<u>35246-2630</u>
Street Address	PO Box	City	State	Zip
<u>337-234-8777</u>		<u>337-235-6777</u>		
Telephone #		Fax #		
WITNESS: 		COMPANY: 		
Signature (see below)		Signature (see below)		
<u>Sandra Schofield</u>		<u>John J. Devine, VP</u>		
Name (print)		Name (print)		
<u>Project Admin</u>		<u>Branch Manager</u>		
Title (print)		Title (print)		

NON-COLLUSION AFFIDAVIT

Contract/Bid/Proposal Hughesville Water Authority Tower Site and Hesker Hill Tower Site

State of Pennsylvania

County of Lycoming

I state that I am Vice President (Title) of ATC Group Services (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this proposal.

I state that:

1. The price(s) and amount of this proposal have been arrived at independently and without consultation, communication, or agreement with any other Bidder or potential Bidder.
 2. Neither the price(s) nor the amount of this proposal, and neither the approximate prices(s) nor approximate amount of this proposal, have been disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before proposal opening.
 3. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a proposal higher than this proposal, or to submit any intentionally high or noncompetitive proposal or other form of complementary proposal.
 4. The proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive proposal.
 5. ATC Group Services (Name of Firm), its affiliates, subsidiaries, officers, and employees are not currently under investigation by any governmental agency and have not, in the last four years, been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding in any public contract, except as follows:
-
-

I state that ATC Group Services (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the County of Lycoming in awarding the contract(s) for which this proposal is submitted. I understand and my firm understands that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the County of Lycoming of the true facts relating to the submission of proposals for this contract.

A statement in this affidavit that a person has been convicted or found liable for any act, prohibited by State or Federal Law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract within the last three years, does not prohibit the County of Lycoming from accepting a proposal form or awarding a contract to that person, but may be grounds for administrative suspension or debarment in the discretion of the County under its rules and regulations, or may be grounds for consideration on the question of whether the County should decline to award a contract to that person on the basis of lack of responsibility.

Name: John J. Devine
Signature: _____
Title Vice President

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 17th DAY
OF August, 20 20

Sandra W. Schofield
Notary Public

My Commission Expires: August 9, 2024

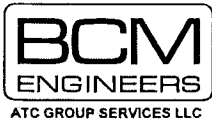
Commonwealth of Pennsylvania - Notary Seal
Sandra W. Schofield, Notary Public
Montgomery County
My commission expires August 9, 2024
Commission number 1146866
Member, Pennsylvania Association of Notaries



APPENDIX B

Standard Hourly Rates





SCHEDULE OF BILLING CHARGES

Effective January 1, 2020

SCOPE OF SERVICES – BCM Engineers, referred to herein as "BCM," will perform the services described in its proposal, or, in the absence of a proposal, as defined in writing and approved by BCM and Client, referred to herein as "Services" in accordance with the terms of this "Schedule of Billing Charges." The Services shall be performed on a Time and Materials basis with payment to BCM for Labor and Other Direct Costs according to this Schedule of Billing Charges.

BILLING RATES

STAFF - Charges for all professional, engineering, and other technical and administrative personnel directly charging time to the project will be calculated and billed on the basis of an hourly "Billing Rate". Billing Rates include direct salary, fringe benefits, payroll burden, overhead costs and fee. All time is rounded to the nearest one-half hour. The following lists the range of average Hourly Billing Rates:

Project Manager/Section Manager	\$125.00 - 160.00
Senior Technical Professional	\$ 95.00 - 130.00
Technical Professional	\$ 80.00 - 105.00
Construction Representative	\$ 50.00 - 75.00
Technical Specialist	\$ 65.00 - 85.00
Technician	\$ 40.00 - 75.00
Project Administration	\$ 35.00 - 75.00

Certain proposals may require the use of specific personnel. In those cases, the hourly billing rates used shall be the average of the actual rates of the personnel expected to be assigned to the project. Billing rates for senior staff not included in the above categories will be quoted separately or billed at a range of \$125.00 to \$175.00 per hour.

All staff personnel have been classified in the above labor classification categories based on discipline skills, education and experience level. All field labor and equipment are subject to a four-hour minimum charge and are portal-to-portal calculated from the base facility.

All travel, to a maximum of eight hours per day, will be charged at the Billing Rates. Overtime hours for exempt employees (non-hourly) will be charged at the standard Billing Rate. Overtime hours, authorized by Client, of non-exempt (hourly non-supervisory) employees will include overtime premium.

LITIGATION SUPPORT - In the event that BCM's employees are requested by Client or compelled by subpoena or otherwise by any party to give expert witness testimony or otherwise participate in a judicial

or administrative proceeding involving the Client at any time, Client shall compensate BCM at 100% of the Billing Rate, including preparation time, and shall reimburse BCM for all Other Direct Costs.

RETAINER - BCM may require advance deposit of funds on specific projects based upon project cost estimates. In those instances, BCM and the Client will mutually provide terms for the deposit of advance payments and provisions for crediting such advances against invoices for Services completed.

OTHER DIRECT COSTS - Costs directly related to a project will be charged to the project at a rate of 1.15 times the actual costs. Direct costs include: shipping charges; printing and reproduction; travel and subsistence; special fees, permits, licenses and insurance; subcontracts; outside computer time; and miscellaneous materials.

CHARGES FOR AUTOMOBILES AND VANS - For use of automobiles, there will be a charge of \$0.57.5 per mile plus a flat rate of \$25.00 per day. Vans, trucks and four-wheel drive vehicles will be charged at the rate of \$0.57.5 per mile plus a flat rate of \$35.00 per day.

INVOICING AND PAYMENT - Invoices will be issued at regular intervals (usually monthly) itemizing the staff categories, hours worked, rates, and the Other Direct Costs. Copies of supporting documentation will be provided upon Client's request and at the Client's expense, to include associated labor and copying costs. Original receipts will be available for review at BCM's Office - but will not be released. Payments are due at the address appearing on the invoice within thirty (30) days of the invoice date. Invoices not paid within thirty (30) days are subject to interest from the 31st day at a rate 1-1/2 percent per month. In addition BCM may, after giving seven (7) days written notice to Client, suspend Services without liability until the Client has paid in full amounts due BCM on account of Services rendered including interest on past due invoices or terminate Services without liability. If there is a disputed amount on an invoice, Client agrees to pay all undisputed amounts in the thirty- (30) day period. In the event that BCM places Client's account in the hands of an attorney for collection, Client agrees to pay BCM all fees and expenses, including attorney's fees and expert fees necessitated thereby. In the event either party terminates the Services for any reason; Client shall pay BCM for all Services performed to the date of termination and reasonable costs

incurred in the demobilization of personnel and equipment.

ESTIMATES OF COSTS AND SCHEDULES - BCM's estimates of costs and schedules are for Client's budget and planning assistance only. Cost and schedule estimates are based on our best judgement of the requirements known at the time of the proposal and can be influenced favorably or adversely by Client needs and other circumstances. BCM will endeavor to perform the Services and accomplish the objectives within the estimated costs and schedules, but in no event shall BCM's estimate be interpreted as a not-to-exceed or fixed price. In the event BCM is required to exceed its original estimate for any reason, the Client may wish to (1) redefine the scope of Services in order to accomplish the Client's budget objectives, or (2) terminate Services at a specific expenditure level. Upon any termination, BCM will turn over all information to the extent completed at the authorized level without further obligation or liability to either party except payment for Services performed.

STANDARD AND WARRANTY - BCM agrees to perform its Services in accordance with generally accepted engineering and scientific practices in effect and utilized by engineering and environmental firms in the United States at the time Services are rendered. BCM warrants that, if any of its completed Services fail to conform to the above standard, BCM will, at its expense and provided BCM is notified of defective Services within one year of the completion of the Services, either perform corrective Services of the type originally performed as may be required to correct such defective Services or refund to Client the amount paid to BCM for the defective Services. Except as provided for in this Section, BCM makes no other warranty, expressed or implied, and shall have no other liability to

Client for defective Services, whether caused by error, omission, negligence or otherwise

REMEDY - Neither party, nor their parent, affiliated or subsidiary companies, nor the officers, directors, agents, employees or contractors of any of the foregoing, shall be liable to the other in any action or claim for the incidental, indirect, special, collateral, consequential or punitive damages arising out of or related to the Services, including without limitation, loss of profits, loss of opportunity, loss of production, or loss of use. Any protection or limitation against liability for any losses or damages afforded any individual or entity by these Conditions shall apply whether the action in which recovery of the damages is sought is based upon contract, tort (including, to the greatest extent permitted by law, the sole, concurrent or other negligence and strict liability of any protected individual or entity), statute or otherwise. To the extent permitted by law, any statutory remedies inconsistent with these terms are waived.

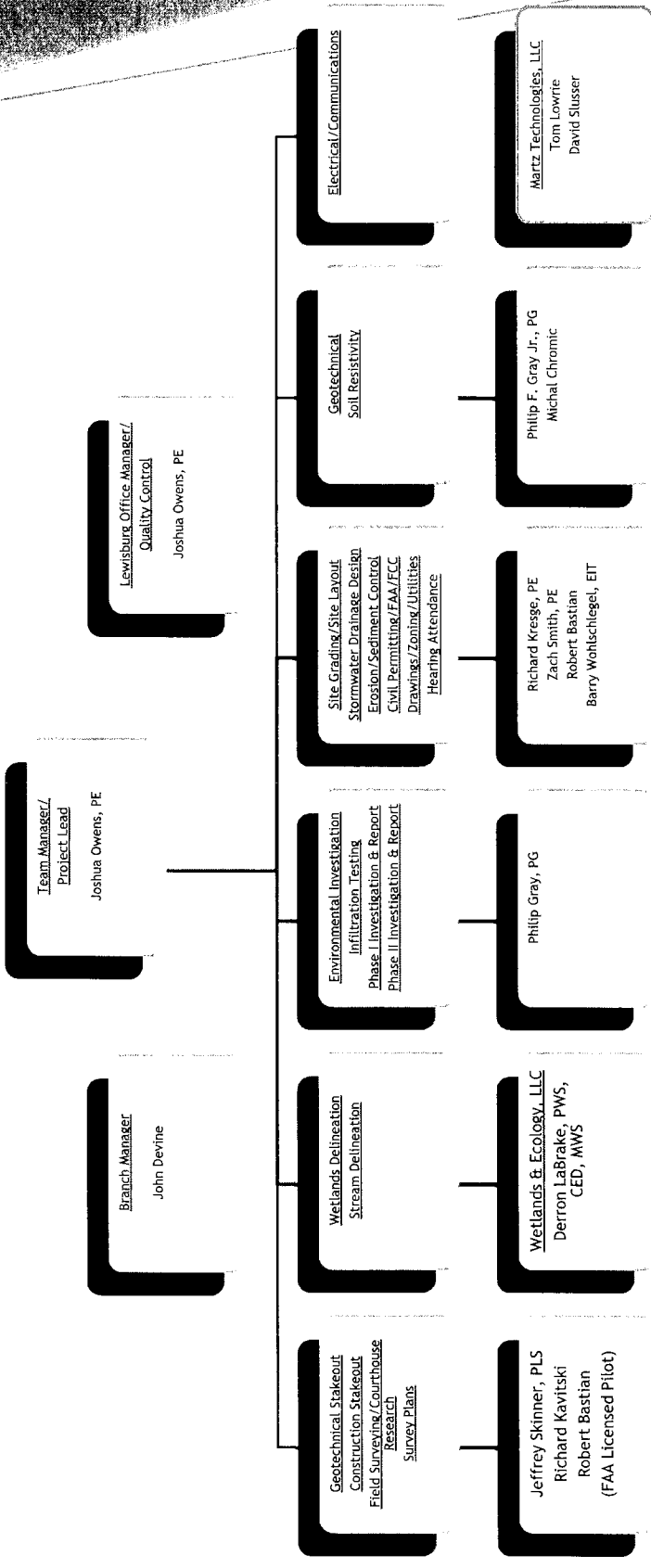
AGREEMENT - The performance of the Services and the rights and obligations of the parties are governed by this Schedule of Billing Charges and BCM's Professional Services Agreement - General Conditions which are incorporated by reference and if not attached, a copy will be provided upon Client's written request. Client's written acknowledgement of these terms or the authorization to commence the Services shall be deemed acceptance of these terms.



APPENDIX C

Organizational Chart





Project Team Organization