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Header 2

List View

General Information | Contact | Default Values | Discount | Document Information | Clarification Request

Procurement Folder: 1954307

Procurement Type: Central Contract - Fixed Amt

Vendor ID: 000000172271

Legal Name: BURGESS & NIPLE INC

Alias/DBA:

Total Bid: \$0.00

Response Date: 06/04/2026

Response Time: 11:38

Responded By User ID: Barnes

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Last Name: Barnes

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SO Doc Code: CEOI

SO Dept: 1400

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Close Date: 6/4/26

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Status: Closed

Solicitation Description: Waste Water Treatment Plant - Expression of Interest

Total of Header Attachments: 2

Total of All Attachments: 2



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

**State of West Virginia
 Solicitation Response**

Proc Folder: 1954307
Solicitation Description: Waste Water Treatment Plant - Expression of Interest
Proc Type: Central Contract - Fixed Amt

Solicitation Closes	Solicitation Response	Version
2026-06-04 13:30	SR 1400 ESR06042600000008465	1

VENDOR
 000000172271
 BURGESS & NIPLE INC

Solicitation Number: CEOI 1400 AGR2600000001
Total Bid: 0
Response Date: 2026-06-04
Response Time: 11:38:04
Comments:

FOR INFORMATION CONTACT THE BUYER
 Larry D McDonnell
 304-558-2063
 larry.d.mcdonnell@wv.gov

Vendor Signature X **FEIN#** **DATE**

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

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Waste Water Treatment Plant				0.00

Comm Code	Manufacturer	Specification	Model #
81000000			

Commodity Line Comments: Statement of Qualification for Waste Water Treatment Plant Improvements for Cedar Lakes Conference Center.

Extended Description:

Please see attached documentation for further details.

**ADDITIONAL TERMS AND CONDITIONS
(Architectural and Engineering Contracts Only)**

1. PLAN AND DRAWING DISTRIBUTION: All plans and drawings must be completed and available for distribution at least five business days prior to a scheduled pre-bid meeting for the construction or other work related to the plans and drawings.

2. PROJECT ADDENDA REQUIREMENTS: The Architect/Engineer and/or Agency shall be required to abide by the following schedule in issuing construction project addenda. The Architect/Engineer shall prepare any addendum materials for which it is responsible, and a list of all vendors that have obtained drawings and specifications for the project. The Architect/Engineer shall then send a copy of the addendum materials and the list of vendors to the State Agency for which the contract is issued to allow the Agency to make any necessary modifications. The addendum and list shall then be forwarded to the Purchasing Division buyer by the Agency. The Purchasing Division buyer shall send the addendum to all interested vendors and, if necessary, extend the bid opening date. Any addendum should be received by the Purchasing Division at least fourteen (14) days prior to the bid opening date.

3. PRE-BID MEETING RESPONSIBILITIES: The Architect/Engineer shall be available to attend any pre-bid meeting for the construction or other work resulting from the plans, drawings, or specifications prepared by the Architect/Engineer.

4. AIA DOCUMENTS: All construction contracts that will be completed in conjunction with architectural services procured under Chapter 5G of the West Virginia Code will be governed by the attached AIA documents, as amended by the Supplementary Conditions for the State of West Virginia, in addition to the terms and conditions contained herein. The terms and conditions of this document shall prevail over anything contained in the AIA Documents or the Supplementary Conditions.

5. GREEN BUILDINGS MINIMUM ENERGY STANDARDS: In accordance with West Virginia Code § 22-29-4, all new building construction projects of public agencies that have not entered the schematic design phase prior to July 1, 2012, or any building construction project receiving state grant funds and appropriations, including public schools, that have not entered the schematic design phase prior to July 1, 2012, shall be designed and constructed complying with the ICC International Energy Conservation Code, adopted by the State Fire Commission, and the ANSI/ASHRAE/IESNA Standard 90.1-2007: Provided, That if any construction project has a commitment of federal funds to pay for a portion of such project, this provision shall only apply to the extent such standards are consistent with the federal standards.

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

(Printed Name and Title) Michael Davis
(Address) 4424 Emerson Ave, Parkersburg, WV 26104
(Phone Number) / (Fax Number) 304.580.6918
(email address) michael.davis@burgessniple.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

Burgess & Niple INC (B&N)

(Company) 

(Signature of Authorized Representative)

Michael P. Davis, 6.4.2026

(Printed Name and Title of Authorized Representative) (Date)
304.580.6918

(Phone Number) (Fax Number)
michael.davis@burgessniple.com

(Email Address)

STATEMENT OF QUALIFICATIONS

Cedar Lakes Conference Center Wastewater Treatment Plant Upgrade

West Virginia Department of Agriculture

June 4, 2026



Re: Cedar Lakes Conference Center Wastewater Treatment Plant Upgrade

Dear Selection Committee,

Burgess & Niple, Inc. (B&N) appreciates the opportunity to partner with the West Virginia Department of Agriculture and Cedar Lakes Conference Center on this important Wastewater Treatment Plant (WWTP) Upgrade. The Cedar Lakes Conference Center WWTP Upgrade presents a significant opportunity to modernize critical infrastructure while supporting the long-term operational, educational and economic goals of one of West Virginia's most recognized conference and training facilities.

Successfully advancing this effort will require thoughtful evaluation of existing conditions, development of practical and sustainable treatment solutions, coordination with facility leadership and stakeholders and implementation strategies that minimize disruption to the year-round operations of Cedar Lakes Conference Center. B&N recognizes the importance of delivering a reliable, energy-efficient, low-maintenance wastewater treatment solution that supports both current operational needs and future growth opportunities for the facility and surrounding training programs.

Beyond the technical requirements of the project, B&N understands the important role Cedar Lakes Conference Center and the Environmental Training Center play in supporting wastewater and utility training across West Virginia and B&N values the opportunity to support and enhance that mission. If selected, our staff will actively engage with facility leadership and training personnel to help provide knowledge-sharing opportunities throughout the project, using the planning, design and construction process as an opportunity to support continued education and training for wastewater professionals across the state.

Supporting this effort is a team that combines national expertise with a local presence and community understanding. B&N's West Virginia-based professionals understand the needs, priorities and regulatory environment of communities and public agencies across the state, while our national wastewater and utility infrastructure practice provides access to specialized technical resources, innovative treatment technologies and industry-leading best practices. This approach allows us to deliver responsive local service backed by the depth and experience of a nationally recognized engineering firm.

B&N is well positioned to support the West Virginia Department of Agriculture and Cedar Lakes Conference Center throughout all phases of this important project. We look forward to the opportunity to partner with the State in advancing a reliable, sustainable and future-focused wastewater treatment solution for Cedar Lakes.

Respectfully submitted,



MICHAEL P DAVIS, PE

Principal-in-Charge

304.580.6918

michael.davis@burgessniple.com



ZACHARY N THOMPSON, PE

Project Manager

304.673.3306

zach.thompson@burgessniple.com



**PROJECT
LEADERSHIP**

Our team brings extensive experience in wastewater treatment planning, facility evaluations, process design, infrastructure upgrades, permitting support, construction administration and operational coordination for public-sector and institutional clients. **Mike Davis, PE** will serve as principal-in-charge, providing senior leadership and oversight throughout the project, including management of the project's quality assurance and quality control processes to help ensure deliverables are technically sound, coordinated and aligned with project objectives.

Zach Thompson, PE will serve as project manager and will lead day-to-day coordination and project delivery efforts. Zach's experience managing projects from planning and preliminary evaluation through final design, bidding and construction administration provides Cedar Lakes Conference Center with a project manager who understands the importance of maintaining facility operations during construction while developing phased implementation strategies that align with project budgets, operational constraints and long-term facility objectives. Zach is a resident of nearby Kenna allowing him to be readily available to the administration and staff.



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QUALIFICATIONS

B&N OVERVIEW

Founded in 1912 in Columbus, Ohio, B&N is a nationally recognized engineering and architecture firm with nearly 650 employees across 32 offices in 14 states. B&N opened its first West Virginia office in 1972 and for more than 50 years has been continuously engaged in engineering projects for public service districts, municipalities, government agencies and private industry throughout the state. Over our 100+ year history, we have served more than 5,000 clients in the U.S. and abroad, delivering practical infrastructure solutions that enhance quality of life, safety and sustainability.

B&N offers expertise in utility infrastructure, architecture, environmental sciences, transportation and land development, with experience spanning both rural and urban communities. Our West Virginia-based staff will manage and deliver this project, providing strong local knowledge and responsiveness, while being supported by the full resources of our national firm when needed. This structure allows us to offer both personalized service and the depth of a large, multidisciplinary organization.



Our success is built on a strong commitment to quality, schedule and budget. B&N has earned a reputation for delivering high-quality work through a team-oriented approach and a consistent focus on client satisfaction. We are proud of our long-standing relationships and continued growth, which reflect our dedication to responsive service and successful project delivery.

WASTEWATER INFRASTRUCTURE AND PUBLIC FACILITY IMPROVEMENTS

B&N offers extensive experience delivering wastewater infrastructure and public facility improvement projects for municipal, institutional and campus-style clients. Our team provides multidisciplinary engineering, planning and design services that support complex utility and site infrastructure projects from evaluation and concept development through final design, permitting, bidding and construction administration.

For Cedar Lakes Conference Center, B&N brings experience designing and upgrading wastewater treatment facilities, lift stations, collection systems, utility infrastructure and site improvements for facilities that require continuous operations and phased implementation strategies. Our experience includes treatment process evaluations, package plant and mechanical system upgrades, electrical and backup power improvements, manhole and collection system rehabilitation, demolition planning and integration of new infrastructure within active campus environments. Similar work includes wastewater treatment plant upgrades, lift station improvements, sewer rehabilitation projects and utility infrastructure improvements completed for municipal and institutional clients throughout the region.

B&N's approach emphasizes maintaining facility operations during construction while developing practical, energy-efficient and low-maintenance solutions aligned with long-term operational goals and available project funding. Our team routinely assists owners with evaluating multiple treatment alternatives, preparing phased implementation plans when budget constraints require prioritization of improvements and coordinating permitting and regulatory approvals. Services also include preparation of detailed construction documents and specifications, development of cost opinions and project schedules, bid phase assistance and construction oversight to support successful project delivery from planning through completion.

WASTEWATER TREATMENT PLANTS

B&N has extensive experience with all facets of wastewater treatment projects. We develop master plans for cost-effective improvements, provide resident project representatives to oversee construction and customize solutions to meet the needs of each client we serve.

Over the last 10 years, we have completed over 500 projects for wastewater facilities that include primary, secondary and advanced treatment. We have a broad range of treatment experience, designing wastewater facilities ranging from small package plants to facilities with a capacity of nearly 1 billion gallons per day.

B&N has designed several Chemically Enhanced Primary Treatment (CEPT) systems that combines traditional primary treatment sedimentation, with the addition of chemical coagulants (alum, ferric chloride, etc.) and flocculants that results in greater removal efficiencies of suspended solids organic matter and some pollutants. These have resulted in improved overall effluent quality without the need for extensive secondary treatment renovations or additional treatment processes, which are especially beneficial in areas with limited space.

Our expertise includes use of computer models to easily and quickly model various flows and loading scenarios to ensure your project will function as designed. We also provide regulatory guidance and use advanced treatment techniques to meet current and anticipated regulations, including nitrogen and phosphorous removal.

Our wastewater treatment capabilities include:

- General/Master Plans
- Long-Term Control Plans
- Feasibility Studies
- Pilot and Bench Scale Testing
- Stress Tests
- Primary, Advanced and Tertiary Treatment System Design
- Process Optimization
- Secondary Bypass Elimination
- Wet Weather Storage Facilities
- Biosolids Management and Resource Recovery
- Operation and Maintenance Assistance
- Services During Construction
- Start-up and Training



Wastewater Treatment Plants

- » Facility Planning
- » Capital Improvement Programs
- » Feasibility Studies
- » Pilot Testing

Treatment Plant Design

- » Package Plant
- » Screening
- » Grit Removal
- » Biological Treatment
- » Biogas
- » Biosolids
- » Carbon Control
- » Optimization
- » Physical Treatment (MBPs)
- » Filtration
- » Disinfection
- » Residuals Management
- » HVAC/Electrical Systems
- » Odor Control
- » SCADA/I&C

Facility Architectural Design

- » Building Design
- » Architectural Improvements
- » Structural Investigation and Rehabilitation
- » HVAC/Electrical System Upgrades
- » Roof Replacement
- » Security Issues
- » Space Planning

WASTEWATER COLLECTION SYSTEM

B&N has a complete understanding of the planning, design and construction of wastewater systems. From our service as a municipal engineer to the research and development of cutting-edge sewer investigation equipment, we continue to incorporate new techniques, such as the use of trenchless technology, into our wastewater design and rehabilitation projects. These techniques benefit our clients by providing a more cost-efficient project, often in a shorter time frame.

Our sanitary sewer evaluation survey (SSES) and infiltration/inflow (I/I) programs have helped eliminate flooded basements and sanitary sewer overflows (SSOs). By improving these wastewater issues, property value for homeowners increases while annual operation and maintenance costs at pump stations decrease. Our design projects have helped extend service to new customers, increase carrying capacities of sewer systems, rehabilitate valuable existing assets and meet compliance requirements of state and federal agencies. Our wastewater experts perform as cohesive teams to ensure that facilities are designed and constructed to function today and long into the future.

Our wastewater collection services include:

- Master Planning
- SSES
- Combined Sewer Overflow Analyses/Elimination
- Collection System Analysis/Design
- CCTV Review and Condition Assessment
- Force Main Analysis/Design
- Grinder Pumps/Lift Station/Pump Station Design
- Major/Trunk Sewer/Interceptor Design
- Diversion/Junction Chamber Design
- Screening Facilities Design
- Sewer/MH Rehabilitation
- Trenchless Technologies
- Bypass Pumping
- Special Studies
- Regulatory Assistance



Sanitary Sewers, Combined Sewers & Force Mains

- » Regulators and CSO facilities
- » Capital improvement programs
- » CMOM program development
- » Detention basins
- » Planning
- » System evaluation/modeling
- » Design and bidding
- » Combined sewer separation
- » Interceptor sewer design
- » Condition assessment
- » Trenchless sewer rehabilitation
- » SAS cleaning/rehabilitation
- » Manhole rehabilitation
- » Right-of-way assessment
- » Data collection
- » Material testing
- » Corrosion control
- » Engineering services during construction

Wastewater Lift Stations

- » Hydraulic analysis
- » Facility design/rehabilitation
- » Emergency generator addition
- » Equipment rehabilitation/replacement
- » Energy efficiency assessments
- » Odor control
- » SCADA/I&C
- » Operation and maintenance assistance
- » Engineering services during construction

CONSTRUCTION ADMINISTRATION

B&N has the capability to provide the City with a wide range of post design and construction administration services. Services can include pre-bid coordination meetings; assistance with the bid process; project status updates; coordination and review of shop drawings; review of change order pricing; responding to contractor's request for information; validation of contractor's request for payment; participation in contractor coordination meetings; full- or part-time on-site representation; review of laboratory testing; and evaluation of progress schedules.

From parking lots and roadways to maintenance buildings and water/wastewater treatment plants, we perform construction-related services daily. Services are tailored to meet your needs for a specific project. We provide continuous or part-time project representation and engineering services during construction.

Our construction services staff also acts as consultants to our design personnel in reviewing project design plans and specifications for construction feasibility and potential construction-related problems.

Our on-site field staff provides observation, quality control, monitors work progress, coordinates the activities of the various trades and contractors, reviews submittal drawings, responds to Requests for Information (RFIs), manages change-order requests, approves payment requests and assists with start-up, commissioning and troubleshooting.

We are also available for consultation on questions that may arise during construction.



Construction Administration

Pre-bid coordination meetings

- » Coordination of bid process
- » Facilitation of construction progress meetings
- » Coordination/review of shop drawings
- » Review of change order pricing and requests to use allowance dollars
- » Respond to contractor's request for payment
- » Validate contractor's request for payment
- » Participate in contractor coordination meetings
- » Full or part-time on-site representation
- » Review of laboratory testing
- » Evaluation of progress schedules
- » Manage documents during construction



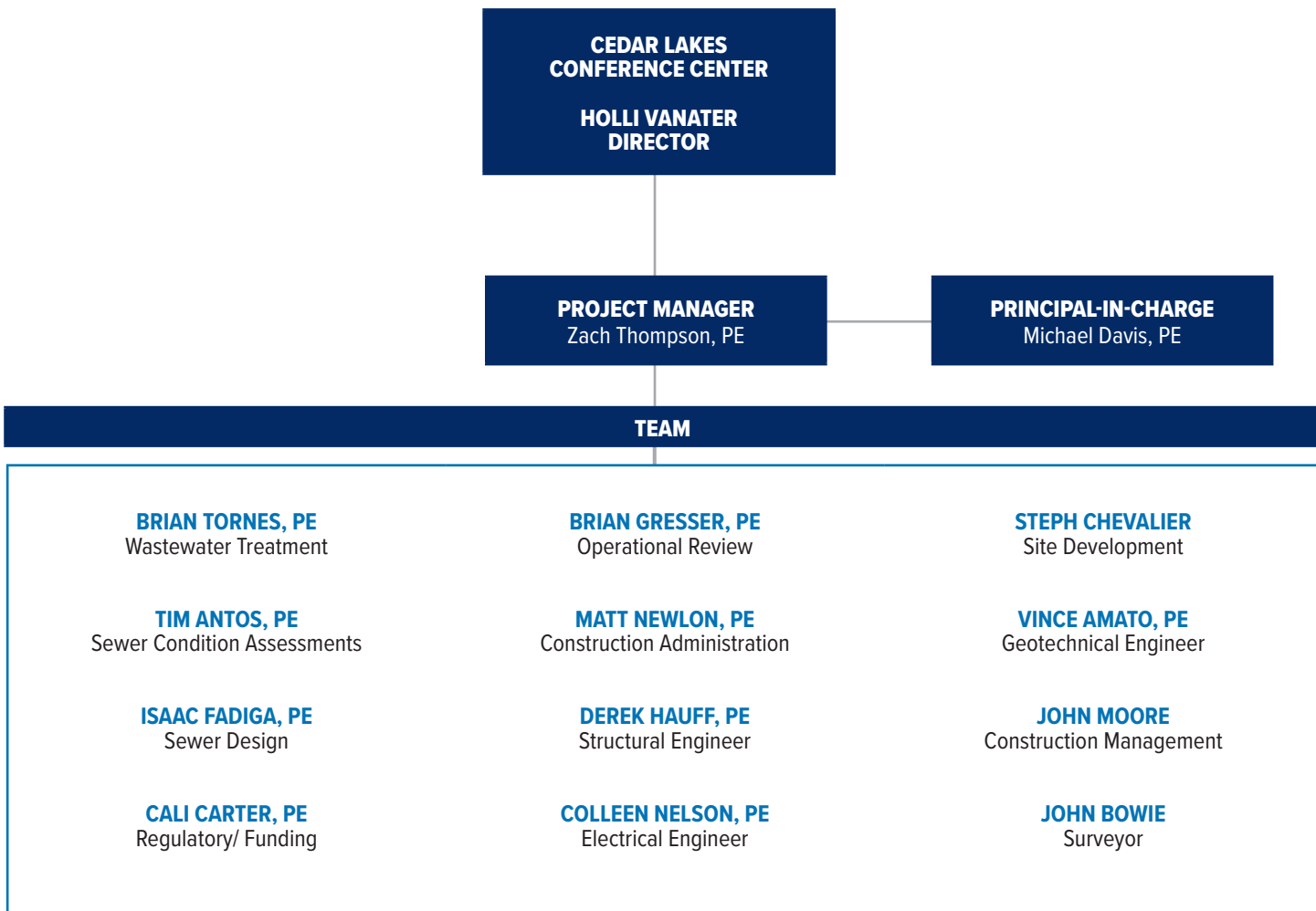
EXPERIENCE

PROPOSED STAFFING PLAN

The proposed team is a highly qualified, multidisciplinary group with the experience and capacity to deliver the full range of services required for this project. Our team brings extensive expertise in wastewater treatment planning, facility evaluations, process design, infrastructure improvements, permitting support, construction administration and operational coordination for public-sector and institutional clients.

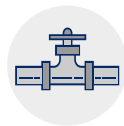
Mike Davis, PE, will serve as principal-in-charge, providing senior leadership and oversight throughout the project. In this role, he will guide project execution and oversee quality assurance and quality control efforts to help ensure all deliverables are technically sound, well-coordinated and aligned with project objectives.

Zach Thompson, PE, will serve as project manager and lead day-to-day project coordination and delivery. His experience managing projects from planning and preliminary evaluation through final design, bidding and construction administration provides Cedar Lakes Conference Center with a project manager who understands the importance of maintaining facility operations during construction while developing practical, phased implementation strategies that align with budget requirements, operational constraints and long-term facility goals. Zach is a resident of nearby Kenna allowing him to be readily available to the administration and staff.



HIGHLIGHTS OF THE PROJECT TEAM

B&N provides experienced, multidisciplinary project teams that support planning, design, bidding and construction of water and other municipal infrastructure improvements. Our staff stays current with engineering practices and technologies to deliver efficient, high-quality plans and specifications. We function as an extension of your team, responsive to urgent needs, collaborative in problem-solving and focused on solutions that meet your requirements. Highlights of our project team include:



Experience with aging infrastructure. B&N has extensive experience evaluating aging sewer systems and developing practical, phased improvement solutions for communities throughout West Virginia. Our team understands the challenges associated with system reliability, asset condition and funding-driven project prioritization.



Single-source planning, design and construction-phase services. As a full-service engineering firm, B&N provides comprehensive services including planning, design, preparation of bidding and contract documents, bid evaluation and construction monitoring and inspection. In-house environmental, geotechnical, electrical and mechanical expertise allows for efficient coordination, reduced risk and consistent project delivery from start to finish.



Demonstrated success delivering sewer projects across West Virginia. B&N has successfully completed wastewater projects for sanitary sewer providers, guiding them through planning, funding coordination, design, bidding and construction compliance. Our team has developed a strong understanding of regional infrastructure needs, regulatory requirements and operational priorities.



Depth of staff responsiveness. Supported by a firm-wide staff of about 650 professionals, B&N offers the depth and flexibility to respond to both routine needs and urgent situations. With your proximity to both our Charleston and Parkersburg offices, our West Virginia staff can be onsite in less than an hour.



Member of your team. Our proposed project manager, Zach Thompson, serves on the West Virginia Water Environment Association (WVWEA) Board alongside the members of the Mountain State Educational Cooperative's Environmental Training Center. Because the Environmental Training Center is expected to play a significant role in project administration, this existing professional relationship fosters effective communication, coordination and alignment with stakeholder priorities, helping support a smooth and successful project delivery.



Proactive Funding Assistance. Our team routinely supports clients with technical input for funding applications, grant/loan documentation and compliance reporting, helping projects secure the financial resources necessary for implementation. This support ensures project scope, schedules and budgets remain aligned with funding requirements from planning through construction.



Local Presence and Community Knowledge. B&N's West Virginia team has long-standing relationships with state regulatory agencies, funding bodies and local contractors. This insight enables us to anticipate challenges, accelerate approvals and deliver practical, community-focused solutions. Our familiarity with local conditions and stakeholders supports efficient project delivery and informed decision-making.



Experienced Construction Administrators and Inspectors. Our construction-phase staff provides on-site presence, QA/QC monitoring and issue resolution during construction, reducing change orders and keeping projects on schedule and within budget. We emphasize clear communication and proactive coordination with contractors, inspectors and City staff to protect project quality and minimize disruptions.

STAFF QUALIFICATIONS AND EXPERIENCE

MIKE DAVIS, PE
Principal-in-Charge



BURGESS & NIPLÉ

Years of Experience: 29

Education: MS Civil Engineering, West Virginia University |
BS Chemical Engineering, West Virginia University

Professional License: WV PE - 16347

BACKGROUND

Mike is a principal and director of utility infrastructure with 28 years of experience in municipal engineering, specializing in both water and wastewater systems. His background includes extensive work in water distribution, storage and treatment, as well as wastewater collection, conveyance and reclamation. Mike's project portfolio spans a full range of utility infrastructure, including water line replacement and extensions, pump stations, treatment facility upgrades, sewer rehabilitation and storm drainage analysis, allowing him to support the Board's water, wastewater and stormwater needs.

With deep experience leading preliminary investigations, process evaluations, detailed facility design and construction-phase services, Mike has served as principal-in-charge for system improvements across the region. His work includes the planning, design and construction of wastewater treatment facilities encompassing influent pumping, preliminary, primary, secondary, tertiary and sludge processing systems. He has delivered improvements to numerous local municipal systems similar in scale and complexity.

RELEVANT EXPERIENCE

- General Engineering Services | New Martinsville Water and Sanitary Sewer Board
- Water Treatment Plant Improvements; Fort Boreman Water & Sewer Extension | Parkersburg Utility Board
- Water System Improvements; 45th Place Water Main Improvements; Water Tank Condition Assessment | Vienna Utility Board
- Water Treatment Plant Improvements, General Engineering Services; Lewis Lane Water Improvements | City of Point Pleasant
- General Engineering Services | Charleston Sanitary Board
- General Engineering Services; Water System Improvements | Mineral Wells Public Service District

ZACH THOMPSON, PE
Project Manager



BURGESS & NIPLÉ

Years of Experience: 12

Education: MS Environmental Engineering, Marshall University |
BS Civil Engineering, West Virginia University | BS Mining &
Mineral Engineering, West Virginia University

Professional License: WV PE - 24521

BACKGROUND

Zach is a project manager with experience in planning, design, bidding and construction of water and wastewater infrastructure improvements. In addition to his consulting experience, Zach brings a unique perspective to projects for Owners, since he served as a project Owner with the Sanitary Board of the City of Charleston, where he gained firsthand experience in navigating the challenges a project Owner will experience during an infrastructure project. One such challenge is overseeing utility infrastructure projects through construction while maintaining ongoing system operations.

Zach's experience includes coordinating multidisciplinary project teams, supporting phased implementation strategies and delivering infrastructure improvements that align with operational needs, budget considerations and long-term system objectives. His understanding of both owner and consultant perspectives allows him to effectively guide projects through each phase of delivery while maintaining communication and coordination among stakeholders, contractors and regulatory agencies.

RELEVANT EXPERIENCE

- General Engineering Services | Charleston Sanitary Board
- Sanitary Sewer Pipe and Manhole Rehabilitation | Pea Ridge PSD*
- Establishment of Sanitary Sewer PSD - Collection System and Package Treatment Plant | Community of Walton, WV Public Sewer District*
- Sanitary Sewer Pipe and Manhole Rehabilitation Program | Charleston Sanitary Board*
- WWTP Upgrade | City of Ravenswood*
- CSO Program Management | Charleston Sanitary Board*

*Relevant experience prior to B&N

BRIAN TORNES, PE

Wastewater Treatment



BURGESS & NIPLÉ

Years of Experience: 36

Education: BS Civil Engineering, Ohio State University

Professional License: WV PE - 16460

BACKGROUND

Brian experience includes civil/site design for development of municipal, educational, industrial and commercial facilities. Design responsibilities include site layout, utility service, parking lot and roadway design, site grading, stormwater control and construction stormwater pollution prevention. Stormwater control features are sized to comply with state and local regulations for control of the rate of stormwater runoff and improvement of the stormwater quality both during and after construction is completed. Brian has provided construction administration services, including conducting pre-bid meeting, contract submittal review and approval, bid evaluation and general services during construction.

Brian excels in evaluating and optimizing parking lots, replacing amenities like boat ramps and restrooms. His expertise in recreational facility design spans 2,000 acres, featuring trails, streambank stabilization, wetlands and athletic fields. Using traditional and “natural” techniques, he ensure floodplain stabilization and fish passage. Brian’s eco-conscious designs cover diverse elements, from boat ramps to nature centers, reflecting his skills in evaluating and permitting dredging operations for waterway restoration and environmental remediation.

RELEVANT EXPERIENCE

- Tygart Glen WWTP | City of Philippi, WV
- Zoetis WWTP | Willow Island, WV
- Newport WWTP | Newport, OH
- Mineral Wells PSD WWTP | Mineral Wells, WV
- Pennsboro WWTP | Pennsboro, WV
- General Municipal Engineering Services | New Martinsville Water and Sanitary Board
- Statewide Boating Access & Restroom Replacements, ODNR, Division of Wildlife
- Y-Bridge Confluence Park Design, City of Zanesville
- Scioto Audubon Metro Parks and Nature Center, Columbus and Franklin County Metropolitan Park District / City of Columbus / The Audubon Society, OH

TIM ANTOS, PE

Sewer Condition Assessments



BURGESS & NIPLÉ

Years of Experience: 26

Education: MS & BS Civil Engineering, Cleveland State University

Professional License: OH PE - 70320

BACKGROUND

Tim’s background includes sewer evaluation and rehabilitation experience. He specializes in trenchless technologies, including cleaning and inspection and condition assessment. He has been involved in the detailed design of the expansion, upgrade and rehabilitation of wastewater collection systems and utility assets such as sewer lines, force mains, manholes and pump stations.

His career experience has had an emphasis on such trenchless technologies as horizontal directional drilling (HDD), cured-in-place pipe (CIPP) lining, slip-lining and manhole rehabilitation. He also has experience with contract administration; services during construction; and the inspection and evaluation of utility pipes and structures.

RELEVANT EXPERIENCE

- Wastewater System Improvements | City of St. Marys
- Porters Hollow Sanitary Sewer System Improvements | Charleston Sanitary Board
- Water System Improvements | Moundsville Water Board
- Water System Improvements | Parkersburg Utility Board
- Pond Creek Water Main Extension | Mineral Wells Public Service District
- Pikewood Manor Water Main Rehabilitation | City of Elyria, OH
- Project Management Office | Lake County Department of Utilities, Lake County, OH
- Blueprint Water Line Initiative | Trumbull County Sanitary Engineer, Trumbull County, OH
- South Water Line Extensions | City of Canton
- Bellevue Drive Storm Sewer and Stream Bank Restoration | City of Niles, OH
- CSO Program Management | City of Akron, OH

ISAAC FADIGA, PE

Sewer Design

**BURGESS & NIPLE****Years of Experience:** 8**Education:** BS Civil Engineering, Marshall University**Professional License:** WV PE - 25394**BACKGROUND**

Isaac experience focuses on the design and construction support of municipal water and wastewater infrastructure improvements. His background includes the design of sewer line extensions and rehabilitations, pump stations, storm and sanitary sewer separation projects and water and wastewater treatment plant upgrades. Isaac also has experience preparing permits and technical documents, including design reports, long-term control plans, asset management plans and operations and maintenance manuals. In addition, he has supported multiple clients in securing funding through public financing programs.

Isaac brings strong technical knowledge and attention to detail to each phase of project development. He works closely with project teams and clients to develop practical, cost-effective design solutions that address system performance, constructability and long-term operational needs. His experience supporting projects through design and construction allows him to anticipate potential challenges early and develop solutions that help keep projects on schedule and aligned with client goals. Isaac's collaborative approach and commitment to quality contribute to successful project delivery and strong client relationships.

RELEVANT EXPERIENCE

- Wastewater Improvements | Charleston Sanitary Board
- Wastewater System Improvements | Town of Chesapeake
- Wastewater System Improvements | Vienna Utility Board
- Wastewater System Improvements | City of St. Marys
- Virginia Street Lift Station Force Main Replacement Construction Services | Charleston Sanitary Board
- Mark Drive and Porters Lift Station Improvements | Charleston Sanitary Board

CALI CARTER, PE

Regulatory

**BURGESS & NIPLE****Years of Experience:** 6**Education:** BS Civil Engineering, West Virginia University Institute of Technology**Professional License:** WV PE - 26645**BACKGROUND**

Cali recently joined B&N as a project manager in the West Virginia Utility Infrastructure group, specializing in water system planning, design and construction-phase services. She brings experience in both consulting and regulatory environments, providing clients with a strong understanding of project delivery requirements from planning through construction and compliance.

Prior to joining B&N, Cali worked with the West Virginia Department of Environmental Protection, where she gained firsthand experience with state and federal regulatory processes applicable to public water systems. This background gives her a practical understanding of permitting, funding coordination and compliance requirements.

RELEVANT EXPERIENCE

- General Engineering Services | City of Williamstown
- Virginia Street Lift Station Force Main Replacement Construction Services | Charleston Sanitary Board
- General Engineering Services | Charleston Sanitary Board
- Water Distribution System Improvements | City of Belmont*
- Maplewood Water System Improvements Project | Danese PSD*
- Water System Improvements | Town of Wardensville*
- Madams Creek/Broomstraw Extensions | Jumping Branch Nimitz PSD, Summers County*
- New England Rd/Pine Run Rd Extensions | Lubeck PSD, Washington*

**Project experience prior to B&N*

BRIAN GRESSER, PE

Operational Review

**BURGESS & NIPLE****Years of Experience:** 36**Education:** BS Mechanical Engineering, University of Akron**Professional License:** OH PE - 57274**BACKGROUND**

Brian came to B&N in 2021, bringing more than 32 years of experience in municipal wastewater gained while at the City of Akron as a treatment plant engineer, plant superintendent and ultimately as divisional manager overseeing all wastewater collection, treatment and biosolids recycling. His combination of hands-on practical experience with administrative and program/policy leadership skills enables him to assist others involved at any level in the running of a wastewater system. Brian understands the needs of this specialized area of city utility management, gained through working in the full range of positions, from plant engineer to bureau manager.

Brian's extensive operational background provides significant value in conducting wastewater system operational reviews and performance evaluations. Having managed all aspects of wastewater collection, treatment and biosolids operations, he brings a practical, operator-focused perspective to assessing facility performance, identifying process improvements, evaluating staffing and maintenance practices and recommending strategies to enhance reliability, efficiency and regulatory compliance. His experience working at every level of a wastewater utility enables him to effectively evaluate both technical operations and organizational processes, providing actionable recommendations that support sustainable, long-term system performance.

RELEVANT EXPERIENCE

- Water Resiliency Study | City of Akron, OH
- Water System Condition Assessment Assistance | City of Barberton, OH
- Taylor Road Water Main Replacement | City of Barberton, OH
- 16th Street Waterline Improvements | City of Barberton, OH

MATT NEWLON, PE

Construction Administration

**BURGESS & NIPLE****Years of Experience:** 13**Education:** BS Civil Engineering, Marshall University**Professional License:** WV PE - 22716**BACKGROUND**

Matt's experience includes construction administration; cost estimating; procurement of permits; field surveying; quantity takeoffs; smoke testing; sewer pipe condition evaluation; services during construction responsibilities including field order and work change directive preparation and design modifications; and resident project representative (construction inspection) services.

Matt is also skilled in planning and design of wastewater conveyance facilities, planning and design of water distribution facilities and permitting. He has provided engineering support and assistance to design engineers on several water and wastewater related projects. Project involvement and responsibilities include gravity sanitary sewer planning and design; sanitary sewer lift station design; combined sewer separation design; sanitary sewer lining design.

RELEVANT EXPERIENCE

- Municipal Improvements | City of Point Pleasant
- Wastewater Improvements | Charleston Sanitary Board
- Wastewater & Water Improvements | Parkersburg Utility Board
- Wastewater Improvements | Moundsville Sanitary/Stormwater Utility Board
- WWTP Improvements | City of Philippi
- WWTP Improvements Phases 1 Through 3 | City of Pennsboro
- Woodward Branch Sanitary Sewer Improvements | Charleston Sanitary Board
- Danner Hollow Sanitary Sewer Improvements SVDC | Charleston Sanitary Board
- Benwood Sewer Separation Phase 2 | Charleston Sanitary Board

COLLEEN NELSON, PE

Electrical Engineer

**BURGESS & NIPLE****Years of Experience:** 23**Education:** BS & MS, Electrical Engineering, Old Dominion University**Professional License:** WV PE - 18775**BACKGROUND**

Colleen specializes in the electrical design of power systems, including power distribution, grounding and emergency power, as well as interior and site lighting design for both new facilities and renovations. Her extensive portfolio includes projects for private, municipal and military clients, covering a variety of building types such as retail, commercial, educational, municipal and residential facilities. Colleen is adept at providing design constructibility reviews and has a focus on achieving sustainability goals through solar design and lighting upgrades to meet LEED certification standards.

RELEVANT EXPERIENCE

- Water Treatment Plant Improvements Design | Parkersburg Utility Board
- General Engineering Services | Charleston Sanitary Board
- Wastewater Treatment Plant Improvements | City of Point Pleasant
- Water System Improvements | Mineral Wells Public Service Department
- Water System Improvements | Parkersburg Utility Board
- Jesse Owens State Park Water Extensions | Morgan-Meigsville Rural Water Department
- Elkins Rail-Trail Connector | Randolph County Development Authority

DEREK HAUFF, PE

Structural Engineer

**BURGESS & NIPLE****Years of Experience:** 9**Education:** MS & BS Civil Engineering, University of Akron**Professional License:** WV PE - 26515**BACKGROUND**

Derek joined B&N in 2024 as a structural engineer. His background encompasses municipal, residential, commercial, retail, industrial and precast concrete jobs spanning over 300 projects completed in AutoCAD and Revit. He is familiar with design standards for steel, concrete, masonry, timber, cold formed steel, aluminum and stainless steel and the various design standards of IBC, AISC, AASHTO, ACI, TMS, ASCE and NDS.

RELEVANT EXPERIENCE

- Water Treatment Plant Improvements Design | Parkersburg Utility Board
- Wastewater System Improvements | City of St. Marys
- Water Extension to Matatmoras Design | Newport Water & Sewer Association
- Bancroft Pump Station Improvements | City of Fairlawn, OH
- Peninsula Environmental Sustainability | Summit County DSSS, OH
- Renewable Energy Facility Polymer System Building Addition | City of Akron, OH
- Anaerobic Digester Cover Replacement | City of Wadsworth, OH
- Building HVAC Improvements | Lake County Commissioners, OH

STEPH CHEVALIER

Site Development

**BURGESS & NIPLE****Years of Experience:** 44**Education:** Certificate, Washington Technical College**BACKGROUND**

Steph has experience in design, surveying, computer-aided design and drafting (CADD) and technical support coordination for projects involving site development, utilities and utility rehabilitation. Steph has contributed to designs related to site planning, flood insurance studies, stormwater management, environmental assessments, new building construction and building renovations. He has also performed inspection and observation activities for subsurface investigations and storm sewer television inspections.

RELEVANT EXPERIENCE

- AAA Mobile Home Park Sewer Improvements | New Martinsville Water and Sewer Board
- Wastewater & Water Improvements | Parkersburg Utility Board
- Wastewater Improvements | Moundsville Sanitary Board
- Water Treatment Plant Improvements | Parkersburg Utility Board
- Water System Improvements Project | Parkersburg Utility Board
- Water System Improvements | Vienna Utility Board
- Water System Improvements | Mineral Wells Public Service District
- Pond Creek Water Main Extension | Mineral Wells Public Service District

VINCE AMATO, PE

Geotechnical

**BURGESS & NIPLE****Years of Experience:** 41**Education:** MS & BS Civil Engineering, Ohio State University**Professional License:** WV PE - 11760**BACKGROUND**

Vince joined B&N in 1986 and is the firm's chief geotechnical engineer. He oversees geotechnical engineering investigations, analyses and the development of construction plans and specifications, including integrating geotechnical instrumentation. Vince's design expertise encompasses deep and shallow foundations for buildings and bridges and stability and settlement analyses for dams, dikes and levees. He is proficient in the design of earth-retaining systems and cofferdams and is a recognized expert in slope stability, settlement and seepage analyses. Additionally, Vince has designed erosion control measures to mitigate the effects of wave action and fluctuating water levels, utilizing methods such as dumped rockfill embankments, riprap slope protection, rock-filled heavy-duty wire gabion baskets and drilled shaft and concrete lagging retaining walls. He also provides construction services and assists in resolving geotechnical-related issues on-site. Vince is proficient in using software tools like GRLWEAP, LPILE, LPILE GROUP, STABL, CWALSHT and DRIVEN.

RELEVANT EXPERIENCE

- Water Treatment Plant Improvements | Parkersburg Utility Board
- Water System Improvements Project | Parkersburg Utility Board
- Jesse Owens State Park Water Extension | Morgan Meigs Rural Water District, OH
- Water System Improvements | Mineral Wells Public Service District
- Water System Improvements | Moundsville Water Board
- Fort Boreman Water & Sewer Extension | Parkersburg Utility Board

JOHN MOORE

Construction Management

**BURGESS & NIPLÉ****Years of Experience:** 40**Education:** BS Geology, Mount Union College**BACKGROUND**

John is a construction resident project representative (RPR) and has significant experience in construction-related industries. He is responsible for construction observations and other construction-related services. In addition, John provides environmental support to complement B&N environmental consulting division.

He has served as resident project representative (RPR) on numerous projects involving installation of water main pipe, vaults, booster stations and additional facilities. John also provides services such as observance of construction, adjustments of water main location, extension layout and compliance with plans and specifications.

Additional experience includes RPR for installation of sanitary sewer pipe, force main, wye branches, manholes, pump stations, cured in place pipe (CIPP) sewer lining and manhole rehabilitation. Services also include observance of construction, grade adjustments and compliance with plan specifications.

RELEVANT EXPERIENCE

- AAA Mobile Home Park Sewer Improvements | New Martinsville Water and Sewer Board
- General Engineering Services | Charleston Sanitary Board
- Water System Improvements | Mineral Wells Public Service Department
- Water System Improvements | Parkersburg Utility Board
- Fort Boreman Water & Sewer Extension | Parkersburg Utility Board
- Jesse Owens State Park Water Extension | Morgan Meigsville Rural Water District, OH

JOHN BOWIE

Surveyor

**BURGESS & NIPLÉ****Years of Experience:** 32**Education:** AS Drafting, West Virginia University**BACKGROUND**

John joined B&N in 1994 as an engineering technician. He serves as Crew Leader in surveying activities and has performed CADD and drafting services on utility projects; bridge, railroad and roadway designs; and bridge rehabilitations. John is a trained operator of AutoCAD and Microstation CADD software. He has performed inspections of bridges throughout West Virginia, Virginia, Arizona, Ohio, Kentucky, Florida Oregon, Oklahoma, Louisiana, Iowa and New York. Many of these inspections have included gathering the information needed for designing repairs and overall rehabilitation.

RELEVANT EXPERIENCE

- Wastewater Improvements | Town of Chesapeake
- Moundsvilld Sanitary Sewer Replacement Design | Moundsville
- General Engineering Services | Charleston Sanitary Board
- Hebron Water Extension | Pleasants County Public Service District
- 48th and Coonskin Lift Station Design | Charleston Sanitary Board

PAST PERFORMANCE

QUALITY OF WORK

At B&N we pride ourselves in providing consistent, high-quality work across all of our projects. Whether it is a simple project or a large, complex project, B&N is committed to maintaining a high degree of performance and excellence.

Our goal is to produce the highest quality work for our clients. We believe our history of repeat work, performance ratings and design awards demonstrate our ability for meet and exceed our clients' expectations.

ON-TIME DELIVERY

As one of the largest consulting firms in West Virginia, B&N has continually demonstrated our ability to assemble and lead multi-discipline architectural and engineering teams through consistent high-quality, on-time completion of work. Our dedicated staff and robust project management systems provide us with the flexibility to accommodate new work while respecting our existing project commitments.

PROJECT DETAILS

Examples of past cost estimates for water/wastewater projects which demonstrate our commitment to our clients' budget constraints are shown below:

Client	Project	Construction Cost	Highlights
City of Pennsboro	WWTP Improvements, Phases 1-3	\$7,100,000	Phased approach to maximize grants
Newport (OH) Water & Sewer District	WWTP Improvements	\$1,857,000	Expanded capacity by rehabilitation of existing plant
City of Philippi	Tygart Glen WWTP Replacement	\$265,000	Replaced steel package plant with precast concrete
Zoetis, Inc. (Willow Island, WV)	WWTP Replacement	\$551,000	Replaced package plant with recirculating media filters
City of St. Marys	EQ Basin Improvements	\$75,000	Designed for City staff installation
Constellium (Ravenswood, WV)	WWTP Elimination	\$2,000,000*	Pumping system to new Ravenswood WWTP

*Currently bidding

SIMILAR PROJECTS

WASTEWATER COLLECTION AND TREATMENT SYSTEM IMPROVEMENTS

City of Pennsboro | Pennsboro, WV



Project Overview

The City of Pennsboro undertook a multi-phase wastewater collection and treatment system improvement project to address regulatory compliance requirements, reduce wet-weather overflows and modernize aging treatment infrastructure. The work was structured into Phase 1, Phase 2A and Phase 2B to align scope, funding availability and implementation timing.

Project Goals and Objectives

- Comply with the WVDEP Consent Order and support continued compliance with the City's WV/NPDES permit.
- Reduce temporary sanitary sewer overflows and improve handling of peak wet-weather flows.
- Upgrade treatment capacity and reliability through phased improvements to the collection system and wastewater treatment plant.
- Advance constructible work early where possible while refining long-term treatment sizing and design.
- Position the City to secure grant and loan funding while managing rate impacts and long-term operations and maintenance costs.

How Goals and Objectives Were Met

- **Phase 1 improvements completed:** Added interceptor sewer, influent lift station, preliminary treatment facility, temporary splitter box, UV disinfection structure, cascade aeration, TSSO handling improvements and associated site work to better capture, transport and treat peak flows.
- **Project was strategically re-phased:** The original Phase 2 scope was divided into Phase 2A and Phase 2B, allowing the City to move forward with high-priority, non-capacity-dependent improvements while additional flow data was collected.
- **Flow study informed design decisions:** Metering and analysis confirmed that previously assumed peak flows remained appropriate for design, supporting continued planning around a 2.10 mgd design basis.
- **Phase 2A was advanced:** Planned work included site improvements, treatment unit modifications, a solids handling building, control building and electrical upgrades to improve plant operations and readiness for final treatment expansion.
- **Phase 2B scope defined for final compliance:** Planned additions included a permanent splitter box, secondary treatment units, sludge handling improvements and related site work to provide the long-term treatment solution.
- **Funding, permitting and schedule were aligned:** Cost estimates, O&M impacts, permit needs and a revised project schedule were developed to support funding applications, regulatory review and implementation.

MINERAL WELLS WASTEWATER TREATMENT PLANT UPGRADE

Mineral Wells Public Service District | Mineral Wells, WV



Project Overview

The project addressed capacity limitations, sanitary sewer overflows, nuisance pump clogging, aging equipment and future growth pressures within the wastewater collection system and treatment facilities. Key problem areas included the Jackson Run Lift Station, Route 21 Lift Station, Bonnivale Lift Station, individual grinder pump stations and preliminary treatment at the wastewater treatment plant (WWTP). After evaluating alternatives, the PSD selected a systemwide improvement program that includes extending the Stoops Road force main to the Jackson Run wet well, relocating and upgrading the Route 21 Lift Station with a new upstream 12-inch gravity crossing, converting Bonnivale to a larger submersible lift station, replacing or rehabilitating individual grinder pump stations, extending a new Jackson Run force main to the WWTP and installing a second headworks at the WWTP.

Project Goals and Objectives

- Eliminate or reduce sanitary sewer overflows and sewer surcharging, especially upstream of the Jackson Run Lift Station.
- Increase pumping and conveyance capacity at major lift stations to handle current peak flows and projected growth.
- Reduce operational problems caused by ragging, clogging, flooding vulnerability and aging grinder pump infrastructure.
- Maintain compliance with NPDES permit requirements and support continued reliable treatment at the WWTP.
- Provide a practical, fundable, long-term improvement plan that improves customer service, protects public health and reduces environmental impacts to Tygart Creek and the Little Kanawha River.

How Goals and Objectives Were Met

The selected improvements directly address the system bottlenecks and operational deficiencies documented in the report. Capacity-related issues are addressed by upgrading the Jackson Run, Route 21 and Bonnivale lift stations and by extending new force mains and gravity sewers where needed to relieve surcharge conditions. Reliability is improved through conversion to larger duplex submersible stations, better routing of flows and replacement of failing grinder pump equipment and controls. WWTP performance is supported by installation of a second headworks to receive rerouted Jackson Run flows and accommodate higher peak influent conditions. The plan also reflects findings from alternatives analysis, present worth comparisons, emergency improvements already completed at Jackson Run and Route 21 and public participation conducted under SRF requirements. Collectively, these measures create a more resilient wastewater system, reduce the likelihood of overflows, support regulatory compliance, accommodate expected growth and provide measurable public health and environmental benefits.

WASTEWATER HANDLING DESIGN

Camp Otterbein | Logan, OH



Project Overview

This project included the planning, design and construction administration of critical water and wastewater infrastructure improvements intended to improve system reliability, operational efficiency and long-term performance. Services included preliminary evaluation, utility coordination, detailed design, permitting, bidding assistance and construction-phase services. The project required close coordination with the owner to maintain ongoing operations and minimize impacts to surrounding facilities and users throughout construction.

Project Goals and Objectives

- Improve reliability and performance of aging infrastructure
- Maintain continuous operations during construction activities
- Develop phased implementation strategies aligned with budget constraints
- Minimize impacts to customers, residents and facility operations
- Address regulatory requirements and support long-term system needs
- Deliver practical, cost-effective infrastructure improvements

How Goals and Objectives Were Met

The project team worked closely with the owner and stakeholders throughout planning, design and construction to develop solutions that balanced operational, budgetary and scheduling needs. Phased construction sequencing and detailed coordination efforts allowed facility operations and utility services to remain functional throughout implementation. Regular communication with contractors, utility staff and regulatory agencies helped proactively address challenges and maintain project progress.

WATER AND WASTEWATER SYSTEMS

Diocese of Cleveland Facilities Services Corporation | Camp Christopher, OH



Project Overview

B&N was retained by the Catholic Diocese of Cleveland to evaluate and improve the wastewater collection and treatment system serving its youth and family camp facility in Akron, Ohio. The camp includes both overnight and day-use facilities, creating significant fluctuations in wastewater flow and pollutant loading from restrooms, showers and cafeteria operations. The existing extended aeration treatment plant, designed for 15,000 gallons per day, was experiencing challenges maintaining consistent discharge permit compliance. B&N provided evaluation, planning, design and permitting services to identify practical and cost-effective infrastructure improvements that would enhance system performance while avoiding complete treatment plant replacement.

Project Goals and Objectives

- Evaluate the performance and condition of the existing sanitary sewer collection and treatment system
- Identify the causes of operational and discharge permit compliance challenges
- Improve treatment reliability under fluctuating hydraulic and pollutant loading conditions
- Develop cost-effective improvements that avoided full treatment plant replacement
- Enhance long-term operability and maintainability of the wastewater treatment system
- Provide improvements that supported continued camp operations during implementation

How Goals and Objectives Were Met

Improvements designed and permitted by B&N included replacement of the sanitary sewer system, installation of a flow equalization tank, replacement of sand filters, installation of new precast concrete covers and relocation of the blower system to an aboveground enclosure.

WASTEWATER TREATMENT PLANT

City of Philippi | Philippi, WV



Project Overview

B&N was selected to provide design services for upgrades to the 1.5 mgd Philippi Wastewater Treatment Plant, the nearby Tygart Glen package treatment plant and two area lift stations in Philippi, West Virginia. The improvements represented the first phase of the community's long-term control plan aimed at reducing and eliminating combined sewer overflows while improving overall treatment plant reliability and operational efficiency. Services included preliminary engineering evaluations, review of existing structures and equipment, electrical and control system assessments and design of comprehensive treatment process and solids handling improvements.

Project Goals and Objectives

- Support implementation of the community's long-term control plan
- Reduce or eliminate combined sewer overflows
- Improve treatment plant reliability, efficiency and operational flexibility
- Replace aging and failing process, electrical and mechanical equipment
- Enhance solids handling and sludge management capabilities
- Improve monitoring, controls and overall system maintainability

How Goals and Objectives Were Met

B&N completed detailed evaluations of existing treatment facilities, equipment and control systems to identify operational deficiencies and prioritize infrastructure improvements. The project included upgrades to headworks facilities, screening and grit removal equipment, clarifier rehabilitation, UV disinfection replacement, flow control improvements and replacement of critical pumping systems with VFD-controlled equipment.

GENERAL ENGINEERING SERVICES

City of Point Pleasant | Point Pleasant, WV



Project Overview

B&N has provided ongoing engineering support for a variety of wastewater, stormwater, structural and municipal infrastructure projects. Services have included wastewater treatment plant improvements, combined sewer system evaluations, drainage and stormwater improvements, long-term planning studies and general engineering support for public facilities and infrastructure. The program has allowed the City to address regulatory requirements, operational challenges and capital improvement needs through a coordinated and responsive engineering partnership.

Project Goals and Objectives

- Improve wastewater treatment plant efficiency, safety and operational reliability
- Reduce combined sewer overflows and address inflow and infiltration concerns
- Improve stormwater conveyance and reduce localized flooding issues
- Support regulatory compliance and long-term wastewater system planning
- Provide responsive engineering support for municipal infrastructure and facility needs
- Develop practical, cost-effective solutions that support long-term community objectives

How Goals and Objectives Were Met

B&N provided engineering services for multiple wastewater, stormwater and municipal infrastructure projects, including treatment plant upgrades, combined sewer separation improvements, sewer investigations and development of the City's Long-Term Control Plan. Key improvements included replacement and rehabilitation of treatment plant equipment, construction of new stormwater conveyance and treatment infrastructure and implementation of sewer system investigations utilizing smoke testing, televising and flow metering to identify inflow and infiltration sources.

REFERENCES

Our clients can provide the best indication of our staff's level of experience, ability to provide professional services, commitment to projects and compatibility with clients. We are providing you with the names of clients and references familiar with our experience and qualifications. We strongly encourage you to contact the referenced individuals to help you assess B&N's ability to meet your project goals.

Parkersburg Utility Board

Eric Bennett, General Manager
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Parkersburg, WV 26101
304.424.8535
eric.bennett@pubwv.com

Mineral Wells Public Service District

Kyle McCauley, Operations Manager
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Mineral Wells, West Virginia 26150-0266
304.489.2915
mwpsd@cascable.net

New Martinsville Water & Sanitary Sewer Board

Richard Wade, Superintendent
191 Main Street
New Martinsville, WV 26155
304.455.9110
newmartinsvillewater@newmartinsville.com

Charleston Sanitary Board

Tim Haapala, Operations Manager
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City of Benwood

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City of St. Marys

Brooke Barnhart, City Manager
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Vienna Utility Board

Craig Metz, Public Works Director
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City of Moundsville

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Pleasants County Public Service District

Eric Cunningham, Chairman
PO Box 369
St. Marys, WV 26170
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pleasantscopisd@outlook.com

Town of Chesapeake

Melissa Hill, Mayor
12404 MacCorkle Ave., SE
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mhill@chesapeakewv.gov

WHY B&N?



Our past performance with similar clients demonstrates our ability to understand, manage and provide quality work. We take pride in developing relationships with our clients, leading to repeat work and a foundational trust that the service you are receiving is done with the utmost care, respect and consideration for your needs.

GOALS AND OBJECTIVES



OUR APPROACH TO YOUR PROJECT

Project Challenge	B&N Approach
Variable wastewater flows and seasonal loading	Evaluate equalization of flow and process optimization
Aging infrastructure (collection system & plant)	Assess rehabilitation vs. replacement and I/I reduction
Maximize Limited budget	Prioritize improvements and phased implementation
Continuous operations (minimal disruption)	Minimize disruption during construction
Long-term reliability	Select durable, operator-friendly technologies
Future growth	Evaluate scalable treatment solutions

PROJECT UNDERSTANDING

Cedar Lakes Conference Center serves as a unique recreational, educational and hospitality destination in Jackson County, West Virginia, with a wastewater treatment system that supports a diverse range of facilities and highly variable wastewater flows. Daily and seasonal fluctuations associated with lodging, dining, conferences, training events and special gatherings create operational challenges that require a treatment system capable of maintaining reliable performance under changing conditions. In addition to wastewater treatment plant improvements, the project includes collection system rehabilitation, manhole upgrades, electrical improvements including backup power generation, demolition of obsolete facilities and potential upgrades to the West Virginia Environmental Training Center Laboratory.

B&N understands that the selected improvements must not only address existing infrastructure needs but also provide a practical, sustainable and operator-friendly solution that supports the long-term mission of Cedar Lakes Conference Center. Our team recognizes the importance of maintaining regulatory compliance, improving operational reliability, minimizing maintenance requirements and implementing improvements that can be delivered within budget while accommodating ongoing facility operations. Through a collaborative planning and design process, B&N will work closely with Cedar Lakes stakeholders to evaluate alternatives, identify opportunities for system optimization and develop a phased implementation strategy that provides long-term value and resiliency.

Particular consideration will be given to identifying a turnkey package treatment solution that provides energy-efficient operation, minimizes maintenance requirements, offers a long service life and can be implemented with minimal disruption to ongoing Cedar Lakes operations. B&N understands that Cedar Lakes hosts conferences, training programs, lodging guests and special events throughout the year with minimal downtime. Therefore, maintaining operational continuity during planning, design and construction will be a key factor in evaluating and implementing project improvements.

A PROJECT APPROACH ALIGNED WITH YOUR GOALS

B&N understands that the success of this project depends on selecting a wastewater treatment solution that addresses current operational needs, supports future growth, improves operational reliability and can be implemented with minimal disruption to Cedar Lakes Conference Center operations. Our approach emphasizes practical, cost-effective solutions that provide long-term value while improving treatment performance, reducing maintenance demands and supporting regulatory compliance.

PROJECT DELIVERY



Scoping Meetings

To maximize the budget, B&N wants to meet with stakeholders prior to securing an agreement to discuss goals and objectives, develop budgets, prepare a timeline and establish lines of communication. Our Project Manager, Zach Thompson, will lead these conversations, as he will serve as the primary point of contact throughout the project—from conceptualization through construction.



Kickoff Meeting

Our team's approach will begin by reviewing and analyzing existing facility conditions, treatment performance, collection system considerations and operational constraints in close coordination with the Owner, including Executive Officers with the West Virginia Department of Agriculture, the Director of Cedar Lakes Conference Center and the Director of the West Virginia Environmental Training Center.

Effective communication will be a cornerstone of this project. B&N will establish regular coordination meetings with project stakeholders, provide written progress updates at key milestones, maintain action-item tracking and ensure project decisions are documented and communicated throughout planning, design, permitting, bidding and construction. This structured communication process will facilitate timely decision-making and keep all stakeholders aligned with project goals, budget and schedule expectations.



Alternatives Analysis/Planning

Through this collaborative process, B&N will evaluate treatment alternatives, including the Rotating Biological Contactor (RBC) as a preferred option, alongside other modern wastewater treatment solutions. We will also evaluate rehabilitation versus replacement alternatives for both treatment and collection system infrastructure. Because Cedar Lakes hosts events throughout the year with minimal downtime, B&N will place particular emphasis on constructability, operational continuity and phased implementation strategies that minimize disruptions to facility operations during design and construction.

As part of this evaluation, B&N will assess opportunities to improve system reliability and performance through flow equalization. For facilities such as Cedar Lakes that experience significant variations in influent flow and loading due to seasonal occupancy and event-driven activities, an equalization (EQ) tank may provide substantial operational benefits. An EQ tank can dampen peak flows by temporarily storing excess wastewater and releasing it at a more consistent rate to downstream treatment processes, improving overall treatment stability and efficiency.

B&N will also evaluate the incorporation of coarse bubble diffusers within the EQ tank. Continuous mixing provided by coarse bubble aeration helps prevent solids settling and septicity while providing moderate aeration. This mixing promotes a more uniform distribution of pollutants, equalizes temperature and pH conditions and minimizes odor generation. Coarse bubble systems are particularly well suited for equalization applications due to their durability, resistance to clogging and lower energy requirements when mixing, rather than oxygen transfer, is the primary objective. Together, these improvements can protect downstream biological treatment processes from shock loading, improve process reliability and help maintain consistent effluent quality under variable operating conditions.

B&N will also coordinate with applicable regulatory agencies and prepare permitting documentation necessary to advance the selected improvements and maintain compliance with all applicable environmental regulations. Early coordination with permitting agencies will help identify potential challenges, reduce project risk and support a streamlined project delivery process.



Budget Management and Phasing

B&N recognizes the importance of aligning project improvements with available funding while maximizing long-term value. Throughout planning and design, our team will develop planning-level and refined opinions of probable construction cost at key milestones and continuously evaluate project scope against available funding. If anticipated costs exceed the available budget, B&N will work collaboratively with Cedar Lakes to prioritize improvements and develop a phased implementation strategy. This approach will identify critical wastewater treatment, collection system, electrical, demolition and laboratory improvements in order of priority, allowing Cedar Lakes to proceed with the highest-value improvements first while maintaining a clear roadmap for future phases.

Each alternative will be assessed based on capital cost, long-term maintenance requirements, operational reliability, regulatory compliance, ease of implementation, operator usability, energy efficiency and overall service life to identify the most effective and sustainable solution for Cedar Lakes. Building on that evaluation, B&N will provide the engineering and design services necessary to advance the selected solution in a manner consistent with Cedar Lakes Conference Center’s objectives and all applicable laws, codes and regulatory requirements. Our approach will include development of a practical implementation strategy, preparation of planning-level and refined cost estimates, establishment of a realistic project schedule and coordination of phased improvements as needed to align with budget and operational priorities.



Design/Bidding Services

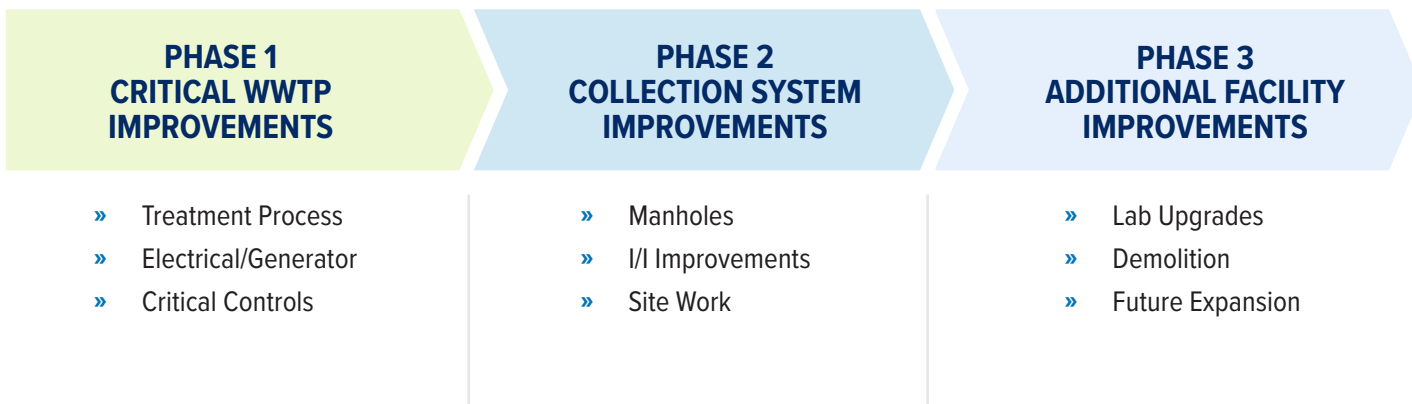
Once a preferred solution is confirmed, B&N will prepare complete bid documents to support procurement and construction, helping Cedar Lakes move confidently from concept through implementation with a clear, well-documented path forward. This documentation will include drawings and technical specifications necessary for bidding and construction, as well as construction cost estimates for proposed improvements. Documents will undergo internal quality reviews and meetings will be held with stakeholders to discuss feedback and finalize the design for construction.



Construction Phase Services

During the construction phase, B&N will provide support services such as pre-construction meetings, shop drawing reviews, weekly site visits during active construction, preparation of pay estimates and advising the Owner on issues of noncompliance. B&N will monitor construction progress against the approved schedule, facilitate timely resolution of field issues, review contractor schedule updates and provide recommendations when corrective actions are necessary to maintain project milestones and overall completion dates. Resident project representatives will be provided as needed and substantial completion and final inspections will be conducted to help ensure quality, compliance and successful project delivery.

POSSIBLE FUNDING STRATEGY



TECHNICAL CONSIDERATIONS

FLOW EQUALIZATION

- Reduces peak hydraulic loading
- Stabilizes treatment processes
- Improves effluent consistency
- Supports future growth

COARSE BUBBLE DIFFUSION

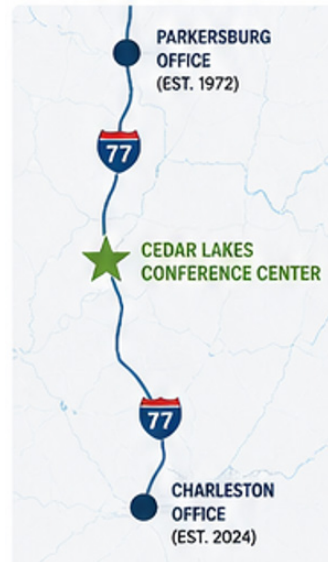
- Prevents solids settling
- Reduces septicity
- Controls odors
- Low maintenance operation

OPERATOR FRIENDLY DESIGN

- Simple operation
- Reduced maintenance
- Long equipment life
- Energy efficiency

LOCATION

Cedar Lakes is located between both offices, allowing the full resources of our West Virginia operation to provide responsive service and efficient project support via I-77 corridor. This local presence enables responsive service, efficient coordination and timely project support throughout planning, design and construction.



COMMITMENT TO COMMUNICATION



Regular Coordination Meetings



Written Progress Updates



Budget & Schedule Tracking



Stakeholder Engagement

CLIENT FOCUSED AND COMMUNITY DRIVEN

B&N recognizes the challenges all wastewater utilities face with inflow and infiltration (I/I). Over the past 20 years, B&N's West Virginia team has helped many of the state's largest municipal utilities identify and address these issues, improving plant performance and reducing treatment costs. Additionally, B&N understands the challenges associated with operating and maintaining wastewater treatment facilities. Throughout the evaluation and design process, our team will leverage this experience to recommend reliable, operator-friendly technologies that minimize maintenance requirements and provide a long, sustainable service life for the wastewater treatment system. This experience allows B&N to evaluate not only treatment effectiveness, but also operator workload, lifecycle costs, energy efficiency, maintainability and long-term reliability when recommending improvements for Cedar Lakes Conference Center.

CONSTRUCTION MANAGEMENT & CONTRACT ADMINISTRATION

B&N provides comprehensive construction management and contract administration services focused on maintaining project quality, controlling costs and schedules and minimizing disruptions to facility operations throughout construction. Our team understands the importance of maintaining continuous operation at active facilities such as Cedar Lakes Conference Center and incorporates phased construction strategies and proactive coordination into every stage of project delivery.

For wastewater treatment and utility infrastructure projects, B&N provides construction oversight services that include preconstruction coordination, shop drawing and submittal review, responses to contractor questions and requests for information, evaluation of proposed substitutions, review of pay applications, coordination with regulatory agencies and project documentation management. Our team also conducts regular site visits and weekly construction progress meetings to monitor project status, identify potential issues early and maintain communication among the owner, contractor and project stakeholders.

B&N emphasizes practical construction sequencing and operational continuity for projects involving active wastewater treatment facilities, collection systems and utility infrastructure. We routinely work with owners and contractors to develop phased implementation plans that allow critical systems to remain operational during construction while minimizing downtime and service interruptions. Our experience with wastewater treatment plant upgrades, lift station improvements, collection system rehabilitation and electrical and backup power improvements allows us to anticipate construction challenges and provide responsive solutions throughout the project.

In addition to construction oversight, B&N assists owners through project closeout and startup activities, including punch list development, review of record drawings, coordination of equipment startup and testing and support during operator training and commissioning. Our collaborative and responsive approach helps ensure projects are constructed in accordance with the design intent, remain within budget and schedule expectations and achieve long-term operational objectives.

B&N has *experience at every scale.*

From targeted facility improvements to large-scale capital programs, B&N has managed hundreds of millions of dollars in construction projects and brings the same level of attention, expertise and accountability to every assignment.

CONSTRUCTION MANAGEMENT



Weekly Site Observation



Contractor Coordination



Shop Drawing Review



Budget & Schedule Monitoring



Phased Construction Planning



Regulatory Coordination



Pay Application Review



Internal Quality Assurance



Risk Management

ADDITIONAL B&N SERVICES



ARCHITECTURE

- Space Planning
- Programming
- Building Design
- Building Evaluations
- Interior Design
- Landscape Architecture
- Civil Engineering
- Structural Engineering
- Mechanical Engineering
- Electrical Engineering



TRANSPORTATION

- Bridge Inspection
- Bridge Design and Rehabilitation
- Streets and Roadways
- Interchanges
- Trails and Bicycle Facilities
- Sidewalks and ADA Access
- Contract Plans
- Traffic Impact Studies
- Traffic Engineering Studies
- ITS
- Incident Management Planning
- Highway Safety Improvements
- Asset and Data Management
- Assistance to Support Traffic Data Programs



LAND DEVELOPMENT

- Plan Reviews
- Project Feasibility
- Master Planning
- Site Plan Design
- Traffic Studies
- Utility Systems
- Landscape Architecture
- Boundary and Topo Surveys
- Geology and Hydrology
- Grading and Drainage Design
- Wetland Delineation
- Environmental Assessment
- Zoning and Permit Assistance
- Surveying



ENVIRONMENT

- Site Assessment
- Compliance Assistance
- Brownfield Redevelopment
- Hazardous Waste Management
- Environmental Engineering
- Geotechnical Services
- Wetlands
- Groundwater Investigations
- Groundwater Supply
- Noise and Air Quality Analysis



UTILITY INFRASTRUCTURE

- Utility Evaluations
- Water Distribution System
- Sanitary Sewer Systems
- Water and Wastewater Treatment
- Watershed Planning
- Stormwater Management
- Reservoir and Dam Studies
- Hydraulic Structures
- Rate Studies
- Sludge Handling
- Construction Inspection Services



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