Statement of Qualifications



GarNat Engineering, LLC

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Designing our client's success



Table of Contents

Part 1 – Firm

Part 2 – Experience

Part 3 – Resumes

- Vernon Williams, P.E.
- Jennifer Williams, P.E.
- George Wooden, P.S.
- Chad Oppenhuizen, PLA
- Tariq Moreshed, E.I.
- Shakhiyorkhon Mukhitdinov
- Michael Cornish

Part 4 – References

Part 5 – Proof of Insurance



Part 1 – Firm



General

GarNat Engineering, LLC (GNE) is a civil engineering and land surveying consulting firm founded by Vernon Williams, P.E. in 2011. GNE'S office is located in Bryant, Arkansas where all work for the firm is accomplished.

Contact Information:	GarNat Engineering, LLC
	Mailing Address: P.O. Box 116, Benton, Arkansas 72018
	Physical Address: 3825 Mt Carmel Road, Bryant, Arkansas 72022
	Phone: (501) 408-4650
	E-mail: garnatengineering@gmail.com
	Website: www.garnatengineering.com

Vernon has worked as a consulting engineer in Arkansas for over 30 years. The five years prior to founding GNE were spent with a thirty-person, Arkansas-based engineering firm. While with this company, he managed its branch office in Little Rock and was promoted to the position of Vice President.

Vernon has a very broad range of design experience. He has designed land development, roadway, bridge, sidewalk, drainage, water, wastewater, athletic, trail, and parks projects. While he has worked for state and private sector clients, most of Vernon's experience involves working for municipal clients including cities, towns, county judges, utilities, and parks departments.

Company Philosophy/Approach

I named my firm after my three children – Garrett, Nathan, and Natalie. The name reminds me of why I get up and go to work each day. It also reminds me that my clients, through their patronage of my business, help me support the things that are most important to me. It makes me thankful for all the things that my clients allow us an opportunity to do. It makes me determined to bring honor to our relationship, to treat my clients like family, and to make sure that their success is my priority.

I pride myself on being an excellent listener. Finding out exactly what my clients want to accomplish and what motivates them allows me to provide them with exceptional service. However, I never assume that I know what is best for them. I see my role as organizing their projects and providing them with information, so they can make informed decisions. I work to empower them to act in the best interest of themselves and those they serve.



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The economic downturn in the late 2000s motivated me to start my own company because I felt like I could no longer provide clients with the best possible service while working in my previous capacity. Clients today are faced with greater and greater strains on their resources. They have increasing responsibilities and ever shrinking budgets and staff. Like all of us, they must do more with less. With our present market conditions, engineering is more important than ever. Unfortunately, many clients no longer feel like they can afford it. By starting a small firm, with the lowest possible overhead, I felt I could help them reduce their cost for outsourced engineering. By surrounding myself with talented, like-minded people that I trust, I believe I can provide top notch engineering and related services.

Resources

In addition to Vernon Williams, GNE has six other full time employees. A brief description of GNE's staff follows:

- Jennifer Williams, P.E. Jennifer is Vernon's college sweet heart. She joined GNE in the Fall of 2021 after retiring from ARDOT as the Division Head of Right of Way where she managed over 80 employees. During her 28-year ARDOT career she also held the positions of Consultant Contracts Administrator and Roadway Design Section Head.
- George Wooden, P.S. George is a registered professional surveyor with over 25 years of experience. He is GNE's survey manager.
- Tariq Morshed, E.I. Tariq is a project engineer that received his master's degree in Civil Engineering with an emphasis in transportation from Arkansas State University.
- Shak Mukhitdinov Shak is a degreed mechanical engineer from Southern Arkansas University.
- Michael Cornish Michael is a survey party chief/CADD tech with over 15 years of experience.
- Susie Goldman Susie is GNE's office manager and Vernon's assistant.

GNE is a technology driven company which utilizes the latest AutoCAD Civil design software. Surveys are completed using either RTK GPS equipment or a robotic total station, depending on the job and our client's needs.



Survey Services

GarNat Engineering, LLC (GNE) offers a full complement of survey services throughout the State of Arkansas. We provide surveying as a standalone service or as a phase of our scope of services on more complex projects. Regardless of the type of project, our goal is to provide our clients with accurate, cost-effective surveying through our commitment to using the best and most current equipment, software, and techniques available. From property survey to largescale survey projects for public and private clients, our survey team brings an unfailing commitment to quality. All survey work is performed by experienced professionals under the direct supervision of a licensed Professional Surveyor. GNE's services include construction layout and staking, new home construction plot plans, and elevation certificates. The survey data is gathered in accordance with established standards of accuracy and precision to meet the requirements of the client and local, state, and federal agencies.

Boundary and Topographic Surveys

Our personnel are qualified to perform boundary surveys for the preparation of survey plats, including American Land Title Association/American Congress on Surveying & Mapping (ALTA/ACSM), and land Title Surveys often required for commercial financing. We are equipped to perform both conventional and GPS control surveys utilizing the latest equipment and software. We also perform control, topographic, and utility surveys for the preparation of engineering plans.

Easement and Right-of-Way Preparation

GNE has extensive experience preparing right-of-way and easement documents in support of our projects or at the request of clients. We have prepared easement documents for roadway, drainage, water, wastewater, and other types of utility projects. GNE takes a holistic approach that ensures all right-of-way documents are properly coordinated with the design and construction documents, which ensures that the boundaries are based on the construction control survey data, are shown accurately on the drawings, and provide an adequate site for the construction of the project.



Project Record Drawings

GNE routinely provides record drawings for our projects in state plane, our client's, or some other entity's coordinate system. This information is gathered to the level of accuracy needed to meet the project requirements. We often supplement record drawings by providing record information in a database and graphical formats that are suitable for integration into our client's existing GIS systems.

Construction Layout and Staking

GNE provides construction layout and staking as part of our scope of services on our projects. Additionally, we have a strong client base of contractors that utilize us to layout projects designed by others. These contractors employ our services for two main reasons. First, we meet deadlines and keep their projects on schedule. Second, we have surveyors that come from a construction background, as opposed to a background limited to boundary surveys only. This allows us to anticipate the contractor's needs, understand how the contractor plans to approach the project, and provide the contractor with the tools he needs to work accurately.

Survey Equipment List

- 2 Zoom 80 Geomax 5" Robotic Total Stations
- 4 iGage iG8 RTK GPS Receivers
- 2 iGage CHC X91 RTK GPS Receivers
- 2 Carlson Surveyor2 GEP Data Collectors
- CHC LT35 Data Collector
- 2012 Ford F-150 equipped with tripods, rods, measuring wheels, pin locators, measuring tapes and other ancillary equipment
- 2004 Chevorlet Tahoe equipped with tripods, rods, measuring wheels, pin locators, measuring tapes and other ancillary equipment
- 2 Laptop computers
- 2 iPad2 Airs
- ADL Vantage Pro Repeater
- Access to flat bottom boats and ATV's as required



Part 2 – Experience



City of Little Rock Street Projects Cobb Street from 29th to 30th Streets Zion Street from 29th to 31st Streets Little Rock, Arkansas

GNE was selected by the City of Little Rock to design the extension of Cobb Street from 29th to 30th Streets and Zion Street from 29th to 31st Streets as part of their TREA Affordable Housing Program and ARPA funding.

In accordance with the City of Little Rock's Master Street plan, the completed road will be 26-feet wide with two lanes, curb and gutter, sidewalk, and meet the requirements of a local street. The project will construct approximately 325 feet of new roadway on Cobb Street and approximately 600 linear feet of new roadway on Zion Street.

The new roadway project allowed for the development of residential lots owned by the Little Rock Housing Authority. GNE coordinated its work closely with Little Rock Water Reclamation Authority to confirm existing sewer service location and design relocations to avoid conflicts with the new box culverts.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 dhopkins@littlerock.gov

Completion Date

Design 2023

Project Cost

\$1,315,000

Services Provided

Topographic Surveys Right-of-Way Documents Permitting Hydrology Hydraulic Modeling Construction Plans SWPPP On-Call Bid & Construction Services

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Valentine Street Reconstruction 8th Street to 12th Street Little Rock, Arkansas

GNE was selected by the City of Little Rock to design the widening of Valentine Street from 8th Street to 12th Street as part of their 2019-2020 Bond Program.

In accordance with the City of Little Rock's Master Street plan, the completed road will be 26-feet wide with two lanes, curb and gutter, sidewalk, and meet the requirements of a local street. The project will widen approximately 2,000 linear feet of existing road.

This project is one of 5 roadway projects that Little Rock selected GNE to design in 2019. GNE worked on these projects simultaneously and was required to set a rigid schedule for the deliverables at the beginning of the project. GNE met all project milestones and finished some projects early, which allowed them to be bid in the fall of 2019, instead of 2020, as initially planned.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 dhopkins@littlerock.gov

Completion Date

Design 2019 Construction 2020

Project Cost \$1,000,000

Services Provided





City of Little Rock Street Projects West 30th Street from John Barrow Road to Ludwig Street Little Rock, Arkansas

GNE was selected by the City of Little Rock to reconstruct one block of West 30th Street from John Barrow Road to Ludwig Street as part of their 2023–2025 Capital Improvement Project consisting of street and drainage improvements.

In accordance with the City of Little Rock's Master Street plan, the completed road will be 26-feet wide with two lanes, curb and gutter, sidewalk, and meet the requirements of a local street. The project will reconstruct approximately 300 feet of new roadway on 30th Street.

This project is one of three roadway projects that Little Rock selected GNE to design in 2023. GNE has worked on these projects simultaneously and was required to set a rigid schedule for the deliverables at the beginning of the project. GNE has met or exceeded all project milestones to date.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 dhopkins@littlerock.gov

Completion Date

Design 2023

Project Cost

\$350,000

Services Provided





Zion Street Extension 37th Street to 38th Street Little Rock, Arkansas

GNE was selected by the City of Little Rock to design the extension of Zion Street from 37th Street to 38th Street as part of their TREA Affordable Housing Program and ARPA funding.

In accordance with the City of Little Rock's Master Street plan, the completed road will be 26-feet wide with two lanes, curb and gutter, sidewalk, and meet the requirements of a local street. The project will construct approximately 300 linear feet of new roadway.

The new roadway project allowed for the development of four residential lots owned by the Little Rock Housing Authority. The project also included the extension of water and sewer service to these lots. GNE coordinated its work closely with Central Arkansas Water and Little Rock Water Reclamation Authority.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 dhopkins@littlerock.gov

Completion Date

Design 2022

Project Cost \$355,000

Services Provided





10th Street Reconstruction Madison Street to Washington Street Little Rock, Arkansas

GNE was selected by the City of Little Rock to design the widening of 10th Street from Madison Street to Washington Street as part of their 2019-2020 Bond Program.

In accordance with the City of Little Rock's Master Street plan, the completed road will be 26-feet wide with two lanes, curb and gutter, sidewalk, and meet the requirements of a local street. The project will widen approximately 1,200 linear feet of existing road.

This project is one of 5 roadway projects that Little Rock selected GNE to design in 2019. GNE worked on these projects simultaneously and was required to set a rigid schedule for the deliverables at the beginning of the project. GNE met all project milestones and finished some projects early, which allowed them to be bid in the fall of 2019, instead of 2020, as initially planned.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 dhopkins@littlerock.gov

Completion Date

Design 2019 Construction 2020

Project Cost \$800,000

Services Provided



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Madison Street Reconstruction 12th Street to 10th Street Little Rock, Arkansas

GNE was selected by the City of Little Rock to design the widening of Madison Street from 12th Street to 10th Street as part of their 2019-2020 Bond Program. Late in the project, Little Rock added the improvements to one block of 11th Street to the project.

In accordance with the City of Little Rock's Master Street plan, the completed road will be 26-feet wide with two lanes, curb and gutter, sidewalk, and meet the requirements of a local street. The project will widen approximately 1,100 linear feet of existing road.

This project is one of 5 roadway projects that Little Rock selected GNE to design in 2019. GNE worked on these projects simultaneously and was required to set a rigid schedule for the deliverables at the beginning of the project. GNE met all project milestones and finished some projects early, which allowed them to be bid in the fall of 2019, instead of 2020, as initially planned.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 dhopkins@littlerock.gov

Completion Date

Design 2019 Construction 2020

Project Cost \$450,000

Services Provided





Maryland Avenue Reconstruction Abigail Street to Lewis Street Little Rock, Arkansas

GNE was selected by the City of Little Rock to design the widening of Maryland Avenue from Abigail Street to Lewis Street as part of their 2019-2020 Bond Program.

In accordance with the City of Little Rock's Master Street plan, the completed road will be 26-feet wide with two lanes, curb and gutter, sidewalk, and meet the requirements of a local street. The project will widen approximately 500 linear feet of existing road.

This project is one of 5 roadway projects that Little Rock selected GNE to design in 2019. GNE worked on these projects simultaneously and was required to set a rigid schedule for the deliverables at the beginning of the project. GNE met all project milestones and finished some projects early, which allowed them to be bid in the fall of 2019, instead of 2020, as initially planned.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 dhopkins@littlerock.gov

Completion Date

Design 2019 Construction 2020

Project Cost \$350,000

Services Provided





B Street Reconstruction Polk Street to Tyler Street Little Rock, Arkansas

GNE was selected by the City of Little Rock to design the widening of B Street from Polk Street to Tyler Street as part of their 2019-2020 Bond Program.

In accordance with the City of Little Rock's Master Street plan, the completed road will be 26-feet wide with two lanes, curb and gutter, sidewalk, and meet the requirements of a local street. The project will widen approximately 600 linear feet of existing road.

This project is one of 5 roadway projects that Little Rock selected GNE to design in 2019. GNE worked on these projects simultaneously and was required to set a rigid schedule for the deliverables at the beginning of the project. GNE met all project milestones and finished some projects early, which allowed them to be bid in the fall of 2019, instead of 2020, as initially planned.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 dhopkins@littlerock.gov

Completion Date

Design 2019 Construction 2020

Project Cost \$250,000

Services Provided





Mabelvale West 2016 Bond & Sales Tax Program Little Rock, Arkansas

GNE was selected by the City of Little Rock to design the widening of Mabelvale West Road near Southwest Hospital from Otter Creek East Boulevard to South Loop Road.

In accordance with the City of Little Rock's Master Street plan, the completed road will be 55-feet wide, include four lanes plus a center turn lane, and meet the requirements of a minor arterial road. The project will widen approximately 2,000 linear feet of existing road and complete the improvements required to fully connect South Loop Road to Interstate 30's Otter Creek exit, which includes the new Bass Pro Shop and the Outlets of Little Rock.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 dhopkins@littlerock.gov

Completion Date

Design 2017 Construction 2018

Project Cost \$1,000,000

Services Provided





Jackson & Kavanaugh 2016 Bond & Sales Tax Program Little Rock, Arkansas

GNE was selected by the City of Little Rock to design a very complex drainage and roadway reconstruction project in an older neighborhood south of Mount St Mary's between Kavanaugh and F Street.

Scoping was one of the major hurdles for this project as there were limited funds available for the project. The scope was developed from a drainage study of the entire neighborhood. GNE provided data for the study through an extensive survey to field verify existing infrastructure. The final project scope resulted from a holistic approach that included milling and overlaying Kavanaugh to reestablish gutter flow capacity, replacing select culverts, and rebuilding three city blocks of local roads. All aspects of this project were impacted by the age of the neighborhood and the lack of adherence to modern zoning codes. GNE worked closely with City of Little Rock Staff to evaluate each property on a case by case basis to bring into compliance with current city codes, while allowing the property owners the continued access to their property.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 <u>dhopkins@littlerock.gov</u>

Completion Date

Design 2017 Construction 2018

Project Cost \$600,000

Services Provided





Markham & Bowman 2016 Bond & Sales Tax Program Little Rock, Arkansas

GNE was selected by the City of Little Rock to design intersection and sidewalk improvements to the intersection of Markham and Bowman.

The sidewalk portion of the project addressed the completion of a gap in the sidewalk along the north side of Markham between the Regions Bank and the east end of Entergy Court.

The intersection improvements included the addition of a right turn lane to the north approach to the intersection of Markham and Bowman. The addition of this turn lane allowed south bound traffic on Bowman access to one right turn lane, two straight through lanes, and one left turn lane. Space for the project was limited due to its proximity to the bridge over Rock Creek and existing development at the intersection.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 dhopkins@littlerock.gov

Completion Date

Design 2017 Construction 2018

Project Cost \$250,000

Services Provided







Hilltop Road and Springhill Road Intersection Improvements Bryant, Arkansas

The intersection of Springhill Road and Hilltop Road is a vital intersection in the City of Bryant that experienced overtopping during rainfall events multiple times per year. GNE was selected to design this important project as part of an on-call drainage design contract in place since 2017.

Since it is likely that the busy Springhill Corridor will be upgraded in the near future, GNE designed drainage improvements to allow for future widening while minimizing modifications to the vertical profile of the roadway geometry.

To ensure safety and limit the impact on the public, GNE coordinated stakeholder meetings with several City of Bryant Departments prior to developing the project's maintenance of traffic strategy. Impacts were mitigated by limiting lane closures to weekends and over the week of spring break.

Client Contact

Mr. Tim Fournier Public Works Director City of Bryant 210 SW 3rd Street Bryant, Arkansas 72022 (501) 943-0469 <u>tfournier@cityofbryant.com</u>

Completion Date

2020

Project Cost \$550,000

Services Provided

Topographic Surveys Right-of-Way Documents Hydrology Hydraulic Modeling Construction Plans Bid & Construction Phase Utility Relocation Design





Kohl's Road Extension City of Sherwood Sherwood, Arkansas

The City of Sherwood selected GNE to Design a proposed roadway project funded by a local sales tax. Prior to being selected for the final design, GNE assisted the City of Sherwood by completing three preliminary designs for the project. These preliminary designs, in conjunction with cost estimates for them prepared by GNE, were used to determine necessary funding and sell the sales tax to the public.

The project will consist of the completion of a section of road behind Kohl's that will connect the intersection of Brockington Road and Landers Road to the intersection of Cherrywood Drive and Landtrip Road. The purpose of the project will be to reduce congestion by providing an additional east/west corridor from Hwy 67/167 into Sherwood.

Client Contact

Richard Penn P.E. City Engineer City of Sherwood 2199 East Kiehl Avenue Sherwood, AR 72124 (501) 835-4753 rpenn@cityofsherwood.net

Completion Date Spring 2019

Project Cost

\$250,000

Services Provided



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Shirewood Court Road Extension Benton School District Benton, Arkansas

GNE was selected by the Benton School District to design an extension of Shirewood Court to create a third entrance to their athletic complex and to relieve congestion. While being completely responsible for the design and approval of the project, GNE worked as a subconsultant to Lewis Architects, the school district's oncall architect.

The project included approximately 800 linear feet of new road designed to Benton's street standards. There was one jurisdictional creek crossing along the route, which required GNE to acquire a nationwide 404 permit from the U.S. Army Corps of Engineers. To support the nationwide permit application, GNE was required to provide an endangered species study, a cultural resources clearing letter from the Department of Arkansas Heritage, and a wetlands delineation.

The project was submitted to and approved by the City of Benton's Development Review Committee and the Arkansas Department of Education.

Client Contact

Mr. Clayton Vaden Lewis Architects 11225 Huron Lane Little Rock, AR 72211 (501) 223-9302 cvaden@lemvrw.com

Completion Date Designed 2017

Project Cost \$300,000

Services Provided Surveying Drainage Design Roadway Design Environmental Permitting Cultural Resource Studies Wetlands Delineation







Harmon Drive Private Access Road Benton School District Benton, Arkansas

GNE was selected by the Benton School District to design a private access road from Harmon Drive to their athletic complex. The purpose of the project was to create a third entrance to the complex and to relieve congestion. While being completely responsible for the design and approval of the project, GNE worked as a subconsultant to Lewis Architects, the school district's on-call architect.

This project replaced the Shirewood Court Project, which was also designed by GNE. This project was constructed instead of the Shirewood Court Project because it was less expensive. The project included approximately 300 linear feet of new road designed to Benton's street standards. It was constructed across the side yard of an existing house, which was purchased by the school district to allow for this project. GNE closely coordinated its design with the house's site amenities, so it would be possible for the school district to re-sell the house at a later date.

The project was submitted to and approved by the City of Benton's Development Review Committee and the Arkansas Department of Education.

Client Contact

Mr. Clayton Vaden Lewis Architects 11225 Huron Lane Little Rock, AR 72211 (501) 223-9302 cvaden@lemvrw.com

Completion Date 2017

Project Cost \$215,000

<u>Services Provided</u> Surveying Drainage Design Roadway Design





Tetra Technologies Haul Road West Memphis, Arkansas

GNE was selected by ECCI to assist with the design of a new haul road and site improvements at Tetra Technology's existing chemical facility in West Memphis, Arkansas.

The haul road was designed to handle the heavy truck traffic at the site associated with the loading and unloading of chemicals at the facility. The design was complicated by the extremely poor soils at the site, which were primarily very expansive "buckshot" clays. GNE recommended an 8-inch thick continuously reinforced concrete section on 7-inches of base with a geogrid.

GNE also prepared a grading plan for the site, which included a sluice gate that could be closed to prevent the escape of runoff in the event of a chemical spill.

Client Contact

Rod Breuer ECCI, Inc. 13000 Cantrell Road Little Rock, AR 72223 (501) 975-8100 rbreuer@ecci.com

Completion Date

Early 2013

Construction Cost

\$740,000

Services Provided

Civil Site Design Rigid Pavement Design Drainage





Kelso Road & Burns Trail Sidewalk Project - AHTD Job 061556 Sherwood, Arkansas



GNE was selected by the City of Sherwood to design a sidewalk project funded by a grant from the Transportation Alternatives Program (TAP), which is administered by the Arkansas State Highway and Transportation Department (AHTD).

The project will be constructed along Kelso Road from Highway 107 east to North Valley Drive to connect existing sidewalks on both of these streets. In total, approximately 4,100 linear feet of 5-foot wide concrete sidewalk and appurtenances will be constructed.

All project contract documents were designed in strict accordance with the AHTD's design standards and had to be reviewed and approved by the AHTD and Metroplan. Additional reviews conducted by the AHTD included rightof-way and environmental clearances.

Client Contact

Richard Penn P.E. City Engineer City of Sherwood 2199 East Kiehl Avenue Sherwood, AR 72124 (501) 835-4753 rpenn@cityofsherwood.net

Completion Date

Spring 2019

Construction Cost

\$200,000

Services Provided





Haskell SRTS (2011) AHTD Job 061365

Haskell, Arkansas



GNE was selected by the City of Haskell to design a sidewalk project funded through the Safe Routes To School (SRTS) Grant Program, which is administered by the Arkansas State Highway and Transportation Department (AHTD).

The project includes approximately 700 linear feet of 5-foot wide concrete sidewalk and appurtenances along Hwy 229 from Mitchell Drive to Vulcan Road.

All project contract documents were designed in strict accordance with the AHTD's design standards and had to be reviewed and approved by the Department. Additional reviews conducted by the AHTD included right-of-way and environmental clearances.

Client Contact

Judge Jeff Arey (Former Mayor) Saline County Courthouse 200 N. Main St., Room 117 Benton, AR 72015 (501) 303-5640 jeff.arey@salinecounty.org

Completion Date

Spring 2013

Construction Cost

\$35,000

Services Provided





Hardin Elementary Sidewalks Redfield (TAP-15)(S) AHTD Job 020607 Redfield, Arkansas

GNE was selected by the City of Redfield to design a sidewalk project funded through the Safe Routes To School (SRTS) Grant Program, which is administered by the Arkansas State Highway and Transportation Department (AHTD).

The project was the first phase of an overall project to connect walking trails at Baugh Park to Hardin Elementary School. The sidewalk route started at Hardin Elementary School and ran along Suzanne Drive and River Road to the intersection of River Road and Mark Twain Boulevard. It included approximately 2,700 linear feet of 5-foot wide concrete sidewalk and appurtenances.

All project contract documents were designed in strict accordance with the AHTD's design standards and had to be reviewed and approved by the Department. Additional reviews conducted by the AHTD included right-of-way and environmental clearances.

Client Contact

James Smith City of Redfield, Arkansas P.O. Box 81 Redfield, AR 72132 (870) 692-4010 smittyretired@hotmail.com

Completion Date

Summer 2017

Construction Cost

\$110,000

Services Provided







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Hamburg SRTS (2015) Cherry & Milam Street Sidewalk Project AHTD Job 020602 Hamburg, Arkansas



GNE was selected by the City of Hamburg to design a sidewalk project funded through the Safe Routes To School (SRTS) Grant Program, which is administered by the Arkansas State Highway and Transportation Department (AHTD).

The project completed a sidewalk from Hamburg High School to the Noble Lower Elementary School and provided a sidewalk to connect the walking trails in Norman Park to the sidewalks on Cherry Street. In total, approximately 1,500 linear feet of 5-foot wide concrete sidewalk and appurtenances were constructed.

All project contract documents were designed in strict accordance with the AHTD's design standards and had to be reviewed and approved by the Department. Additional reviews conducted by the AHTD included right-of-way and environmental clearances.

Client Contact

Jimmy Hargis Director of Public Works City of Hamburg 305 E. Adams St. Hamburg, AR 71646 (870) 853-5279 jimhargis@cityofhamburg.com

Completion Date

Spring 2017

Construction Cost

\$300,000

Services Provided





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Hamburg SRTS (2011) AHTD Job 020545 Hamburg, Arkansas



GNE was selected by the City of Hamburg to design a sidewalk project funded through the Safe Routes To School (SRTS) Grant Program, which is administered by the Arkansas State Highway and Transportation Department (AHTD).

The project includes approximately 850 linear feet of 5-foot wide concrete sidewalk and appurtenances along Cherry Street from Milam Street to Jackson Street.

All project contract documents were designed in strict accordance with the AHTD's design standards and had to be reviewed and approved by the Department. Additional reviews conducted by the AHTD included right-of-way and environmental clearances.

Client Contact

Jimmy Hargis Director of Public Works City of Hamburg 305 E. Adams St. Hamburg, AR 71646 (870) 853-5279 jimhargis@cityofhamburg.com

Completion Date

Summer 2013

Construction Cost

\$120,000

Services Provided





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Grand Avenue Sidewalk Improvements Haskell, Arkansas



GNE was selected by the City of Haskell to design a sidewalk project funded using LUZA Funds administered by Metroplan.

The project includes approximately 3,000 linear feet of 5foot wide concrete sidewalk and appurtenances along Highway 229 and Grand Avenue from City Hall to Kennedy Street. The project was identified as a priority during the public involvement phase of the Sidewalk Master Plan Project prepared by GNE in early 2012.

All project contract documents were reviewed and approved by Metroplan. GNE coordinated closely with the Haskell Water and Sewer Department, AT&T, and Entergy to relocate utilities that were in conflict with the project.

Client Contact

Judge Jeff Arey (Former Mayor) Saline County Courthouse 200 N. Main St., Room 117 Benton, AR 72015 (501) 303-5640 jeff.arey@salinecounty.org

Completion Date

Spring 2013

Construction Cost

\$110,000

Services Provided





Designing our client's success

Haskell SRTS (2012) AHTD Job 061419 Haskell, Arkansas



GNE was selected by the City of Haskell to design a sidewalk project funded through the Safe Routes To School (SRTS) Grant Program, which is administered by the Arkansas State Highway and Transportation Department (AHTD). This was the second SRTS project and third sidewalk project that GNE completed for Haskell

The project includes approximately 1,400 linear feet of 5foot wide concrete sidewalk and appurtenances along Hwy 229 from Greg Haskell Street to Vulcan Road.

All project contract documents were designed in strict accordance with the AHTD's design standards and had to be reviewed and approved by the Department. Additional reviews conducted by the AHTD included right-of-way and environmental clearances.

Client Contact

Judge Jeff Arey (Former Mayor) Saline County Courthouse 200 N. Main St., Room 117 Benton, AR 72015 (501) 303-5640 jeff.arey@salinecounty.org

Completion Date

December 2014

Construction Cost

\$80,000

Services Provided





Designing our client's success

Sidewalk Master Plan Haskell, Arkansas



GNE was selected by the City of Haskell to assist in the preparation of a sidewalk master plan. The purpose of the project was to create an inventory of existing sidewalks and prepare a plan for the expansion of Haskell's sidewalk system to promote non-vehicular transportation. Haskell intends to use the master plan as a tool for attracting grants and other funding for these types of projects.

GNE coordinated the public involvement process, which included multiple public meetings to obtain input from citizens and public officials on their needs. To encourage additional public involvement, GNE hosted the draft master plan on its website.

The final master plan was adopted by the City Council in May of 2012. Since the project was completed, the master plan was been used to justify using approximately \$125,000 of LUZA Funds for a sidewalk project along Grand Avenue. That project was completed in the Spring of 2013.

Client Contact

Judge Jeff Arey (Former Mayor) Saline County Courthouse 200 N. Main St., Room 117 Benton, AR 72015 (501) 303-5640 jeff.arey@salinecounty.org

Completion Date

May 2012

Design Fee

\$2,500

Services Provided

Master Planning Cost Estimating Public Involvement





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Stillman Loop Drainage Bryant, Arkansas

The Stillman Loop area is an older residential area within the City of Bryant, Arkansas that was constructed in multiple phases. Due to this style of development, there was no consistency in the construction of its main drainage flow path. The drainage path currently consists of a hodgepodge of open channels, undersized culverts, and areas where essentially no drainage path exists and water is allowed to spread out. This renders some backyards unusable and too wet to be maintained.

On the evening of April 29, 2017 the City of Bryant received a large rainfall in excess of the 50-year event and six homes along this drainage path flooded. The City of Bryant engaged GNE to study this area and recommend improvements. The resulting study recommended the construction of 3,100 linear feet of storm sewers ranging in size from an 18-inch pipe to 6-foot x 3-foot box culvert.

The City of Bryant is currently seeking funding for this project. GNE is working closely with the City and its grant writer to identify funding sources.

Client Contact

Mr. Troy Ellis Street / Stormwater Superintendent City of Bryant 210 SW 3rd Street Bryant, Arkansas 72022 (501) 943-0453 tellis@cityofbryant.com

<u>Completion Date</u> Preliminary Engineering Fall 2017

Project Cost \$1,000,000

<u>Services Provided</u> Topographic Surveys Hydrology Hydraulic Modeling Public Involvement Meetings





Designing our client's success

City of Little Rock Street Projects Walker Street at Rock Creek Bridge Little Rock, Arkansas

GNE was selected by the City of Little Rock to reconstruct drainage features along Rock Creek and replace a bridge structure at Walker Street as part of their 2023-2025 Capital Improvement Project consisting of street and drainage improvements.

In accordance with the City of Little Rock's Master Street plan, the completed road will be 26-feet wide with two lanes, curb and gutter, sidewalk, and meet the requirements of a local street. The project will improve approximately 600 linear feet of drainage channel from Gilman Road to Walker Street and construct approximately 200 linear feet of new channel connecting to 30th Street drainage channel.

This project is one of three roadway projects that Little Rock selected GNE to design in 2023. GNE has worked on these projects simultaneously and was required to set a rigid schedule for the deliverables at the beginning of the project. GNE has exceeded all project milestones to date.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 dhopkins@littlerock.gov

Completion Date

Design 2023

Project Cost

\$500,000

Services Provided



GNE Designing our client's success

GarNat Engineering, LLC

Raintree Acres Drainage Project 1 Bryant, Arkansas

GNE was selected in 2021 for an on-call contract to design drainage projects for the City of Bryant, Arkansas. GNE was assigned this project to correct flooding on Carywood Drive that resulted from a lack of a drainage system for the roadway runoff.

The project consisted of installing over 1,000 of new 24inch and 30-inch reinforced concrete pipe culvert and constructing 12 storm drainage structures to outfall along Carywood Drive to an existing drainage channel between Carywood Drive and Amber Cove.

The construction of this project conflicted with an existing water line. GNE worked closely with City of Bryant to identify the conflict and designed the relocation of the water line.

Client Contact

Mr. Troy Ellis Street / Stormwater Superintendent City of Bryant 210 SW 3rd Street Bryant, Arkansas 72022 (501) 943-0453 tellis@cityofbryant.com

Completion Date

Design 2022 Under Construction

Project Cost \$529,500

Services Provided



GNE

GarNat Engineering, LLC

Designing our client's success

Richland Park Drainage Bryant, Arkansas

GNE was selected in 2016 for an on-call contract to design drainage projects for the City of Bryant, Arkansas. GNE was assigned this project to correct flooding in the Carywood Subdivision that resulted from a poorly designed detention pond in the Richland Park Subdivision.

The project consisted of replacing the detention pond's existing outfall structure and installing a new 36-inch and 42-inch outfall along Lavern Street to a tributary of Crooked Creek located south of Carywood.

Since the route of the outfall was along an existing street, GNE worked closely with the City of Bryant to identify potential conflicts with existing utilities. The depth selected for the outfall ensured that only minimal utility relocations would be required to install the new storm sewer.

Lavern Street had a very narrow right-of-way width of 40feet. This required the acquisition of additional right-ofway. GNE prepared these easement documents and acquired the easements for the City of Bryant

Client Contact

Mr. Troy Ellis Street / Stormwater Superintendent City of Bryant 210 SW 3rd Street Bryant, Arkansas 72022 (501) 943-0453 tellis@cityofbryant.com

Completion Date 2017

Project Cost \$210,000

Services Provided

Topographic Surveys Right-of-Way Documents Easement Acquisition Permitting Hydrology Hydraulic Modeling Construction Plans SWPPP




Augusta Cove Drainage Bryant, Arkansas

GNE was selected in 2016 for an on-call contract to design drainage projects for the City of Bryant, Arkansas. This was the first project that GNE was assigned under that contract. This construction project was the result of a lawsuit between the City of Bryant and a property owner. It included added scrutiny because it was built in the yard of that property owner.

Initially, the project consisted of the installation of 125 linear feet of 65-inch x 40-inch reinforced concrete arch pipe that was adjacent to an existing 48-inch corrugated metal culvert. During the course of the project, it was determined that the 48-inch culvert was in bad condition and that it also needed to be replaced.

Given the project's history and its location in a residential subdivision, a great deal of emphasis was placed on final cleanup and coordination with the property owners while working in their yards. At the end of the job, GNE and the contractor both received thank you notes from the property owner involved in the project.

Client Contact

Mr. Tim Fournier Public Works Director City of Bryant 1017 SW 2nd Street Bryant, Arkansas 72022 (501) 943-0468 tfournier@cityofbryant.com

Completion Date 2017

Project Cost \$125,000

Services Provided

Topographic Surveys Hydrology Hydraulic Modeling Construction Plans SWPPP On-call Bid & Construction Services





Northlake Road Drainage Improvements Bryant, Arkansas

Northlake Road is a vital thoroughfare in the City of Bryant and Saline County that experienced overtopping during rainfall events multiple times per year. In addition to being undersized, the existing corrugated metal culverts were near failure due to missing pipe inverts that allowed water to escape the pipes and pass through the roadway subgrade.

Since it is likely that the busy Northlake Corridor will be upgraded in the near future, GNE designed drainage improvements to allow for future widening while minimizing modifications to the vertical profile of the roadway geometry that would have altered the 100-year flood conditions at the crossing.

Construction of 56' linear feet of a quadruple 12-foot x 5foot box culvert and a 56' linear feet of a 10-foot x 5-foot box culvert to correct the flooding.

To ensure safety and limit the impact on the public, GNE coordinated stakeholder meetings with several City of Bryant Departments prior to developing the project's maintenance of traffic strategy. Impacts were mitigated by limiting lane closures to weekends.

Client Contact

Mr. Tim Fournier Public Works Director City of Bryant 1017 SW 2nd Street Bryant, Arkansas 72022 (501) 943-0468 <u>tfournier@cityofbryant.com</u>

Completion Date April 2023

Project Cost \$1,100,000

Services Provided

Topographic Surveys Right-of-Way Documents Hydrology Hydraulic Modeling Construction Plans Bid & Construction Phase Utility Relocation Design



GarNat Engineering, LLC

Colonel Glenn Drainage 2016 Bond & Sales Tax Program Little Rock, Arkansas

GNE was selected by the City of Little Rock to design a neighborhood drainage project to replace a failed culvert in backyards of the Tall Timber West Subdivision. The project consisted of 425 linear feet of new 30-inch storm drain and appurtenances.

Prior to preparing construction documents for the project, GNE completed a drainage study of the entire area to confirm that all of the drainage infrastructure in the area was properly sized.

Existing platted drainage easements were not large enough for the required construction. GNE prepared new right-ofway documents, so additional easements could be acquired.

To ensure proper long term maintenance of the culvert, existing fences were moved to allow equipment access to the drainage easement.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 dhopkins@littlerock.org

Completion Date

Design 2017 Construction 2018

Project Cost \$75,000

Services Provided





Windamere Drainage 2013 Bond & Sales Tax Program Little Rock, Arkansas

As part of the 2013 Bond and Sales Tax Program, GNE was selected by the City of Little Rock to design a project on Windamere Drive. The project included the replacement of undersized culverts between existing homes. The drainage issues with these culverts were compounded by the fact that the existing culverts were prone to clogging. The project also included the installation of a culvert to eliminate an existing ditch.

GNE routed the culverts to ensure that no utilities would need to be relocated to construct the project.

All work on this project was done is accordance with strict City of Little Rock standards for design, plan, and right-ofway document preparation.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 <u>dhopkins@littlerock.gov</u>

Completion Date

Project Cost \$200,000

Services Provided





Victoria & Woodford Drainage 2013 Bond & Sales Tax Program Little Rock, Arkansas

As part of the 2013 Bond and Sales Tax Program, GNE was selected by the City of Little Rock to design a project to correct drainage issues caused by an undersized private stormwater pump station at an apartment complex on Baseline Road. GNE designed a new storm drain through an existing residential subdivision to convey the storm water by gravity from the lift station to an existing drainage channel. Since the route of the storm drainage system was already developed, GNE had to carefully coordinate the storm sewer design with the subdivision's existing storm drainage infrastructure and utilities to minimize disruptions and project costs.

All work on this project was done is accordance with strict City of Little Rock standards for design, plan, and right-ofway document preparation.

<u>Client Contact</u>

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 <u>dhopkins@littlerock.gov</u>

Completion Date

Fall 2014

Project Cost \$200,000

Services Provided





Sandy Lane Drainage 2013 Bond & Sales Tax Program Little Rock, Arkansas

As part of the 2013 Bond and Sales Tax Program, GNE was selected by the City of Little Rock to design a project to correct drainage issues caused by two undersized culvert crossings on Sandy Lane and Shady Brook Drive. GNE's design included replacing existing corrugated metal culverts at each crossing with precast concrete box culverts. The design was complicated by limited cover and existing right-of-way, the close proximity of existing homes, and the need to coordinate the box culvert installation with existing utilities and drainage ditches.

All work on this project was done is accordance with strict City of Little Rock standards for design, plan, and right-ofway document preparation.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 <u>dhopkins@littlerock.gov</u>

Completion Date

Fall 2014

Project Cost \$150,000

Services Provided





Meyer Road & Sheila Lane Drainage 2013 Bond & Sales Tax Program Little Rock, Arkansas

As part of the 2013 Bond and Sales Tax Program, GNE was selected by the City of Little Rock to design a project to correct drainage issues caused by undersized culverts at an existing intersection. GNE designed a system of dual box culverts with a splitter box. This unique design maintained flows to an existing pond while providing the additional capacity required for larger storm events. GNE's design worked through very challenging grade issues caused by reverse grades on existing culverts, very little fall across the site, and a general lack of cover. GNE routed the box culverts to ensure that no utilities would need to be relocated to construct the project.

All work on this project was done is accordance with strict City of Little Rock standards for design, plan, and right-ofway document preparation.

<u>Client Contact</u>

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4812 <u>dhopkins@littlerock.gov</u>

Completion Date

Fall 2014

Project Cost \$300,000

Services Provided





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Drainage Project I-630 & Woodrow Little Rock, Arkansas

In 2013, GNE designed the site work associated with a new maintenance warehouse for U.S. Pizza on Appian Way in Little Rock. After starting construction on the warehouse in 2014, U.S. Pizza decided that they would like to build parking over an existing drainage channel on their property adjacent to the warehouse. The drainage basin for the channel included 167 acres of downtown Little Rock neighborhoods. GNE designed 150 linear feet of 9-foot by 5-foot cast-in-place box culvert, which is capable of conveying the 25-year storm.

The drainage design was prepared in accordance with the Little Rock Drainage Manual and submitted to the City of Little Rock for approval. Since the project was located in the 100-year floodplain, GNE assisted the owner in obtaining a City of Little Rock special grading permit. GNE also obtained a Short-term Activity Authorization from the Arkansas Department of Environmental Quality and a 404 Permit from the U.S. Army Corps of Engineers.

Client Contact

Don Holland U.S. Pizza P.O. Box 251710 Little Rock, AR 72225 (501) 519-7888 h.c.i.builders@sbcglobal.net

Completion Date

Summer 2015

Construction Cost

\$120,000

Services Provided

Drainage Design Hydrology USACE 404 Permitting ADEQ Permitting Box Culvert Design





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Drainage Project Landers Chevrolet Benton, Arkansas

In 2011, GNE designed an emergency repair to an existing 48-inch corrugated metal pipe (CMP) that collapsed under Landers Chevrolet's parking lot.

In 2012, as part of a remodeling project at the dealership, GNE designed the full replacement of this culvert with a 73"x45" reinforced concrete arch pipe. The project also included the re-grading and replacement of a significant portion of the existing concrete parking lot to remove an existing concrete swale.

GNE coordinated with the AHTD and enabled Landers to acquire an AHTD special permit, so work could be conducted on I-30 right-of-way.

Per City of Benton requirements, the drainage design was prepared in accordance with the Little Rock Drainage Manual.

Client Contact

Brian Black, AIA Black, Corley, Owens & Hughes 219 West South Street Benton, AR 72015 (501) 315-7686 <u>brian@bcoandh.com</u>

Completion Date

November 2012

Construction Cost

\$300,000

Services Provided

Drainage Design Hydrology Reinforced Concrete Retaining Wall Design Bid Phase Services Construction Phase Services





Floodplain Study Lake Balboa Hot Springs Village, Arkansas

GNE was selected by Saline County to revise the FIRM for a portion of the county surrounding Lake Balboa in Hot Springs Village, Arkansas. During the course of the project, GNE was also engaged by Garland County to revise the FIRMS for Lake Balboa in that county.

To create a basemap without extensive survey work, GNE digitized existing 5-foot contour information from existing Hot Springs Village POA subdivision plats. This information and record drawings from the construction of the Lake Balboa Dam were used by GNE to create a HEC-RAS model of the lake. The model and supporting documents were submitted to FEMA. After FEMA approved GNE's work, GNE coordinated the public notification required for the three Letters of Map Revision (LOMRs). The LOMRs became effective in February of 2014 after the 90 day appeal period.

Client Contact

Mr. Christopher Boutzale Water and Wastewater Plants Superintendent Hot Springs Village POA 895 DeSoto Blvd. Hot Springs Village, AR 71909 (501) 922-5522 <u>CBoutzale@hsvpoa.org</u>

Completion Date

November 2013

Project Cost

\$15,000

Services Provided

Floodplain Modeling Drainage Design Topographic Surveying



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Levee Certification 36th Street/Boyle Park Levee Little Rock, Arkansas



While with another firm, Vernon Williams managed the certification of an existing levee and floodwall system in Boyle Park owned by the City of Little Rock for FEMA to ensure compliance with 44CFR 65.10.

The levee system was evaluated to determine that adequate design and maintenance systems were in place to provide reasonable assurance of protection against the 100-year base flood. Evaluations included site inspections, hydrology & hydraulic, structural, geotechnical, electrical, mechanical, and interior drainage analyses.

Vernon worked closely with Little Rock Public Works staff to coordinate levee repairs needed in order to allow it to be certified.

Client Contact

Mr. David Hopkins Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4811 <u>mhood@littlerock.gov</u>

Completion Date

April 2009

Project Cost

\$75,000

Services Provided

Hydrology Hydraulic Modeling Structural Analysis Erosion Analysis Seepage & Settlement Analysis Operation & Maintenance Plans



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Levee O&M Manual 36th Street/Boyle Park Levee Little Rock, Arkansas



While with another firm, Vernon Williams managed the certification of an existing levee and floodwall system in Boyle Park owned by the City of Little Rock for FEMA to ensure compliance with 44 CFR 65.10.

In 2012 as part of its annual levee inspection, Little Rock was advised by the U.S. Army Corps of Engineers (USACE) that an operations and maintenance (O&M) manual was needed for the levee. Due to Vernon's familiarity with the levee system, Little Rock selected GNE to prepare the O&M manual.

To create the document, Vernon modified an existing O&M manual prepared by the USACE for the entire Fourche Bayou Basin, which includes the Boyle Park Levee. The manual met all of the requirements of USACE ER 1110-2-401 – Operation, Maintenance, Repair, Replacement, and Rehabilitation Manual for Projects and Separable Elements Managed by Project Sponsors. The final document was reviewed and approved by the City of Little Rock and the USACE.

Client Contact

Mr. Eric Petty Little Rock Public Works 3313 J. E. Davis Little Rock, Arkansas 72209 (501) 918-3630 <u>epetty@littlerock.gov</u>

Completion Date

December 2012

Project Cost

\$9,500

Services Provided

Operation & Maintenance Preparation







Hilltop Road and Springhill Road Intersection Improvements Bryant, Arkansas

The intersection of Springhill Road and Hilltop Road is a vital intersection in the City of Bryant that experienced overtopping during rainfall events multiple times per year. GNE was selected to design this important project as part of an on-call drainage design contract in place since 2017.

Since it is likely that the busy Springhill Corridor will be upgraded in the near future, GNE designed drainage improvements to allow for future widening while minimizing modifications to the vertical profile of the roadway geometry.

To ensure safety and limit the impact on the public, GNE coordinated stakeholder meetings with several City of Bryant Departments prior to developing the project's maintenance of traffic strategy. Impacts were mitigated by limiting lane closures to weekends and over the week of spring break.

Client Contact

Mr. Tim Fournier Public Works Director City of Bryant 210 SW 3rd Street Bryant, Arkansas 72022 (501) 943-0469 <u>tfournier@cityofbryant.com</u>

Completion Date

2020

Project Cost \$550,000

Services Provided

Topographic Surveys Right-of-Way Documents Hydrology Hydraulic Modeling Construction Plans Bid & Construction Phase Utility Relocation Design



GarNat Engineering, LLC

Stone Pine Drive Drainage Improvements Bryant, Arkansas

GNE was selected in 2021 for an on-call contract to design drainage projects for the City of Bryant, Arkansas. GNE was assigned this project to correct flooding on a residential property at the corner of Stone Pine Drive and Shobe Road.

The project consisted of installing over 32' of reinforced concrete pipe culvert and constructing 2 storm drainage structures to outfall across Stone Pine Drive to an existing drainage system on Shobe Road.

Since the route of the outfall was along an existing street, GNE worked closely with the City of Bryant to identify potential conflicts with existing utilities. The depth selected for the outfall ensured that only minimal utility relocations would be required to install the new storm sewer.

Client Contact

Mr. Troy Ellis Street / Stormwater Superintendent City of Bryant 210 SW 3rd Street Bryant, Arkansas 72022 (501) 943-0453 tellis@cityofbryant.com

Completion Date

Design 2022 Under Construction

Project Cost \$529,500

Services Provided



GarNat Engineering, LLC

Rogers Drive Drainage Bryant, Arkansas

GNE was selected in 2021 for an on-call contract to design drainage projects for the City of Bryant, Arkansas. GNE was assigned this project to correct flooding of residential properties on Rogers Drive.

The project consisted of constructing a 132' concrete drainage swale outfall south of Rogers Drive. Prior to this project, the existing stormwater runoff from the roadway was not controlled and was running outside the limits of existing easements and damaging private property. The project protected private property by confining the storm water within the swale.

GNE worked closely with the City of Bryant to identify potential conflicts with existing utilities. A swale, instead of culvert, was selected to prevent utility conflicts.

The existing drainage channel had a narrow easement width of 12-feet. This required the acquisition of an additional temporary construction easement. GNE prepared these easement documents for the City of Bryant.

Client Contact

Mr. Troy Ellis Street / Stormwater Superintendent City of Bryant 210 SW 3rd Street Bryant, Arkansas 72022 (501) 943-0453 tellis@cityofbryant.com

Completion Date Design 2023

Project Cost \$42,150

Services Provided



GarNat Engineering, LLC

Eastwood Drive Drainage Project 2 Bryant, Arkansas

GNE was selected in 2021 for an on-call contract to design drainage projects for the City of Bryant, Arkansas. GNE was assigned this project to correct flooding of residential properties on Eastwood Drive.

The project consisted of replacing existing culverts with a $6' \times 2' \times 138'$ box culvert and one storm drainage structure to outfall across Eastwood Drive to increase capacity.

GNE worked closely with the City of Bryant to identify potential conflicts with existing utilities. The depth selected for the outfall ensured that only minimal utility relocations would be required to install the new storm sewer.

The existing drainage channel had narrow easement width of 16-feet. This required the acquisition of additional easements on the upstream side. GNE prepared these easement documents and acquired the easements for the City of Bryant.

Client Contact

Mr. Troy Ellis Street / Stormwater Superintendent City of Bryant 210 SW 3rd Street Bryant, Arkansas 72022 (501) 943-0453 tellis@cityofbryant.com

Completion Date Design 2023

Project Cost \$174,500

Services Provided







Norman Street Park Hamburg, Arkansas

The City of Hamburg selected GNE to design modifications to Norman Street Park – its largest park. The project was funded by a sales tax passed after the success of GNE's work across town at Pine Street Park.

GNE held multiple public meeting with local stakeholders, which included the baseball association, softball association, and parks committee. The resulting master plan included the addition of a baseball field, a softball field, new parking lots, two new playgrounds, a pavilion, and a rest room/concession stand. GNE also designed the utility and drainage improvements required to support these facilities.

As with most other projects constructed in Arkansas during the fall of 2018 and spring of 2019, this project was dramatically impacted by an extreme rainfall pattern. GNE coordinated closely with Owner's construction manager to work through these issues and the impacts that they had on the project budget and schedule.

Client Contact

Jimmy Hargis Director of Public Works City of Hamburg 305 E. Adams St. Hamburg, AR 71646 (870) 853-5279 jimhargis@cityofhamburg.com

Completion Date

Fall 2019

Project Cost

\$2,000,000

Services Provided

Park Master Planning Surveying Civil Site Design Bid Phase Services Construction Phase Services





Norman City Park Trail Improvements ARDOT Job 020709 (RTP-18)(S) Hamburg, Arkansas

GNE assisted the City of Hamburg in obtaining a Recreational Trails Program (RTP) Grant for \$96,000 from the Arkansas Department of Transportation (ARDOT) for an expansion of its existing walking trail system at Norman Street Park.

The scope for this project grew out of public involvement meetings that GNE coordinated for the City of Hamburg for a larger construction project at the park. Obtaining the grant allowed the city to increase the scope of the other project by reducing funds the city needed for infrastructure.

The expansion resulted in better connectivity to the park's new facilities and created a one-mile loop around the park. In addition to upgrading the walking trail, the project also allowed the city to complete an internal drivable section of trail used by trucks delivering supplies to the concession stand and to provide reliable access for emergency vehicles to all sports facilities.

Client Contact

Jimmy Hargis Director of Public Works City of Hamburg 305 E. Adams St. Hamburg, AR 71646 (870) 853-5279 jimhargis@cityofhamburg.com

Completion Date

Fall 2020

Project Cost

\$120,000

Services Provided

Park Master Planning Civil Site Design Bid Phase Services Construction Phase Services Coordination with ARDOT





Pine Street Park Hamburg, Arkansas

GNE assisted the City of Hamburg in obtaining a 50/50 Matching Grant for \$225,000 from the Arkansas Department of Parks and Tourism that enabled them to make improvements to Pine Street Park.

Pine Street Park was a well-used community park that had served the community for decades. One of the main features of the park was two existing basketball courts that had reached the end of their useful life. The court's playing surface, lights, and goals were reconstructed. Bleacher seating with shade structures were added. An existing baseball practice field was also reconstructed by regrading it and adding new fencing, backstop, and dugouts. All existing playground equipment was replaced and covered with a shade structure. A walking trail and second pavilion were also added to the amenities at the park.

Some of the matching funds provided by Hamburg on this project were in the form of in-kind labor and materials. GNE worked closely with Hamburg and ASP Staff to ensure that funds were accounted for properly.

Client Contact

Jimmy Hargis Director of Public Works City of Hamburg 305 E. Adams St. Hamburg, AR 71646 (870) 853-5279 jimhargis@cityofhamburg.com

Completion Date

Fall 2016

Project Cost

\$450,000

Services Provided

Park Master Planning Civil Site Design Bid Phase Services Construction Phase Services Coordination with ASP





Parking Lot Bishop Park Bryant, Arkansas

GNE teamed with Black, Corley, Owens and Hughes and they were selected by the City of Bryant to design improvements at Bishop Park. Bishop Park is an existing sports complex that includes baseball, softball and a community center/fitness facility, which houses the Bryant Boys and Girls Club.

GNE led the team's efforts on a new 264 spot parking lot constructed at the complex. Since most of the complex and all of the parking lot are located within the 100-year floodplain or floodway, GNE paid close attention to the special requirements for developing in these areas.

The City of Bryant also wants to ensure that their project meets all the requirements that any other developer would need to meet if they were building a project. To that end, GNE submitted the plans to the City for review and approval by their Planning Department and Development Review Committee.

Client Contact

Mr. Chris Treat Parks Director City of Bryant 6401 Boone Road Bryant, Arkansas 72022 (501) 943-0444 ctreat@cityofbryant.com

Completion Date

Project Cost \$450,000

Services Provided

Surveying Drainage Design Floodplain Management Landscape Architecture Civil Site Design





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Arkansas Game & Fish Wildlife Recreation Facilities Grant Fishing Piers Redfield, Arkansas

The City of Redfield received a Wildlife Recreation Facilities Grant from the Arkansas Game and Fish Commission to construct two fishing piers and hired GNE to design and manage the project.

Each of the identical, T-shaped fishing piers was constructed of treated wood and complied with all Americans with Disabilities Act (ADA) requirements. The design included three wheel chair accessible fishing spots on each pier.

To reduce the construction cost by allowing the use of cast in place footings in lieu of barge driven piles, GNE coordinated with Redfield to devise a plan for draining the lakes. This approach called for the lower lake to be drained first, which allowed the lower lake to be filled with water from the upper lake when it was drained.

All plans for this project were reviewed and approved by the Arkansas Game & Fish Commission prior to bidding.

Client Contact

James Smith Street Superintendent City of Redfield, Arkansas P.O. Box 81 Redfield, AR 72132 (870) 692-4010 <u>smittyretired@hotmail.com</u>

Completion Date

December 2011

Construction Cost

\$66,000

Services Provided

Structural Design Funding Agency Coordination Bid Phase Services Construction Phase Services





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Arkansas State Parks Connecting Trail & Bridge Parkin Archeological State Park



While with another firm, Vernon Williams, P.E. was selected to design a trail connecting the Parkin Archeological State Park and the historic Northern Ohio African American School.

The trail spans a moat that surrounds the Parkin Archeological State Park. For the final design, Arkansas State Parks selected a 160-foot timber bridge for this crossing. During the design development stage, a preengineered steel truss bridge was also evaluated. The timber bridge was selected due to its lower construction cost and because it matched the style of other bridges at the site.

Since the Parkin Archeological State Park is an active archeological site, all excavation was monitored by an ASP archeologist. To prevent damage to artifacts, excavation was avoided whenever possible.

All project documents were reviewed and approved by the Arkansas Building Authority.

Client Contact

Mr. Stan Graves Planning & Development Manager Arkansas State Parks One Capitol Mall, Suite 4B.215 Little Rock, AR 72201 (501) 682-1633 stan.graves@arkansas.gov

Completion Date

April 2009

Construction Cost

\$88,674

Services Provided

Civil Site Design Timber Bridge Design **Bid Phase Services Construction Phase Services**







Bryant Parkway Trail City of Bryant ARDOT Arkansas Recreational Trails Program

GNE was selected by the City of Bryant to design a trail project funded by an Arkansas Recreational Trails Program Grant from the Arkansas Department of Transportation (ARDOT).

The project provided for a 1644 linear feet asphalt trail around the Alcoa 40 Park.

Contract documents were reviewed and approved by the ARDOT. The contract documents were prepared in strict accordance with the ARDOT Program Management Division's requirements for this grant program.

Bids for the project that fell within the budget established for the project by GNE were received in May of 2021. The project was constructed in the Summer and Fall of 2021. GNE provided all survey, design, bid, and construction phase services on this project.

Client Contact

Mr. Chris Treat Parks Director City of Bryant 6401 Boone Road Bryant, Arkansas 72022 (501) 943-0444 ctreat@cityofbryant.com

Completion Date

Fall 2021

Project Cost

\$290,000

Services Provided

Surveying Civil Site Design Bid Phase Services Construction Phase Services Coordination with ARDOT



<u>GNE</u>

GarNat Engineering, LLC

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Master Meter - Guy Water Works Guy, Arkansas

In 2022, GNE prepared an American Rescue Plan Act (ARPA) grant application for this project, which the Arkansas Natural Resources Commission (ANRC) selected for funding.

The bulk of Guy's water distribution system capacity is located near its city center in the north part of its service area, while the bulk of its potential growth is located at its extreme southern border closer to the City of Greenbrier. To that end, it does not have the required infrastructure in place to respond to this growth. Community Water System's (CWS) water transmission line that supplies the City of Guy with wholesale water from Greers Ferry Lake runs in close proximity to this area of potential growth. The addition of the second master meter will allow Guy to supply water from the north and the south and centralize the bulk of Guy's water demand between its two water supply sources. This enables Guy to serve all its existing and proposed customers without making expensive water distribution improvements required to supply its southern customers from the existing infrastructure in the northern part of its system.

The project includes the design of a new CWS master meter, 2,860 linear feet of 8-inch PVC water main, and 3,600 linear feet of 6-inch PVC water main. GNE also closely coordinated with Guy's staff to prepare and acquire land and easements for this project.

Client Contact

Greg Hooten, Manager Guy Water Department P.O. Box 12 Guy, AR 72061 (501) 454-9195 gbhooten@yahoo.com

Completion Date

Design 2023

Project Cost

\$802,000

Services Provided

Master Meter Design Water Distribution Design Bid Phase Services Coordination with ANRC Easement Preparation



GNE

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Breaux Lane Water Line Guy Water Works Guy, Arkansas

In 2023, the City of Guy obtained an American Rescue Plan Act (ARPA) grant from Faulkner County to serve existing homes along Breaux Lane from its water distribution system. These homes had previously relied on wells, which had developed problems over time.

That project included the design of 4,100 linear feet of 6inch and 4,000 linear feet of 4-inch PVC water main. GNE closely coordinated with Guy's staff to prepare and acquire land and easements for this project.

GNE coordinately closely with Faulkner County staff to ensure that the construction contract complied with all grant requirements, which enabled the City of Guy to be reimbursed for the project.

Client Contact

Greg Hooten, Manager Guy Water Department P.O. Box 12 Guy, AR 72061 (501) 454-9195 gbhooten@yahoo.com

Completion Date

October 2023

Project Cost

\$200,350

Services Provided

Water Distribution Design Bid Phase Services Construction Phase Services Coordination with Faulkner County Easement Preparation





Designing our client's success

Hwy 82 Water and Sewer Relocation ARDOT Job 020770 Hamburg, Arkansas

In 2023, GNE was asked to design water and sewer line relocations for the widening of Hwy 82 from Hwy 425 to the east of the intersection of Ashley County Roads 70 and 948. The project included the design of installation of approximately 550 linear feet of 2" SDR-21 PVC water line, 950 linear feet of 6" SDR-21 PVC water line, 4,700 linear feet of 8" SDR-21 PVC water line, 1,570 linear feet of directionally bored 8" DR-11 DIPS HDPE water line, 130 linear feet of 6" SDR-26 sanitary sewer, 1,430 linear feet of 8" SDR-26 PVC sanitary sewer, 580 linear feet of 10" SDR-26 sanitary sewer, 70 linear feet of 10" D.I. sanitary sewer, lift station, and other appurtenances.

GNE coordinated its work with the Arkansas Department of Transportation (ARDOT). GNE assisted the City of Hamburg in negotiations for its Utility Relocation Agreement with the ARDOT.

Services provided by GNE on this project included water and sewer line relocation design, easement preparation, and bid phase services. GNE will provide construction phase services, construction observation, and construction staking upon contract award. GNE also worked closely with the City of Hamburg's easement acquisition agent and property owners during the easement acquisition phase.

Client Contact

Jimmy Hargis Director of Public Works City of Hamburg 305 E. Adams St. Hamburg, AR 71646 (870) 853-5279 jimhargis@cityofhamburg.com

Completion Date

2024

Project Cost

\$863,600

Services Provided

Water Distribution Design **Construction Phase Services Construction Layout Construction Observation** Coordination with AHTD **Easement Preparation**



GarNat Engineering, LLC

2019 Water Systems Improvement and Extension ARPA Grant Application and Award Hamburg, Arkansas

The City of Hamburg engaged another engineering firm for the design of a \$1,831,000 project which included:

- Repainting 3 of Hamburg's 4 tanks #1, #3 and #4.
- Installation of a mixing system at Tanks #1, #2, and #3.
- Miscellaneous piping, safety and appurtenance repairs to at all 4 tanks.
- Construction of chlorination and other chemical feed improvements at Wells #2, #3, and #4.
- Various rural water line extensions to provide service to 49 new customers.

When Hamburg approached the that firm about submitting this project to Arkansas Natural Resources Commission (ANRC) for an an American Rescue Plan Act (ARPA) grant, the firm was unable to help them.

GNE prepared an ARPA grant application, which resulted in the City of Hamburg receiving \$630,000 in grant funding for the project.



Client Contact

Jimmy Hargis Director of Public Works City of Hamburg 305 E. Adams St. Hamburg, AR 71646 (870) 853-5279 jimhargis@cityofhamburg.com

Completion Date

2022

Award Amount

\$630,000

Services Provided

Coordination with ANRC





GarNat Engineering, LLC

2021 Water Systems Improv

2021 Water Systems Improvements – Contract 1 & 2 ARPA Grant Application and Award East End, Arkansas

In 2012, GNE completed a 20-year master plan for East End's system. GNE later updated the master plan in 2017. In 2020, GNE was asked to design the immediate improvements outlined in the updated master plan which included a 750,000 gallon elevated storage tank, construction of altitude valves at East End's other two elevated storage tanks and 10,000 LF of 12-inch water line.

The completion of these improvements ensured that 1100 new customers and a mega-site are located directly between East End's two water treatment plants provide good pressure and adequate water supply for the perceived future.

The budget for this project was developed in 2019, prior to COVID related construction inflation. In order to compensate for rising construction costs related to COVID, East End was forced to obtain an additional loan of \$500,000 from Arkansas Natural Resources Commission (ANRC).

In 2022, GNE prepared an American Rescue Plan Act (ARPA) grant application which proposed providing \$500,000 to retire the 2nd, unplanned loan. ANRC awarded the grant and East End received the funds in 2023.



Client Contact

Kim Cupples East End Improvement Dist. #1 20621 Arch Street Little Rock, AR 72206 (501) 442-6844 <u>eastendwater@att.net</u>

Completion Date

2022

Award Amount

\$500,000

Services Provided

Coordination with ANRC





2023 Hot Springs Village Water Line Improvements Hot Springs Village POA Hot Springs Village, Arkansas

GNE was selected by the Hot Springs Village Property Owners Association to design six of water line projects in 2023. The scope of each project follows:

- Barcelona Road installation of approximately 1,000 linear feet of 6-inch PVC water line.
- Entrada Way installation of approximately 3,000 linear feet of 6-inch HDPE water line.
- Fonsagrada Circle installation of approximately 1,015 linear feet of 6-inch PVC water line.
- Galeon Way installation of approximately 1,400 linear feet of 6-inch PVC water line.
- Gancho Way installation of approximately 1,200 linear feet of 8-inch HDPE water line.
- Pontevedra Drive installation of approximately 2,600 linear feet of 8-inch PVC water line.

All improvements were designed accordance with applicable Ten State Standards and were approved by the Arkansas Department of Health.

Client Contact

Christopher Boutzale Water & Wastewater Superintendent Hot Springs Village POA 895 DeSoto Blvd Hot Springs Village, AR 71909 (501) 922-5522 CBoutzale@hsvpoa.org

Completion Date

Design 2023

Construction Cost

Barcelona Road - \$60,000 Entrada Way - \$299,550 Fonsagrada Circle - \$115,200 Galeon Way - \$170,350 Gancho Way - \$198,475 Pontevedra Drive - \$237,000

Services Provided

Water Distribution Design Bid Phase Services Construction Phase Services



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2022 Hot Springs Village Water Treatment Plant – Sodium Hypochlorite Improvements Hot Springs Village POA Hot Springs Village, Arkansas

GNE was selected by the Hot Springs Village Property Owners Association to design a conversion of the chlorine feed system at its water treatment plant from chlorine gas to liquid sodium hypochlorite.

The sodium hypochlorite feed system included phased demolition plans for the chlorine gas system, site improvements to facilitate delivery of the sodium hypochlorite, two bulk storage tanks, a day tank, four sodium hypochlorite feed pump skids, and modifications to the water treatment plant SCADA system.

Since the project was a retrofit of an existing chlorine gas feed system, GNE took particular care to ensure components would fit the existing space and that the components could be installed without partial demolition of the existing building.

All improvements were designed accordance with applicable Ten State Standards and were approved by the Arkansas Department of Health.

Client Contact

Christopher Boutzale Water & Wastewater Superintendent Hot Springs Village POA 895 DeSoto Blvd Hot Springs Village, AR 71909 (501) 922-5522 CBoutzale@hsvpoa.org

Completion Date

Design 2023 Construction 2024

Construction Cost

\$295,292.00

Services Provided

Sodium Hypochlorite Distribution System Design SCADA Design Bid Phase Services Construction Phase Services







Congo Road Water Storage Tank Maintenance Salem Water Users Association

GNE serves as the engineer of record for Salem Water Users Association Public Water Authority - a rural water provider with approximately 8,000 customers that is located in Saline County.

GNE designed a maintenance project for Salem's 300,000 gallon welded steel ground storage tank located on Congo Road near Benton, Arkansas.

Maintenance items include:

- Drain, clean, repaint, and disinfect the interior and exterior of the tank.
- Repair leaks.
- Replace/repair tank roof hatch and Saf-T Climb on exterior ladder.
- Install a tank mixing system.

All improvements were designed accordance with applicable Ten State Standards and were approved by the Arkansas Department of Health.



Client Contact

Dickie Kentner Board President Salem Water Users Association 620 Airlane Drive Benton, AR 72015 (501) 315-2212 waterusers@sbcglobal.net

Completion Date

Design 2023

Construction Cost \$175,000

Services Provided

Coating System Design Tank Mixing System Design Bid Phase Services





Designing our client's success

2019 Water Improvements – Contract 3 Water Line Improvements Salem Water Users Association

GNE serves as the engineer of record for Salem Water Users Association Public Water Authority - a rural water provider with approximately 8,000 customers that is located in Saline County.

In 2018, GNE designed the 2019 Water Improvements project utilizing funds from an Arkansas Natural Resources Commission (ANRC) Ioan. Salem Water had an excess of funds upon completion of that project. GNE worked with Salem Water and ANRC to develop an additional project. The resulting project included the design of 5,700 linear feet of 8-inch PVC and 17,700 linear feet of 6-inch PVC water main. GNE's design services also included obtaining all environmental permits required for the project.

GNE coordinated it work with the ANRC, who required preparation of a preliminary engineering report, facility plan, environmental information document, certification of compliance with Davis Bacon Wage Rates, and certification of compliance with the American Iron and Steel requirements.

<u>Client Contact</u>

Dickie Kentner Board President Salem Water Users Association 620 Airlane Drive Benton, AR 72015 (501) 315-2212 waterusers@sbcglobal.net

Completion Date

Design 2023 Construction 2024

Project Cost

\$1,208,550

Services Provided

Water Distribution Design Bid Phase Services Construction Phase Services Coordination with ANRC Easement Preparation



<u>GNE</u>

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2019 Water Improvements Salem Water Users Association

GNE serves as the engineer of record for Salem Water Users Association Public Water Authority - a rural water provider with approximately 8,000 customers that is located in Saline County.

In 2018, GNE was asked to design a project that would utilize funds from an Arkansas Natural Resources Commission (ANRC) loan. The resulting project included the design of a 2,000,000 gallon elevated storage tank, 25,000 linear feet of 18-inch ductile iron water main, 16,000 linear feet of 12-inch PVC water main, an altitude valve at an existing water storage tank, and upgrades to their existing SCADA system. GNE's design services also included obtaining all environmental permits required for the project.

GNE coordinated it work with the ANRC, who required preparation of a preliminary engineering report, facility plan, environmental information document, certification of compliance with Davis Bacon Wage Rates, and certification of compliance with the American Iron and Steel requirements.

Client Contact

Dickie Kentner Board President Salem Water Users Association 620 Airlane Drive Benton, AR 72015 (501) 315-2212 waterusers@sbcglobal.net

Completion Date

Design 2020 Construction 2022

Project Cost

\$9,000,000

Services Provided

Water Distribution Design Storage Tank Design Water Storage Tank Design SCADA Design Bid Phase Services Construction Phase Services Coordination with ANRC Easement Preparation





Water Line Relocation Hwy 5 Alcoa to I–30 AHTD Job Salem Water Users Association

GNE serves as the engineer of record for Salem Water Users Association Public Water Authority - a rural water provider with approximately 8,000 customers that is located in Saline County.

In 2019, GNE was asked to design a water line relocation in Benton for the widening of Hwy 5 from Alcoa Road to Interstate 30. The resulting project included the design of 7,000 linear feet of 6-inch water, 200 linear feet of 3-inch water main, and appurtenances.

GNE coordinated its work with the Arkansas State Highway and Transportation's Utility Section and assisted Salem in negotiations for its Utility Relocation Agreement with the AHTD. This highway corridor is in the midst of a lot of commercial development. GNE also coordinated closely with many property owners, developers, engineers and other utility companies when designing the project.

Client Contact

Dickie Kentner Board President Salem Water Users Association 620 Airlane Drive Benton, AR 72015 (501) 315-2212 waterusers@sbcglobal.net

Completion Date

Design 2019 Construction 2020

Project Cost

\$300,000

Services Provided

Water Distribution Design Construction Phase Services Construction Layout Coordination with AHTD Easement Preparation





Water Line Harrison Road Salem Water Users Association

GNE serves as the engineer of record for Salem Water Users Association Public Water Authority - a rural water provider with approximately 8,000 customers that is located in Saline County, Arkansas.

In 2016, GNE was asked to design a water line extension to reinforce the western part of Salem's system along Highway 5. The resulting project included the design of 30,000 linear feet of 12-inch, 5,000 linear feet of 8-inch, and 800 linear feet of 2-inch water mains.

Since most of this project was through undeveloped parts of Salem's service area and over rugged terrain, GNE worked closely with Salem's Staff and property owners to establish a route that was economical, buildable, and suitable for all parties. At this time, the project is planned to be constructed with Salem's in-house construction crew. GNE will assist with construction layout, permitting, and other construction phase services.

Client Contact

Dickie Kentner Board President Salem Water Users Association 620 Airlane Drive Benton, AR 72015 (501) 315-2212 waterusers@sbcglobal.net

Completion Date

2018

Project Cost

\$1,700,000

Services Provided

Water Distribution Design Construction Phase Services Construction Layout Coordination with AHTD Easement Preparation Easement Acquisition



GarNat Engineering, LLC

Water Line Relocation AHTD Job 061335 Salem Water Users Association

GNE serves as the engineer of record for Salem Water Users Association Public Water Authority - a rural water provider with approximately 8,000 customers that is located in Saline County.

In 2015, GNE was asked to design a water line relocation for the widening of Hwy 5 from Reynolds Road in Bryant to Alcoa Road in Benton. The resulting project included the design of 3,500 linear feet of 8-inch, 3,200 linear feet of 6inch, and 200 linear feet of 4-inch PVC water mains.

GNE coordinated its work with the Arkansas State Highway and Transportation's Utility Section and assisted Salem in negotiations for its Utility Relocation Agreement with the AHTD. This highway corridor is in the midst of a lot of commercial development. GNE also coordinated closely with many property owners, developers, engineers and other utility companies when designing the project.

Client Contact

Dickie Kentner Board President Salem Water Users Association 620 Airlane Drive Benton, AR 72015 (501) 315-2212 waterusers@sbcglobal.net

Completion Date

Spring 2017

Project Cost

\$300,000

Services Provided

Water Distribution Design Construction Phase Services Construction Layout Coordination with AHTD Easement Preparation Easement Acquisition




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2013 Water Improvements Salem Water Users Association

GNE serves as the engineer of record for Salem Water Users Association Public Water Authority - a rural water provider with approximately 8,000 customers that is located in Saline County.

In 2013, GNE was asked to design a project that would utilize funds left over from an open Arkansas Natural Resources Commission (ANRC) loan obtained for other improvements. The resulting project included the design of 14,000 linear feet of 6-inch, 3,000 linear feet of 3-inch, and 1,000 linear feet of 2-inch PVC water mains. The goal of the project was to add additional customers and to replace existing mains that required excessive maintenance due to their age and problems with their installation.

GNE coordinated it work with the ANRC, who required that a preliminary engineering report be prepared for the proposed project. To ensure all available funds were spent and that state bidding requirements were followed, GNE incorporated a series of deductive alternates in the bid documents.

Client Contact

Dickie Kentner Board President Salem Water Users Association 620 Airlane Drive Benton, AR 72015 (501) 315-2212 waterusers@sbcglobal.net

Completion Date

Summer 2014

Project Cost

\$400,000

Services Provided

Water Distribution Design Bid Phase Services Construction Phase Services Coordination with ANRC Easement Preparation



<u>GNE</u>

GarNat Engineering, LLC

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East End 2021 Water Improvements East End Improvement District #1

From 2012 to 2023 GNE served as the engineer of record for East End Improvement District #1 - a rural water provider with approximately 2,400 customers that is located in Saline County.

In 2012, GNE completed a 20-year master plan for East End's system. GNE later updated the master plan in 2017. In 2020, GNE was asked to design the immediate improvements outlined in the updated master plan which included a 750,000 gallon elevated storage tank, 9,700 LF of 12-inch water line and appurtences.

The project was funded through the Arkansas Natural Resoures Commission's (ANRC) DWSRF Loan Program. GNE handled all aspects of acquiring the ANRC loan, including preparation of the preliminary engineering report, WWAC application, loan application, facility plan, EID, verifying Davis Bacon rates, and verifying compliance with the American Iron Steel requirements.

GNE also closely coordinated with East End's staff to prepare and acquire land and easements for this project.

Client Contact

Kim Cupples, Manager East End Improvement Dist. #1 20621 Arch Street Little Rock, AR 72206 (501) 442-6844 <u>eastendwater@att.net</u>

Completion Date

Design 2021 Construction 2022

Project Cost

\$2,650,000

Services Provided

Water Distribution Design Storage Tank Design Water Storage Tank Design SCADA Design Bid Phase Services Construction Phase Services Coordination with ANRC Easement Preparation





Off-site Water Improvements East End Middle School Saline County, Arkansas

GNE was selected by Lewis Architects to provide design services for the off-site water improvements for the Sheridan School District's new green field middle school serving the East End Community in Saline County, Arkansas.

The purpose of the project was to provide necessary fire flows at the site as required by the local fire marshal. GNE developed a scope for the project by computer modeling East End's existing water distribution system to determine what improvements were necessary to enable East End to provide the fire flow.

The project scope included approximately 8,000 linear feet of 12-inch water line and appurtenances. The new water line was routed from East End's existing water treatment plant on Arch Street to an existing 6-inch water line on the Grace Church property east of the school.

Several off-site water line easements were required to construct the project. GNE prepared and acquired these easements for the school district.

Client Contact

Clayton Vaden Lewis Architects 11225 Huron Lane Little Rock, AR 72211 (501) 223-9302 <u>cvaden@lemvrw.com</u>

Completion Date

Spring 2018

Construction Cost

\$350,000

Services Provided

Feasibility Study Hydraulic Modeling Easement Preparation Easement Acquisition Water Line Design Utility Permitting







Water System Master Plan East End Improvement District #1

From 2012 to 2023 GNE served as the engineer of record for East End Improvement District #1 (East End) - a rural water provider with approximately 2,400 customers that is located south of Little Rock in Saline County.

In 2013, GNE prepared a 20-year master plan of East End's Water System. The Arkansas Department of Health recommends updates to such plans every 5 years, so GNE updated it in 2018. GNE's work included delineation of East End's service area, mapping of existing infrastructure, future customer base projections, and future water usage projections. This data was utilized to create a hydraulic model of East End's current and future water distribution systems, recommend immediate and future infrastructure projects, and estimate the cost of those infrastructure projects. Infrastructure evaluated as part of the master plan included all of East Ends water distribution piping, water storage tanks, pump stations, water treatment plants, raw water piping, and water supply wells.

Client Contact

Kim Cupples, Manager East End Improvement Dist. #1 20621 Arch Street Little Rock, AR 72206 (501) 442-6844 <u>eastendwater@att.net</u>

Completion Date

October 2013

Project Cost

2013 - \$12,500 2018 - \$7,500

Services Provided

Master Planning Cost Estimation Hydraulic Modeling





Water Treatment Plant #2 Clearwell Repaint East End Improvement District #1

From 2012 to 2023 GNE served as the engineer of record for East End Improvement District #1 (East End) - a rural water provider with approximately 2,400 customers that is located south of Little Rock in Saline County.

In 2016, GNE took bids to have East End's clearwell at WTP #2 taken out of service and repainted. GNE coordinated the process of prequalifying and inviting bids from three coating contractors. Construction observation was provided by East End's Staff. GNE managed the construction phase and provided technical support throughout the project.

The clearwell was a bolted steel tank. To ensure that the tank could be put back in service without leaking, the floor of the tank was coated with a trowel grade commercial industrial membrane.

Client Contact

Kim Cupples, Manager East End Improvement Dist. #1 20621 Arch Street Little Rock, AR 72206 (501) 442-6844 <u>eastendwater@att.net</u>

Completion Date

2016

Project Cost

\$130,000

Services Provided

Coating Design Bid Phase Services Construction Phase Services





Water Improvements Nature Land Subdivision East End Improvement District #1

From 2012 to 2023 GNE served as the engineer of record for East End Improvement District #1 (East End) - a rural water provider with approximately 2,400 customers that is located south of Little Rock in Saline County.

In the fall of 2013, East End was approached about water service by 5 customers on Nancy Lane in the Nature Land Subdivision. Shortly after meeting with the residents on Nancy Lane, other property owners in the subdivision also approached East End about water service and it was decided that it would be better to construct one project to serve the entire subdivision than it would be to piece meal the project with several small projects. GNE planned and coordinated a series of public meetings with property owners to gain project signups. The project was funded through a loan from the Arkansas Natural Resources Commission (ANRC). The project included the design of 24,000 linear feet of 6inch and 4,000 linear feet of 3-inch water mains. East End gained around 50 new customers.

Client Contact

Kim Cupples, Manager East End Improvement Dist. #1 20621 Arch Street Little Rock, AR 72206 (501) 442-6844 <u>eastendwater@att.net</u>

Completion Date

May 2016

Project Cost

\$410,000

Services Provided

Water Distribution Design Construction Phase Services Construction Layout Construction Observation Coordination with ANRC





Water Treatment Plant #2 Filter Repaint East End Improvement District #1

From 2012 to 2023 GNE served as the engineer of record for East End Improvement District #1 (East End) - a rural water provider with approximately 2,400 customers that is located south of Little Rock in Saline County.

In 2015, GNE took bids to have one of East End's two pressure filters at WTP #2 taken out of service and repainted. GNE coordinated the process of prequalifying and inviting bids from three coating contractors. Construction observation was provided by East End's Staff. GNE managed the construction phase and provided technical support throughout the project.

In addition to being repainted, all filter valves were replaced, new media was installed in the pressure filters, and all filter piping insulation was replaced.



Client Contact

Kim Cupples East End Improvement Dist. #1 20621 Arch Street Little Rock, AR 72206 (501) 442-6844 <u>eastendwater@att.net</u>

Completion Date

April 2015

Project Cost

\$80,000

Services Provided

Coating Design Bid Phase Services Construction Phase Services







2017 Storage Tank Maintenance Hot Springs Village POA Hot Springs Village, Arkansas

GNE was selected by the Hot Springs Village Property Owners Association's Public Works Department to design a maintenance project for Ground Storage Tank C1 and Elevated Storage Tank D1.

Ground Storage Tank C1 is a 500,000 gallon welded steel tank. Tank C1 was drained, cleaned, repainted, and disinfected. It also had a mixing system, sample port and freeze proof drain line installed on it.

Elevated Storage Tank D1 is a 50,000 gallon welded steel pedisphere. Tank D1 was drained, cleaned, and disinfected.

GNE also re-bid previously designed mixing systems for Tanks A2 and A3. However, funds were not available this year for those mixing systems to be installed. These two mixing system designs will be utilized in the future, when funds to install them are available.



Client Contact

Christopher Boutzale Hot Springs Village POA 895 DeSoto Blvd Hot Springs Village, AR 71909 (501) 922-5522 <u>CBoutzale@hsvpoa.org</u>

Completion Date

2017

Construction Cost

\$150,000

Services Provided

Coating System Design Tank Mixing System Design Bid Phase Services Construction Phase Services







2016 Ground Storage Tank Maintenance Hot Springs Village POA Hot Springs Village, Arkansas

GNE was selected by the Hot Springs Village Property Owners Association's Public Works Department to design a maintenance project for Ground Storage Tanks A1, A2, and A3.

Ground Storage Tank A1 is a 500,000 gallon welded steel tank. Tank A1 was drained, cleaned, repainted, and disinfected. It also had a mixing system, sample port and freeze proof drain line installed on it.

Ground Storage Tanks A2 and A3 were 500,000 gallon glassline tanks that were drained, cleaned, and disinfected. Both of these tanks also had a sample port installed on them. GNE designed mixing systems for Tanks A2 and A3, but funds were not available this year for those mixing systems to be installed. These two mixing systems designs will be utilized in the future, when funds to install them are available.

Client Contact

Christopher Boutzale Hot Springs Village POA 895 DeSoto Blvd Hot Springs Village, AR 71909 (501) 922-5522 <u>CBoutzale@hsvpoa.org</u>

Completion Date

2016

Construction Cost

\$150,000

Services Provided

Coating System Design Tank Mixing System Design Bid Phase Services Construction Phase Services







Water Line Relocation AHTD Job CA0202 Hamburg, Arkansas

In 2015, GNE was asked to design a water line relocation for the widening of Hwy 425 from the Hamburg High School south to the intersection of Hwy 82 West and Hwy 53 East. The project included the design of 8,700 linear feet of 8inch, 4,200 linear feet of 6-inch, and 9,500 linear feet of 4inch PVC water mains.

GNE coordinated its work with the Arkansas State Highway and Transportation's Program Manager – Garver, LLC. GNE assisted the City of Hamburg in negotiations for its Utility Relocation Agreement with the AHTD.

Services provided by GNE on this project included water line relocation design, easement preparation, bid phase services, construction phase services, construction observation, and construction staking. GNE also worked closely with the City of Hamburg's easement acquisition agent and property owners during the easement acquisition phase.

Client Contact

Jimmy Hargis Director of Public Works City of Hamburg 305 E. Adams St. Hamburg, AR 71646 (870) 853-5279 jimhargis@cityofhamburg.com

Completion Date

2017

Project Cost

\$340,000

Services Provided

Water Distribution Design Construction Phase Services Construction Layout Construction Observation Coordination with AHTD Easement Preparation





Water Line Relocation AHTD Job CA0201 Hamburg, Arkansas

In 2015, GNE was asked to design a water line relocation for the widening of Hwy 425 from the intersection of Hwy 82 West and Hwy 53 East south to the Louisiana state line. The project included the design of 6,800 linear feet of 4-inch PVC water main.

GNE coordinated its work with the Arkansas State Highway and Transportation's Program Manager – Garver, LLC. GNE assisted the City of Hamburg in negotiations for its Utility Relocation Agreement with the AHTD.

Services provided by GNE on this project included water line relocation design, easement preparation, bid phase services, construction phase services, construction observation, and construction staking. GNE also worked closely with the City of Hamburg's easement acquisition agent and property owners during the easement acquisition phase.

Client Contact

Jimmy Hargis Director of Public Works City of Hamburg 305 E. Adams St. Hamburg, AR 71646 (870) 853-5279 jimhargis@cityofhamburg.com

Completion Date

2017

Project Cost

\$100,000

Services Provided

Water Distribution Design Construction Phase Services Construction Layout Construction Observation Coordination with AHTD Easement Preparation





Jefferson Samples & Dexter Water Users Association 2019 Meter Replacement Program Jefferson, Arkansas

In 2019, GNE was asked to assist the Jefferson Samples Dexter Water Users Association (Jefferson) with obtaining a loan from the Arkansas Natural Resources Commission to replace all of their 1,100 water meters and take advantage of a special program which loaned money for meter replacements at 0.5% interest for 10-years.

GNE prepared a preliminary engineering report that recommended a radio read system manufactured by Mueller. The study also evaluated a do nothing alternative and a cellular based system manufactured by another company.

Jefferson was able to obtain the funding without raising water rates.

The project allowed Jefferson to cut their meter reading time from 18 man-days per month to 2 man-days per month.

The increased accuracy of the new meters also allowed Jefferson to greatly reduce their water loss.

Client Contact

JS & D Water Users Association Daniel Freeman Manager 111 Wishbone Farm Road Jefferson, AR 72079 (501) 397-2709

Completion Date

January 2020

Project Cost

\$340,000

Services Provided

Preliminary Engineering Report Water Distribution Design Bid Phase Services Construction Phase Services Coordination with ANRC Facility Plan







Jefferson Samples & Dexter Water Users Association Well Replacement Project Jefferson, Arkansas

In 2019, one of Jefferson Samples Dexter Water Users Association's (Jefferson) three water supply wells failed due to plugging of its screen. Jefferson selected GNE to design a replacement of that well.

The existing well was rated for 250 gpm. GNE recommended upgrading the well to 500 gpm to increase Jefferson's firm water supply capacity.

GNE assisted Jefferson in identifying a new well site adjacent to the existing one, obtained Health Department approval of the new well site, coordinated a land swap trading the old well site for the new well site, and assisted Jefferson in obtaining a loan to fund the project through the Arkansas Natural Resources Commission's General Obligation Bond Program.

Client Contact

JS & D Water Users Association Daniel Freeman Manager 111 Wishbone Farm Road Jefferson, AR 72079 (501) 397-2709

Completion Date

2020

Construction Cost

\$700,000

Services Provided

Hydraulic Modeling Well Design Bid Phase Services Construction Phase Services Land Surveying Land Acquisition Assistance







Meter Replacement Project Guy, Arkansas

In 2019, GNE was asked to assist the City of Guy's Water Department (Guy) with obtaining a loan from the Arkansas Natural Resources Commission (ANRC) to replace approximately 800 water meters and take advantage of a special program which loaned money for meter replacements at 0.5% interest for 10-years.

Guy had previously changed out approximately 70 meters with ultrasonic cellular read meters manufactured by Badger. GNE prepared a preliminary engineering report that recommended replacing Guy's remaining meters with the same equipment. The study also evaluated a do nothing alternative and a radio read system manufactured by another company.

Guy elected to install the new meters themselves. GNE coordinated closely with ANRC to get this approach approved.

Guy was able to fund this project without raising water rates.

Client Contact

Greg Hooten, Manager Guy Water Department P.O. Box 12 Guy, AR 72061 (501) 454-9195 gbhooten@yahoo.com

Completion Date

Fall 2019

Project Cost

\$250,000

Services Provided

Preliminary Engineering Report Water Distribution Design Bid Phase Services Coordination with ANRC



<u>GNE</u>

GarNat Engineering, LLC

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2016 Water Line Improvements Guy, Arkansas

In 2015, GNE was asked to assist the City of Guy's Water Department with developing a water line replacement program. The goals of the program were to relocate certain water lines constructed on AHTD right-of-way in anticipation of the widening of Hwy 25 through Guy, to replace smaller diameter water lines, and to provide some new water lines required to serve new customers. GNE began by consolidating existing water line maps into one overall map for the program area. GNE then produced a schematic design and estimated the cost of replacing all water lines, so the work could be prioritized.

After the initial master planning phase was completed, the Guy Water Department asked GNE to design the first stage of improvements to begin the program. That project included the design of 3,200 linear feet of 8-inch, 900 linear feet of 6-inch, and 1,400 linear feet of 4-inch PVC water main. The Guy Water Department plans to follow this successful project with other projects until the water line replacement program is completed.

Client Contact

Greg Hooten, Manager Guy Water Department P.O. Box 12 Guy, AR 72061 (501) 454-9195 gbhooten@yahoo.com

Completion Date

January 2017

Project Cost

\$150,000

Services Provided

Master Planning Water Distribution Design Bid Phase Services Construction Phase Services Coordination with AHTD Easement Preparation





WWTP – Phase 2 Improvements Harrison, Arkansas

In early 2012, GNE completed a preliminary engineering report (PER) that outlined a capital improvement plan (CIP) for the Harrison WWTP. Phase 1 of the CIP, which was completed in 2013, included the replacement of two existing coil filters with a belt filter press and the conversion of two unused clarifiers to aerobic digesters.

Phase 2 of the CIP, included the replacement of the WWTP's aeration basin equipment. GNE bid aeration basin equipment in June of 2013. GNE used a present worth analysis of each option to evaluate the proposals and Harrison selected equipment in July of 2013. GNE prepared contract documents utilizing the equipment selected by the Owner. The project was bid in January of 2014 and construction was completed later that year.

Client Contact

Mr. Wade Phillips, P.E. Public Works Director P.O. Box 1715 Harrison, Arkansas 72602 (870) 741-3434 publicworks@cityofharrison.com

Completion Date

2014

Construction Cost

\$400,000

Services Provided

Feasibility Study Environmental Permitting WWTP Design Bid Phase Services Construction Phase Services





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Primary Clarifier Repairs WWTP Harrison, Arkansas

The City of Harrison selected GNE to assist with repairs to the existing primary clarifier at its Wastewater Treatment Plant (WWTP). Repairs included replacing the clarifier access platform, re-constructing the splitter box upstream of the clarifier, and installing a coating system. The project was broken into two separate contracts. The first included the structural repairs – platform replacement and splitter box re-construction. The second included the coating system and installing water plug at the clarifier sump to correct a defect created during the original clarifier construction.

The work required the contractor performing the structural repairs to do some preliminary work and then demobilize from the site to allow the coating contractor to perform his work. GNE coordinated the two contracts to address this and facilitated meetings between the two contractors and Harrison's staff to ensure that everyone understood their roles and responsibilities.

GNE designed the new platform and reviewed the shop drawings produced by the structural contractor's fabricator.

To ensure that only quality coating systems and qualified installers where utilized on the project while maintaining a competitive bid environment, GNE prequalified several coating systems and installers. The successful bidder completed the project by installing a 1/8-inch resurfacer on the existing walls followed by 125 mils of 100 percent solids epoxy.

Client Contact

Mr. Wade Phillips, P.E. Public Works Director P.O. Box 1715 Harrison, Arkansas 72602 (870) 741-3434 publicworks@cityofharrison.com

Completion Date

2014

Construction Cost

Coating: \$60,000 Structural Repairs: \$40,000

Services Provided

WWTP Design Bid Phase Services Construction Phase Services



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Aerobic Digester Coating System WWTP Harrison, Arkansas



In the Spring of 2013, the City of Harrison was nearing completion of the Phase 1 WWTP Improvements, which included the conversion of two abandoned clarifiers to aerobic digesters. When the contractor began filling the aerobic digesters for testing, it was determined that the concrete tanks leaked.

GNE developed a plan to repair the tanks by repairing a construction defect at each clarifier sump with cementitious water plug. Leaks in the clarifier's walls were addressed by installing a 100% solids polyurethane coating system. GNE coordinated the bidding process for the coating system, which included prequalifying installers and coating systems.



Client Contact

Mr. Wade Phillips, P.E. Public Works Director P.O. Box 1715 Harrison, Arkansas 72602 (870) 741-3434 publicworks@cityofharrison.com

Completion Date

June 2013

Construction Cost

\$100,000

Services Provided

WWTP Design Bid Phase Services Construction Phase Services



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WWTP – Phase 1 Improvements Harrison, Arkansas



In early 2012, GNE completed a preliminary engineering report (PER) that outlined a capital improvement plan (CIP) for the Harrison WWTP. Phase 1 of the CIP included the replacement of two existing coil filters with a belt filter press and the conversion of two unused clarifiers to aerobic digesters.

GNE's first task was to bid the belt filter press and aerobic digestion equipment in two separate bid packages. After receiving equipment bids and providing a present worth analysis of each option, GNE prepared contract documents utilizing the equipment selected by the Owner. Due to concerns regarding the reliability of the existing coil filters, the Owner required GNE to have the project designed in six weeks.

Construction bids were received in September of 2012. The low bid of \$1,032,456 was within the budget of \$1.1 million established in the PER. Construction was completed in 2013.

Client Contact

Mr. Wade Phillips, P.E. Public Works Director P.O. Box 1715 Harrison, Arkansas 72602 (870) 741-3434 publicworks@cityofharrison.com

Completion Date

2013

Construction Cost

\$1.1 million

Services Provided

Feasibility Study Environmental Permitting WWTP Design Bid Phase Services Construction Phase Services



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On-Call Wastewater Engineering Harrison, Arkansas



GNE was selected by the City of Harrison for a two year on-call professional engineering services contract. Initial projects assigned to GNE include:

- WWTP NPDES permit renewal
- Preliminary engineering study to recommend WWTP improvements

Shortly after being selected, GNE's team testified in front of a joint hearing of the Arkansas House and Senate Committees on Agriculture, Forestry, and Economic Development. This testimony assisted the City of Harrison in convincing the Committees to instruct the Arkansas Department of Environmental Quality to delay the establishment of TMDLs for Crooked Creek – the Harrison WWTP's discharge stream. If the TMDLs had been established, nearly untreatable limits for total dissolved solids would have been imposed on Harrison and two other point dischargers along Crooked Creek.

GNE completed the study, which developed a capital improvement plan for the WWTP, in April of 2012. Projects recommended in the study included sludge handling modifications, the addition of sludge storage, addition of aerobic digestion, and aeration basin modifications to reduce energy consumption.

Client Contact

Mr. Wade Phillips, P.E. Public Works Director P.O. Box 1715 Harrison, Arkansas 72602 (870) 741-3434 publicworks@cityofharrison.com

Completion Date

On-going

Design Fee

\$20,000

Services Provided

Feasibility Study Environmental Permitting WWTP Design





West Side School District WWTP Greers Ferry, Arkansas

The West Side School District and their architect, Architecture Plus, Inc. of Fort Smith, hired GNE to design a replacement for their failed surface discharge wastewater treatment plant.

Since a large outparcel was available and the existing wastewater treatment plant discharged into a drinking water supply lake, GNE elected to utilize a below ground discharge – septic or drip. GNE partnered with Meinco Wastewater, a local DR, to conduct field testing of the outparcel's soils. Meinco's testing determined that absorption rates were not high enough to support a septic system, but drip was an option.

GNE designed an Orenco WWTP and drip field to treat and dispose of the wastewater from the school. The facility was sized for 500 students & faculty and can dispose of up to 10,000 gallons per day.

Client Contact

Mr. Craig Boone, AIA Architecture Plus, Inc. 907 South 21st Street Fort Smith, AR 72901

Completion Date

Prior to 2020-2021 School Year

Construction Cost

\$600,000

Services Provided

Feasibility Study Environmental Permitting WWTP Design Coordination with ADH Coordination with ADEQ Bid Phase Services Construction Phase Services



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Wastewater Improvements East End Middle School Saline County, Arkansas

GNE was selected by Lewis Architects to provide design services for the wastewater disposal system for the Sheridan School District's new green field middle school serving the East End Community in Saline County, Arkansas.

GNE reviewed multiple options for the wastewater disposal system including pumping the wastewater to an existing treatment facility at a nearby elementary school, constructing an on-site wastewater treatment facilitywith a surface discharge, and a septic system. However, since the school was directly upstream of a residential subdivision and the absorption rates of the soil were not high enough to support a septic system, it was determined that the best option would be to construct an Orenco wastewater treatment system with a drip field.

In order to protect their real estate investment and leave their most desirable land with highway frontage viable for future construction, GNE designed the septic field on a remote section of the 60 acres owned by the school district. GNE designed two primary tanks near the school which had a combined volume of 30,000 gallons. The effluent from the primary tanks is pumped to the remote treatment system

The facility was sized for 500 students & faculty and can dispose of up to 10,000 gallons per day.



Client Contact

Mr. Clayton Vaden Lewis Architects 11225 Huron Lane Little Rock, AR 72211 (501) 223-9302 cvaden@lemvrw.com

Completion Date

Spring 2018

Construction Cost

\$600,000

Services Provided

Feasibility Study Environmental Permitting WWTP Design Force Main Design Coordination with ADH Coordination with ADEQ Construction Phase Services





Asilo Waste Water Lift Station Hot Springs Village POA Hot Springs Village, Arkansas

GNE was selected by the Hot Springs Village Property Owners Association to design a new lift station at Mandera Way to replace an existing lift station.

The design includes the lift station, modification of force main piping, electrical design, site design, and demolition plans.

All improvements were designed accordance with applicable Ten State Standards and were approved by the Arkansas Department of Health.

Client Contact

Mr. Christopher Boutzale Water & Wastewater Superintendent Hot Springs Village POA 895 DeSoto Blvd Hot Springs Village, AR 71909 (501) 922-5522 CBoutzale@hsvpoa.org

Completion Date

Design 2023 Construction 2023

Construction Cost

\$159,539.00

Services Provided

Lift Station Design Bid Phase Services Construction Phase Services







La Coruna Lift Station Hot Springs Village POA Hot Springs Village, Arkansas

GNE was selected by the Hot Springs Village Property Owners Association to design a new lift station at La Coruna Way to replace an existing lift station.

The design includes the lift station, modification of force main piping, electrical design, site design, and demolition plans.

All improvements were designed accordance with applicable Ten State Standards and were approved by the Arkansas Department of Health.

Client Contact

Mr. Christopher Boutzale Water & Wastewater Superintendent Hot Springs Village POA 895 DeSoto Blvd Hot Springs Village, AR 71909 (501) 922-5522 CBoutzale@hsvpoa.org

Completion Date

Design 2023 Construction 2023

Construction Cost

\$154,632.00

Services Provided

Lift Station Design Bid Phase Services Construction Phase Services





Doscientos Way Lift Stations Hot Springs Village POA Hot Springs Village, Arkansas

GNE was selected by the Hot Springs Village Property Owners Association's Public Works Department to design the replacement of two existing lift stations that were at the end of their useful life. GNE designed the two new submersible lift stations and the associated piping modifications required for the project. GNE submitted the project to the Arkansas Department of Health and coordinated its approval.

Hot Springs Village POA self-performed some of the work required for the lift station replacements, including the electrical work. Some other aspects of the installation of the package lift stations were bid out by Hot Springs Village POA to local contractors.

Client Contact

Mr. Christopher Boutzale Chief Operating Officer Hot Springs Village POA 895 DeSoto Blvd Hot Springs Village, AR 71909 (501) 922-5522 CBoutzale@hsvpoa.org

Completion Date

2015

Construction Cost

\$150,000

Services Provided

Lift Station Design





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Wastewater Improvements Almatis, Inc. Benton, Arkansas

GNE was selected by Almatis, Inc. to design a new wastewater treatment facility with an estimated construction cost of \$500,000. After reviewing the project scope and budget, GNE recommended that Almatis abandon its existing wastewater treatment facility and pump their wastewater to the City of Benton. The scope revisions recommended by GNE reduced the project budget by over \$200,000.

The wastewater improvements for Almatis included one submersible lift station and 6,200 linear feet of force main.

GNE worked closely with the City of Benton's Wastewater Department to obtain permission for the Almatis to be a Benton sewer customer outside of its city limits. This involved the Benton City Council passing a special ordinance to specifically allow this project.

GNE assisted Almatis in receiving invited bids. The accepted bid was within GNE's construction estimate and the project will be completed in the Spring of 2017.

Client Contact

Mr. Travis Williams Almatis, Inc. 4701 Alcoa Road Bauxite, AR 72011 (501) 776-4598 travis.williams@almatis.com

Completion Date

Spring 2017

Construction Cost

\$250,000

Services Provided

Gravity Sewer Design Lift Station Design Force Main Design Hydraulic Modeling Easement Preparation Construction Layout Coordination with Benton







Wastewater Improvements Fiser Development Bryant, Arkansas

GNE was selected by Fiser Development to design the wastewater improvements associated with two Saline County subdivisions – Creekside Cottages and Olde Salem Township.

The wastewater improvements for Olde Salem Township, the larger of the two with 117 lots, included one submersible lift station, 14,000 linear feet of force main and 3600 linear feet of gravity sewer. The Olde Salem force main was routed through Creekside Cottages, which allowed that 10 lot subdivision to have a pressurized wastewater system with each home served by an individual E-one grinder lift station.

GNE worked closely with the City of Bryant's Wastewater Department to obtain permission for the Olde Salem Force Main to discharge at Bryant's existing Bethel Lift Station. As part of its scope, GNE provided hydraulic modeling of the Bethel Lift Station and two other lift stations that shared a common force main to ensure that the Bethel Lift Station had adequate capacity to receive flows from these subdivisions.

Client Contact

Mr. Dee Fiser Fiser Development, LLC P.O. Box 914 Bryant, AR 72089 (501) 454-4070 dee@fiser.com

Completion Date

Spring 2016

Construction Cost

\$500,000

Services Provided

Gravity Sewer Design Pressure Sewer Design Lift Station Design Force Main Design Hydraulic Modeling Easement Preparation Coordination with ADEQ Coordination with Bryant







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Water & Sewer Extensions LT Packer Subdivision

GNE was selected to design water and sewer extensions for the LT Packer Subdivision – an existing mixed use subdivision in Alexander, Arkansas that included two homes, a church, and three businesses.

GNE coordinated its work closely the City of Bryant, the City of Alexander, and the Arkansas State Highway Transportation Department (AHTD). First, GNE got approval from the City of Alexander to allow the subdivision in Alexander to be served by utilities from the City of Bryant.

Plans for the project were submitted for approval to the City of Bryant, the eventual owner of the utilities, and the AHTD to obtain a permit to install a water line within the right-ofway for I-30.

The project included a pressurized sewer collection system and a 6-inch water main extension that provided water service and fire protection. The pressurized sewer system was comprised of five simplex and one duplex grinder lift stations that were connected to the City of Bryant's collection system by a 2-inch PVC force main.

Client Contact

Mr. Duane Purtell Purtell Marketing (913) 488-8656 <u>duane.purtell@gmail.com</u>

Completion Date

May 2013

Construction Cost

\$100,000

Services Provided

Pressurized Sewer Design Force Main Design Water Main Design Bid Phase Services Coordination with AHTD Coordination with City of Bryant Coordination with City of Alexander







Owen Creek Lift Station Bryant, Arkansas

GNE was selected to design a sewage lift station that served an existing 72 lot mobile home park, which flowed to existing wastewater treatment plant (WWTP) that was unable to meet its NPDES discharge permit.

GNE coordinated its work closely the City of Bryant and the Arkansas Department of Environmental Quality (ADEQ). Plans for the project were submitted for approval to the City of Bryant, the eventual owner of the lift station.

The project included a short gravity sewer main designed to intercept the flow of wastewater to the abandoned WWTP, a duplex submersible lift station and 5,000 linear feet of PVC force main.

The force main was routed across an adjacent property. GNE assisted the owner by preparing the required offsite easements for the project. The route for the force main was coordinated with the adjacent property to ensure it didn't negatively impact his plans for future development of the property.

Client Contact

Mr. Lee Pengelly Thomas D. B. Collins 39 Walnut Valley Little Rock, AR 72211 (501) 680-0970 owencreek@comcast.net

Completion Date

December 2013

Construction Cost

\$115,000

Services Provided

Gravity Sewer Design Lift Station Design Force Main Design Easement Preparation Coordination with ADEQ









2017 Sewer Rehab Project Pine Bluff Wastewater Utility Pine Bluff, Arkansas

GNE was selected by the Pine Bluff Wastewater Utility (PBWU) to design its 2017 Cured-In-Place-Pipe (CIPP) and Manhole Rehab Projects.

The CIPP project included the rehabilitation of 284 linear feet of 15-inch, 362 linear feet of 12-inch, 356 linear feet of 10-inch, 6,336 linear feet of 8-inch, and 4,452 linear feet of 6-inch gravity sewer.

The Manhole Rehab project included the rehabilitation of 16 manholes with the SpectraShield liner system.

As with previous years, GNE coordinated the prequalification of prospective bidders to ensure that PBWU's projects were awarded to a contractor who demonstrated extensive experience in these specialized methods sewer rehabilitation. GNE also assisted PBWU in a review of past projects and coordinated required warranty work that was identified as part of that review.



Client Contact

Mr. Ken Johnson Manager Pine Bluff Wastewater Utility 1520 South Ohio Street Pine Bluff, Arkansas 71601 (870) 543-0851 <u>ken@pbwastewater.com</u>

Completion Date

September 2017

Project Cost

CIPP \$385,000 MH Rehab \$72,000

Services Provided







2016 Sewer Rehab Project Pine Bluff Wastewater Utility Pine Bluff, Arkansas

GNE was selected by the Pine Bluff Wastewater Utility (PBWU) to design its 2016 Cured-In-Place-Pipe (CIPP) and Manhole Rehab Projects.

The CIPP project included the rehabilitation of 1,650 linear feet of 24-inch, 3,250 linear feet of 10-inch, 5,190 linear feet of 8-inch, and 260 linear feet of 6-inch gravity sewer.

The Manhole Rehab project included the rehabilitation of 20 manholes with the Nukote liner system.

GNE coordinated the prequalification of prospective bidders to ensure that PBWU's projects were awarded to a contractor who demonstrated extensive experience in these specialized methods sewer rehabilitation. GNE also prequalified three separate manhole lining systems to ensure competitive pricing for the Manhole Rehab Project, while maintaining PBWU's desire to receive a quality manhole lining system with a 10-year warranty.



Client Contact

Mr. Ken Johnson Manager Pine Bluff Wastewater Utility 1520 South Ohio Street Pine Bluff, Arkansas 71601 (870) 543-0851 <u>ken@pbwastewater.com</u>

Completion Date

December 2016

Project Cost

CIPP \$428,000 MH Rehab \$69,000

Services Provided







2015 Sewer Rehab Project Pine Bluff Wastewater Utility Pine Bluff, Arkansas

GNE was selected by the Pine Bluff Wastewater Utility (PBWU) to design its 2015 Cured-In-Place-Pipe (CIPP) and Manhole Rehab Projects.

The CIPP project included the rehabilitation of 770 linear feet of 18-inch, 1,160 linear feet of 15-inch, 960 linear feet of 10-inch, 3,920 linear feet of 8-inch, and 1,300 linear feet of 6-inch gravity sewer.

The Manhole Rehab project included the rehabilitation of 16 manholes with the SpectraShield liner system.

GNE coordinated the prequalification of prospective bidders to ensure that PBWU's projects were awarded to a contractor who demonstrated extensive experience in these specialized methods sewer rehabilitation. GNE also prequalified three separate manhole lining systems to ensure competitive pricing for the Manhole Rehab Project, while maintaining PBWU's desire to receive a quality manhole lining system with a 10-year warranty.



Client Contact

Mr. Ken Johnson Manager Pine Bluff Wastewater Utility 1520 South Ohio Street Pine Bluff, Arkansas 71601 (870) 543-0851 <u>ken@pbwastewater.com</u>

Completion Date

December 2015

Project Cost

CIPP \$335,000 MH Rehab \$53,000

Services Provided





2014 Sewer Rehab Project Pine Bluff Wastewater Utility Pine Bluff, Arkansas

GNE was selected by the Pine Bluff Wastewater Utility (PBWU) to design its 2014 Cured-In-Place-Pipe (CIPP) and Pipe Bursting Projects.

The CIPP Project included the rehabilitation of 700 linear feet of 15-inch, 2,500 linear feet of 10-inch, 4,100 linear feet of 8-inch, and 2,500 linear feet of 6-inch gravity sewer. The Pipe Bursting Project included 1,200 linear feet of 6-inch gravity sewer burst to 8-inch gravity sewer.

GNE coordinated the prequalification of prospective bidders to ensure that PBWU's project was awarded to a contractor who demonstrated extensive experience in these specialized methods of sewer rehabilitation.



Pipe Bursting



Client Contact

Mr. Ken Johnson Manager Pine Bluff Wastewater Utility 1520 South Ohio Street Pine Bluff, Arkansas 71601 (870) 543-0851 <u>ken@pbwastewater.com</u>

Completion Date

December 2014

Project Cost

CIPP: \$310,000 Pipe Bursting: \$84,000

Services Provided







2013 CIPP Project Pine Bluff Wastewater Utility Pine Bluff, Arkansas

GNE was selected by the Pine Bluff Wastewater Utility (PBWU) to design its 2013 Cured-In-Place-Pipe (CIPP) Project.

The project included the rehabilitation of 1,100 linear feet of 15-inch, 2,300 linear feet of 10-inch, 2,800 linear feet of 8-inch, and 2,800 linear feet of 6-inch gravity sewer. The contract was structured to include an Owner option to renew the contract in 2014. GNE coordinated the prequalification of prospective bidders to ensure that PBWU's project was awarded to a contractor who demonstrated extensive experience in this specialized method sewer rehabilitation.

Prior to designing this project while working with other firms, Vernon Williams had previously designed 6 other annual sewer rehab projects for PBWU. Those projects included 50,000 linear feet of CIPP, 10,000 linear feet of pipe bursting, and the rehabilitation of a large lift station wetwell with a 100 percent solids polyurethane.



Client Contact

Mr. Ken Johnson Manager Pine Bluff Wastewater Utility 1520 South Ohio Street Pine Bluff, Arkansas 71601 (870) 543-0851 <u>ken@pbwastewater.com</u>

Completion Date

December 2013

Project Cost

\$275,000

Services Provided







Operations, Policies & Procedures Manual Pine Bluff Wastewater Utility Pine Bluff, Arkansas

GNE was selected by the Pine Bluff Wastewater Utility (PBWU) to help develop a Policy, Procedures, and Operations Manual.

The purpose of this document was to provide information concerning the acceptable practices and procedures of the PBWU as they relate to customers, developers, and contractors. The manual is comprised of the PBWU's Customer Service Policy, Developer Policy, Contractor Policy, forms, details, and specifications. Prior to the project, PBWU did not have such a document, so many of the manual's components were created from scratch by GNE.

It was very important to PBWU that the manual be developed as a document that was very specific to Pine Bluff. To achieve this result, GNE was required to review existing PBWU documents and coordinate closely with PBWU and City of Pine Bluff staff.

Client Contact

Mr. Ken Johnson Manager Pine Bluff Wastewater Utility 1520 South Ohio Street Pine Bluff, Arkansas 71601 (870) 543-0851 <u>ken@pbwastewater.com</u>

Completion Date

June 2012

Project Cost

\$8,000

Services Provided

Specification Writing Policy Review Design of Standard Details





CTE Center

Benton, Arkansas

GNE was included in Black, Corley, Owens and Hughes's team, which was selected by Saline County to design a 135,000 square foot educational facility in Benton.

GNE was responsible for all aspects of the site design including landscape architecture, surveying, and environmental permitting. GNE coordinated the submission of the project as a large scale development to the City of Benton for approval.

GNE completed required delineations, the mitigation plan, and coordinated with the U.S. Army Corps of Engineers to acquire a 404 Permit for the project for loss of function and values of wetlands and streams. Expediting this permit was critical to the project schedule. GNE was able to obtain the permit in less than 60 days.

This was a greenfield project with virtually no existing utilities on site. GNE coordinated closely with multiple utility companies, the engineer who worked for the developer that sold the land, and multiple authorities having jurisdiction over the project to ensure that project was completed in

Client Contact

Mr. Brian Black, AIA Black, Corley, Owens & Hughes 219 West South Street Benton, AR 72015 (501) 315-7686 <u>brian@bcoandh.com</u>

Completion Date

Design 2019 Construction 2021

<u>Construction Cost</u> \$4,000,000 (site work)

Services Provided

Civil Site Design Drainage Design Large Scale Development Landscape Architecture Surveying USACE 404 Permit Wetlands Delineation


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McLarty Nissan Benton, Arkansas

GNE was selected by Black, Corley, Owens, & Hughes for the design of a parking lot associated with a new car dealership in Benton, Arkansas.

GNE was responsible for all aspects of the site design including landscape architecture and surveying. Additionally, GNE coordinated the submission of the project as a large scale development to the City of Benton for approval. GNE met these extensive requirements in accordance with the Owner's strict project deadlines.

Project design aspects completed directly by GNE included surveying, drainage, hydrology, coordination with the Arkansas Highway and Transportation Department, stormwater pollution prevention best management practices, utilities, parking lot layout, pavement, and landscaping.

Client Contact

Brian Black, AIA Black, Corley, Owens & Hughes 219 West South Street Benton, AR 72015 (501) 315-7686 brian@bcoandh.com

Completion Date

2017

Construction Cost

\$2,000,000 (site work)

Services Provided



GNE

GarNat Engineering, LLC

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McLarty Daniel Ford Bentonville, Arkansas

GNE was selected by Black, Corley, Owens, & Hughes for the design of a parking lot associated with a new car dealership in Bentonville, Arkansas.

GNE was responsible for all aspects of the site design including landscape architecture and surveying. Additionally, GNE coordinated the submission of the project as a large scale development to the City of Bentonville for approval. GNE met these extensive requirements in accordance with the Owner's strict project deadlines.

Project design aspects completed directly by GNE included project phasing of site work, surveying, drainage, hydrology, stormwater pollution prevention best management practices, utilities, parking lot layout, pavement, and landscaping.

Client Contact

Brian Black, AIA Black, Corley, Owens & Hughes 219 West South Street Benton, AR 72015 (501) 315-7686 brian@bcoandh.com

Completion Date

2018

Construction Cost

\$2,500,000 (site work)

Services Provided





McLarty Daniel Chrysler – Dodge – Jeep - Ram Bentonville, Arkansas

GNE was selected by Black, Corley, Owens, & Hughes for the design of a parking lot associated with a new car dealership in Bentonville, Arkansas.

GNE was responsible for all aspects of the site design including landscape architecture and surveying. Additionally, GNE coordinated the submission of the project as a large scale development to the City of Bentonville for approval. GNE and its subconsultants met these extensive requirements in accordance with the Owner's strict project deadlines.

Project design aspects completed directly by GNE included drainage, hydrology, selection of stormwater pollution prevention best management practices, utility design, parking lot layout, and pavement design.

Client Contact

Brian Black, AIA Black, Corley, Owens & Hughes 219 West South Street Benton, AR 72015 (501) 315-7686 brian@bcoandh.com

Completion Date

Summer 2015

Construction Cost

\$2,000,000 (site work)

Services Provided



<u>GNE</u>

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Landers McLarty Preowned Bentonville, Arkansas

GNE was selected by Black, Corley, Owens, & Hughes for the design of a parking lot associated with a new car dealership in Bentonville, Arkansas.

GNE was responsible for all aspects of the site design including landscape architecture and surveying. Additionally, GNE coordinated the submission of the project as a large scale development to the City of Bentonville for approval. GNE and its subconsultants met these extensive requirements in accordance with the Owner's strict project deadlines.

Project design aspects completed directly by GNE included drainage, hydrology, selection of stormwater pollution prevention best management practices, utility design, parking lot layout, and pavement design. To overcome very challenging soils conditions at the site and their potential impact on the project, GNE worked closely with the Owner's geotechnical consultant, the contractor and the contractor's geotechnical consultant.

Client Contact

Brian Black, AIA Black, Corley, Owens & Hughes 219 West South Street Benton, AR 72015 (501) 315-7686 brian@bcoandh.com

Completion Date

Spring 2013

Construction Cost

\$600,000 (site work)

Services Provided





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Hill Farm Fire Station Bryant Fire Department Bryant, Arkansas

GNE teamed with Black, Corley, Owens and Hughes and they were selected by the City of Bryant to design the Hill Farm Fire Station. The Hill Farm Fire Station is a green field project located south of I-30 near Hill Farm Elementary in Bryant Fire District 2.

GNE's project role included surveying, civil site design, and landscape architecture. It was a priority to the City of Bryant that they met all of their own development requirements, so GNE submitted the project to the Bryant Planning Department and it was approved by the Bryant Development Review Committee. As part of the development requirements, GNE designed a 12-foot asphalt trail along Reynolds Road and a sidewalk along Hill Farm Road. GNE was also responsible for other site design including the parking lot, site ADA compliance, utilities, grading, drainage, and storm water detention.

During the design, GNE discovered wetlands on the site and delineated them. Since the wetlands were discovered early in the process, GNE was able to mitigate by avoiding the wetlands with the footprint of the fire station site.

Client Contact

Chief J. P. Jordan Bryant Fire Department City of Bryant 312 Roya Lane Bryant, Arkansas 72022 (501) 943-0943 jpjordan@cityofbryant.com

Completion Date 2018

Project Cost \$2,000,000

Services Provided

Surveying Drainage Design Utility Design Landscape Architecture Civil Site Design Wetlands Delineation







Springhill Fire Station Bryant Fire Department Bryant, Arkansas

GNE teamed with Black, Corley, Owens and Hughes and they were selected by the City of Bryant to design the Springhill Fire Station. The Springhill Fire Station is a green field project located north of I-30 near Springhill Elementary in Bryant Fire District 3.

GNE was responsible for surveying, civil site design, and landscape architecture on this project. It was a priority to the City of Bryant that they met all of their own development requirements, so GNE submitted the project to the Bryant Planning Department and it was approved by the Bryant Development Review Committee.

A large part of this project included bringing North Lake Road into compliance with the Bryant Master Street Plan. GNE designed half street improvements that included one lane of widening to North Lake Road and a 12-foot wide asphalt trail through the site. GNE was also responsible for all other aspects of the site design including the parking lot, site ADA compliance, utilities, grading, drainage, and storm water detention.

Client Contact

Chief J. P. Jordan Bryant Fire Department City of Bryant 312 Roya Lane Bryant, Arkansas 72022 (501) 943-0943 jpjordan@cityofbryant.com

Completion Date 2018

Project Cost \$2,000,000

Services Provided

Surveying Drainage Design Utility Design Landscape Architecture Civil Site Design Half Street Improvement Design







BJH – BMS Transfer Lot Benton School District Benton, Arkansas

GNE was selected by the Benton School District to design a bus transfer lot between its junior high and middle school. While being completely responsible for the design and approval of the project, GNE worked as a subconsultant to Lewis Architects, the school district's oncall architect.

The purpose of the project was to provide a staging area for junior high and middle school students riding the transfer buses (buses that transport students to other schools within the district). In addition to the design of this parking lot, GNE also designed a sidewalk system that allowed students a route to walk from their schools to the transfer lot and half street improvements to Cox Street. The geometry of the parking lot is sized for the staging of 15 buses and their turning movements in, out and within the parking lot.

The project was submitted to and approved by the City of Benton's Development Review Committee and the Arkansas Department of Education.

Client Contact

Mr. Clayton Vaden Lewis Architects 11225 Huron Lane Little Rock, AR 72211 (501) 223-9302 cvaden@lemvrw.com

Completion Date 2017

Project Cost \$210,000

<u>Services Provided</u> Surveying Drainage Design Utility Design Civil Site Design Half Street Improvement Design





Cantrell Road Parking Lot Studies AHTD Job 061194 Little Rock, Arkansas

GNE was selected by Reed and Associates (Reed) to assist them with the appraisal work for a highway widening project along Cantrell Road in Little Rock. Reed identified seven commercial properties whose parking lots would be significantly impacted by the AHTD's project. GNE was tasked with providing a schematic re-design of each parking lot. The focus of the design was to recommend modifications to the remaining parking lot that would maximize the amount of parking for each business. In addition to the schematic design, GNE also provided a cost estimate for the improvements outlined in the re-design.

To complete this project, GNE coordinated closely with Reed, O R Colan and Associates (Reed's prime consultant), the City of Little Rock's Planning and Public Works Departments, and the owners of the commercial properties.

Client Contact

Tom Reed Reed & Associates, Inc. 3739 N. Steele Blvd, Suite 140 Fayetteville, AR 72703 (479) 841-6237 treed@reedappraisal.biz

Completion Date

September 2012

Design Fee

\$12,000

Services Provided

Parking Lot Layout Cost Estimating







Fleming Aquatic Habitat Enhancement & Rehabilitation Project Little Rock, Arkansas

GNE was selected by Environmental Consulting Operations, Inc. to assist with a project to dredge an existing wetlands on private property in order to develop a wildlife area.

GNE's primary role was to provide a proposed grading and drainage plan for the project in state plane coordinates. This plan was used by others to conduct floodplain modeling required to permit this project through the U.S. Army Corps of Engineers, FEMA, and Pulaski County – the local floodplain administrator.

GNE utilized AutoCAD Civil 3D to create the drainage and grading plan. This allowed GNE to accurately calculate cut and fill quantities and confirm that the project would have no negative impact on the floodplain. GNE also designed the project to ensure that it would not impact the floodway for the Maumelle River that crossed the site.

Client Contact

Ryan Shell 500 Sanctuary Drive Little Rock, AR 72223 (501) 993-6486 ryanesar@gmail.com

Completion Date

Summer 2013

Construction Cost

Not disclosed

Services Provided

Civil Site Design Drainage Design Topographic Surveying





Convenience Stores Doublebee's - Markham St. in Little (Renovation) Doublebee's - Scott Hamilton in Little Rock (Renovation) Paul Singh - 65th Street in Little Rock (Renovation) Paul Singh - Congo Road in Benton (New Store) Bobby Singh - Dollarway Hwy in White Hall (New Store)

GNE has designed several convenience stores. In 2019, they designed 5 separate stores teaming with Dean Taylor of LDT, Inc. – an architectural designer who specializes in retail stores and gas station/convenience stores. These stores were located in Little Rock, Benton, and White Hall.

GNE was responsible for surveying, landscape design, civil site design, and obtaining planning commission approval for these projects.

GNE understands the complexities of such projects and assists our clients through all aspects of creating a great customer experience including dealing with complex utility issues, designing grease traps and waste oil handling facilities, laying out pump islands, providing access on tight sites for the fuel delivery trucks, approval of curb cuts from ArDOT/cities, and coordination for rightof-way improvements like sidewalks and half street improvements.

Client Contact

Dean Taylor LDT, Inc. 36 Stanwood Loop North Little Rock, AR 72118 (501) 837-1099 Idtinc@comcast.net

Completion Date

Design 2019 Construction 2019 & 2020

<u>Project Cost</u>

Not Disclosed

Services Provided

Surveying Landscape Architecture Civil Site Design Half Street Improvements Sidewalk Design in R-O-W Planning Commission Approval Construction Layout



<u>GNE</u>

GarNat Engineering, LLC

Designing our client's success

Storage Facilities Larry Teeter - Alcoa Rd. Storage II in Benton Bob Schmitt - Benton Parkway Storage Doug Woodall - Midland Storage in Bryant Olan Asbury - Tisdale Storage in Hot Springs

Over the years, GNE has designed several storage facilities. In 2019, we designed four separate facilities in Benton, Bryant, and Hot Springs for four separate clients.

GNE was responsible for surveying, landscape design, civil site design, and obtaining planning commission approval for these projects. They included vehicle storage, climate control, and traditional units.

While many of these sites are cookie cutter, they are not without their complexities. Drainage, storm water detention and proper grading require innovation and attention to detail. Owners want to maximize the number of units they get on the site, while maintaining security and safe access for their customers to get to and around their site. GNE has had the good fortune to work with owners of some of the best, most modern facilities in Central Arkansas. We apply what we have learned to ensure that facilities we design are aesthetically pleasing and function properly. **Client Contact** Larry Teeter (406) 224-2911 Iteeter55@yahoo.com **Bob Schmitt** (479) 435-1876 robertnschmitt@gmail.com **Olan Asbury** (501) 590-1604 olanasbury@gmail.com **Doug Woodall** (501) 413-8334 woodalldoug@gmail.com **Completion Date** Design 2019 Construction 2019 & 2020 **Project Cost** Not Disclosed **Services Provided** Surveying Landscape Architecture **Civil Site Design** Half Street Improvements Sidewalk Design in R-O-W Planning Commission Approval **Construction Layout**



GNE Designing our client's success

Maintenance Facility Expansion Benton Utilities Benton, Arkansas



GNE was selected by Benton Utilities to design a 2000 square foot expansion of its existing maintenance facility offices.

Benton Utilities elected to complete some of the interior finish out with in-house staff. GNE bid one contract that included all site work and the metal building shell. This contract will be complete at the end of 2011. GNE will still be involved in the project through completion by assisting Benton Utilities in bidding small trade packages and providing other construction services.

The project site is located within the limits of the 100-year floodplain. Vernon worked closely with the Benton Planning Commission to provide an elevation certificate for the structure and design flood proofing measures for the building to ensure it complied with local ordinances.



Client Contact

Mr. Todd Pedersen General Manager Benton Utilities 1827 Dale Street Benton, AR 72015 (501) 776-5984 tpedersen@bentonar.org

Completion Date

Spring 2012

Construction Cost

\$200,000

Services Provided

Metal Building Design Structural Design Civil Site Design Topographic Survey Elevation Certificate Bid Phase Services Construction Phase Services

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GarNat Engineering, LLC

Designing our client's success

Northside Fire Station Expansion Benton Fire Department Benton, Arkansas



GNE was selected by the Benton Fire Department to design a 600 square foot expansion of the existing Northside Fire Station. The project's purpose was to provide greater privacy, adequate sleeping accommodations, and an additional bathroom for staff assigned to this station.

The project was funded with unspent money remaining in the city's budget at the end of the year, so the project had to be designed in less than 30 days and completed in accordance with a very strict budget. Bids within the funds allotted by the Owner for the project were opened in October of 2012. A contract has been awarded and a notice to proceed has been issued for March of 2013.



Client Contact

Chief Russ Evans Benton Fire Department 220 South Main Street Benton, AR 72015 (501) 776-5964 russ.evans@bentonar.org

Completion Date

Summer 2013

Construction Cost

\$80,000

Services Provided

Building Design Structural Design Civil Site Design **Topographic Survey Bid Phase Services Construction Phase Services**

<u>GNE</u>

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Benjamin Grove Subdivision Bryant, Arkansas

GNE provided design services for Benjamin Grove, a 30 acre residential subdivision that will be constructed in 3 phases with a total of 146 Lots.

The land for this project was located in Saline County in Bryant's extra territorial jurisdiction. GNE coordinated getting the property annexed into the City of Bryant, so it would have access to city sewer.

GNE was responsible for all aspects of the design of the subdivision including master planning, utility design, roadway design, drainage design, environmental permitting, public involvement, and approval from authorities having jurisdiction.

The land did not have a defined drainage outfall, so GNE approached the City of Bryant and Saline County about providing downstream drainage improvements in lieu of stormwater detention. After gaining approval for this approach, GNE designed phased off site drainage improvements to limit the impact of the development on neighboring property owners.

Client Contact

Lee Pengelly Thomas D. B. Collins 39 Walnut Valley Little Rock, AR 72211 (501) 680-0970 owencreek@comcast.net

Completion Dates

Phase 1 – 2016 Phase 2 – 2017 Phase 3 – 2019 Phase 4 – 2023

Project Cost

Not Disclosed

Services Provided

Surveying Drainage Design Utility Design Subdivision Design Environmental Permitting



<u>GNE</u>

Designing our client's success

Kensington Place Subdivision Bryant, Arkansas

GNE provided design services for Kensington Place, a 40 acre residential subdivision that will be constructed in four or five phases with a total of 146 Lots.

The land for this project was located in Saline County in Bryant's extra territorial jurisdiction. GNE coordinated getting the property annexed into the City of Bryant, so it would have access to city sewer.

GNE was responsible for all aspects of the design of the subdivision including master planning, utility design, roadway design, drainage design, environmental permitting, public involvement, and approval from authorities having jurisdiction.

The sewer system for the subdivision includes one lift station that pumps through an offsite force main to the Bethel lift station. GNE coordinated the acquisition of all offsite easements required for the construction of the force main.

The subdivision will include a primary entrance on to North Lake Road. GNE designed this entrance, including landscaping, signage, and half street improvements.

Client Contact

Lee Pengelly Thomas D. B. Collins 39 Walnut Valley Little Rock, AR 72211 (501) 680-0970 owencreek@comcast.net

Completion Dates

Phase 1 – 2017 Phase 2 – 2018 Phase 3 – 2024

Project Cost

Not Disclosed

Services Provided

Surveying Drainage Design Utility Design Subdivision Design Environmental Permitting Offsite Easement Preparation





Olde Salem Township Subdivision Saline County, Arkansas

GNE provided design services for Olde Salem Township, a 35 acre residential subdivision that will be constructed in two phases with a total of 119 Lots.

The land for this project was located in Saline County outside of Bryant's extra territorial jurisdiction. GNE coordinated getting the property pre-annexed into the City of Bryant, so it would have access to city sewer. The sewer system for the subdivision includes one lift station that pumps through an offsite force main to the Bethel lift station. GNE coordinated the acquisition of all offsite easements required for the construction of the force main.

GNE was responsible for all aspects of the design of the subdivision including master planning, utility design, roadway design, drainage design, environmental permitting, public involvement, and approval from authorities having jurisdiction.

Because of its unique design which includes front porches facing shared common areas, this subdivision was submitted to the Saline County Planning Commission and approved as a planned unit development.

Client Contact

Dee Fiser Fiser Development, LLC P.O. Box 914 Bryant, AR 72089 (501) 454-4070 dee@fiser.com

Completion Date

Phase 1 – 2016 Phase 2 – 2019

Construction Cost

Not Disclosed

Services Provided

Surveying Drainage Design Utility Design Subdivision Design Environmental Permitting Offsite Easement Preparation Offsite Easement Acquisition







Part 3 – Resumes

- Vernon Williams, P.E.
- Jennifer Williams, P.E.
- George Wooden, P.S.
- Chad Oppenhuizen, PLA
- Tariq Moreshed, E. I.
- Shakhiyorkhon Mukhitdinov
- Michael Cornish



Vernon J. Williams, P.E., CCS, CCCA, CFM President

GarNat Engineering, LLC

Vernon Williams is the President and Owner of GarNat Engineering, LLC (GNE). Vernon has over 30 years of experience in the design and management of civil engineering projects for municipal and industrial clients throughout the State of Arkansas. Services provided include feasibility studies, master planning, fieldwork, construction observation, design, permitting, cost estimating, specification writing, and construction contract administration. Vernon has a very well rounded design experience which includes hydraulic modeling of water distribution systems, water and sewage pumping facilities, water storage tanks, water mains, water transmission mains, gravity and pressurized sewage collection systems, gravity sewer rehabilitation, water treatment plants, wastewater treatment plants, roads, bridges, drainage, parks, trails, sports complexes, and other general civil engineering projects.

Education

B.S. Civil Engineering, University of Arkansas, 1993

Professional Credentials

- Registered Professional Engineer in Arkansas
- Member of the Arkansas Academy of Civil Engineers
- CSI Certified Construction Contract Administrator
- CSI Certified Construction Specifier
- Certified Floodplain Manager

Affiliations

- National Society of Professional Engineers
- American Water Works Association
- Construction Specifications Institute
- Arkansas Water/Wastewater Managers Association
- Little Rock Engineers Club Past President
- Arkansas Recreation and Parks Association
- Rotary International, Benton-Bauxite Chapter Paul Harris Fellow



Jennifer Williams, P.E.

GarNat Engineering, LLC

Jennifer Williams has over 30 years of experience as a civil engineer. She joined GNE after retiring from the Arkansas Department of Transportation (ARDOT) in 2021. During her career at ARDOT, she worked primarily in roadway design and right of way operations. Roadway design responsibilities included geometric design, pavement design, hydrologic analysis, drainage design, specification writing, cost estimating, and coordination with bridge, construction, utility and right-of-way engineers/designers. Right of way responsibilities included management of right of way plan development; title research; and appraisal, acquisition, relocation, and utility relocation activities necessary for the construction and maintenance of state highways in accordance with federal and state regulations.

Other related experience at ARDOT included:

- Coordinated and participated in many value engineering studies for projects with estimated construction costs over \$25 million.
- Organized value engineering training for other employees within ARDOT.
- Prepared and reviewed numerous erosion control plans that recommended best management practices for the prevention of storm water pollution prevention.
- Prepared and reviewed numerous maintenance of traffic plans.
- Oversaw the procurement and contract development of consultants utilized by ARDOT for engineering and professional services.
- Managed contracts and approved pay requests for ARDOT's engineering and professional services consultants.

Education

B.S. Civil Engineering, University of Arkansas, 1993 M.S. Civil Engineering, University of Arkansas, 1994

Professional Credentials

- Registered Professional Engineer in Arkansas
- Member of the Arkansas Academy of Civil Engineers



George Wooden, P.S. Survey Manager GarNat Engineering, LLC

George Wooden is a survey manager with GarNat Engineering, LLC (GNE). George has over 25 years of well-rounded surveying experience working for land surveying firms, civil engineering firms, and heavy civil construction contractors. His land surveying experience includes boundary surveys, ALTA/ACSM surveys, topographic surveys, mapping, photometric surveys, GLO retracements, land title ownership research, legal descriptions, tract map preparation, easement/right-of-way preparation, construction layout, measurement of construction quantities, and as-built surveys. Prior to working for GNE, he worked 12 years for another engineering firm that specialized in the design of water and wastewater projects as their survey manager. While with that firm, he provided surveying services for the planning, design and construction of water and sewer mains, pump/lift stations, treatment plants, and water storage projects. His construction layout experience includes buildings, roadways, utilities, drainage, and bridges. He has extensive experience working with and for construction superintendents. This experience includes four years of experience laying out highway/interstate projects for contractors constructing projects for the Arkansas State Highway and Transportation Department. He has setup the GPS control networks and programed GPS guided construction equipment. George is very proficient with manual/robotic total stations, levels, and static/real time GPS equipment. He has used various data collection equipment and software including TDS 48GX, SDMS, Trimble, and Carlson. He is also very proficient with CADD software including AutoCAD Civil 3D, Trimble Business Center, MicroStation, and Terramodel. He can utilize the full functionality of these software packages to create digital terrain and pipe network models, perform earthwork calculations, and cut cross sections and profiles.

Education

Bachelors in Environmental Design, University of Colorado, 1993

Professional Credentials

• Registered Professional Surveyor in Arkansas

Affiliations

• Arkansas Society of Professional Surveyors



Chad Oppenhuizen, PLA Landscape Architect GarNat Engineering, LLC

Chad Oppenhuizen provides landscape architecture design for GarNat Engineering, LLC (GNE). Chad has over 20 years of experience in the design, maintenance, and installation of landscape projects. He has a diverse work experience which includes landscape design firms, a landscape contractor, and a firm that specialized in the commissioning and certification of LEED certified construction projects. This experience has allowed Chad to become familiar with all facets of design including architecture, mechanical, electrical, and civil. Chad's work for a landscape contractor provides him with a unique perspective that has a positive impact on his designs. He has worked on and installed numerous irrigation systems. He has bid landscaping projects, which allows him to design to a budget using plant materials that are readily available. If the owner elects to change planting materials, he knows the impact on the budget without reaching out to contractors for pricing. He has maintained landscaping and knows what works and what doesn't. Having installed and bid landscaping designed by nearly every landscape architect in Central Arkansas, he has been exposed to all types of designs and is driven to not turn out the same old cookie cutter designs that are so common in this market. While working over 10 years with a Central Arkansas landscape architecture firm, Chad gained extensive experience in bringing Arkansas State Parks into compliance with the American with Disability Act. He has designed or master planned improvements at over 20 different Arkansas State Parks and numerous city parks/athletic complexes.

Education

B.A. Landscape Architecture, Iowa State University, 1997 LEED Volume Training, USGBC

Professional Credentials

- Registered Landscape Architect in Arkansas
- LEED AP BD&C
- LEED AP O&M



Tariq Morshed, E.I. Project Engineer GarNat Engineering, LLC

Tariq Morshed is a project engineer with GarNat Engineering, LLC (GNE). In his role at GNE, Tariq is responsible for detailed design and plan production for roadway, drainage, utility, land development, and other civil engineering projects.

Prior to joining GNE, Tariq received a master's degree in Civil Engineering with an emphasis in transportation from Arkansas State University (ASU) in Jonesboro. His master's thesis research focused on the use of nanoclay to improve the quality of asphalt binder. His research was administered and funded by the Consortium of South Central States (Tran-SET) as part of two technical projects for the U.S. Department of Transportation (USDOT).

Prior to working on his masters, Tariq worked as a freelance engineer and taught civil engineering classes at Stamford University Bangladesh for five years. Subjects taught included engineering hydraulics and transportation engineering.

Education

M.S. Civil Engineering, Arkansas State University, 2019B.S. Civil Engineering, Khulna University of Engineering and Technology, Bangladesh, 2012

Professional Credentials

• Registered Engineer Intern in Arkansas

Affiliations

- American Council of Engineering Companies
- American Society of Civil Engineers



Shakhriyorkhon "Shak" Mukhitdinov Project Engineer GarNat Engineering, LLC

Shak Mukhitdinov is a project engineer with GarNat Engineering, LLC (GNE). In his role at GNE, Shak is responsible for detailed design and plan production for drainage, utility, land development, and other civil engineering projects.

Prior to joining GNE, Shak received a bachelor's degree in Engineering from Southern Arkansas University (SAU) in Magnolia. Directly out of school, he worked for a year at a local surveying firm and developed a proficiency in AutoCAD Civil 3D software.

Since joining GNE, Shak has worked on the design of several utility projects including: two lift stations for Hot Springs Village POA; five water lines for Hot Springs Village POA; water treatment plant modifications for Hot Springs Village POA; ARDOT utility relocations for Salem and Hamburg; a hydraulic modeling study for Salem; a new master meter facility for Guy; and ARPA Grant applications for Guy, Salem, East End, Hamburg, and Bryant. Shak has also obtained certifications in the hydraulic modeling of water distribution systems and surge analysis. These certifications have enabled him to be GNE primary hydraulic modeler for water distribution system projects. Utilizing his AutoCAD Civil 3D skills, Shak has designed several civil site design projects including: a soccer complex in Morrilton, the District 6 office for the Arkansas Department of Agriculture in Clarksville, Custom Advertising's commercial complex in Bryant, and Cowboy Car Wash in Heber Springs. Shak is well versed in the preparation of technical specifications, contract documents for municipal projects, and prepares all construction contract administration documents for the projects he designs. He has developed a good working relationship with review and funding agencies that he is required to interface with on his municipal utility projects.

Education

B.S. Engineering, Southern Arkansas University, 2020

Affiliations

- American Council of Engineering Companies
- American Society of Civil Engineers



Michael Cornish Survey Party Chief/CADD Tech GarNat Engineering, LLC

Michael Cornish is a survey party chief/CADD Tech with over 15 years of experience working for surveying firms on a wide range of projects. While working for these firms, Michael has held the titles of rod man, instrument man, and survey party chief. Michael is thoroughly familiar with all aspects of surveying including boundary surveys, topographic surveys, mapping, photometric surveys, GLO retracements, land title ownership research, legal descriptions, construction layout, measurement of construction quantities, and as-built surveys. He has assisted in the production of numerous ALTA/ACSM surveys to satisfy the needs of lenders, corporations, and title companies. Michael utilizes the latest technology including RTK GPS and robotic total station equipment to provide accurate field measurements.

Experience

- Conducted field surveys for numerous boundary surveys under direction of professional land surveyors.
- Conducted field surveys for numerous topographic surveys used as base map for engineering design drawings.
- Extensive construction staking experience for pipeline, roadway, drainage, and civil site construction projects.
- Proficient in gathering property owner/deed research for boundary surveys and easement preparation.
- Proficient with RTK GPS equipment, robotic total stations, total stations, automatic levels, and most other survey equipment used in last 10 years.

Education

Network Systems Administration, Electrical Engineering Technology, DeVry University, 2004 Radio and TV Broadcasting, Cossatot Community College, 2002 Nashville High School, Nashville, AR 2002



Part 4 – References



The following is a list of references for Vernon Williams and GarNat Engineering, LLC.

References

Wade Phillips, P.E. Director of Public Works City of Harrison, Arkansas P.O. Box 1715 Harrison, Arkansas 72602 Phone: (870) 741-3434 E-mail: publicworks@cityofharrison.com

Britt Vance, P.E. Lead Wastewater Engineer City of Tulsa Engineering Services 2317 S. Jackson Ave. N-206 Tulsa, OK 74107 Phone: (918) 596-9564 E-mail: <u>bvance@cityoftulsa.org</u>

Chuck Harper President Harco Constructors 8060 Counts Massie Road North Little Rock, Arkansas 72113 Phone: (501) 804-7207 <u>chuck@harco.net</u>

Joe Courtright Dale Capital Partners One Allied Drive Suite 1720 Little Rock, Arkansas 72201 Phone: (501) 258-0883 JCourtright@dalecapitalpartners.com Tim Shaw General Manager Community Water System 299 Lakeshore Drive Greers Ferry, Arkansas 72067 Phone: (501) 825-7294 E-mail: <u>tshaw@cwswater.org</u>

Greg Hooten Water Superintendent Guy Water Works P.O. Box 12 Guy, Arkansas 72061 Phone: (501) 679-4585 E-mail: <u>gphooten@yahoo.com</u>

Eric Petty, P.E. Manger, Operations Division Little Rock Public Works 3313 J.E. Davis Little Rock, Arkansas 72209 (501) 690-8109 E-mail: <u>epetty@littlerock.gov</u>

Daniel Freeman Manager Jefferson Water Users Association 111 Wishbone Farm Road Jefferson, Arkansas 72079 Phone: (501) 425-6493 jefferson_water@centurytel.net



Stephanie Griffin Executive Director Habitat for Humanity of Saline County 404 W Walnut Street Benton, Arkansas 72015 Phone: (501) 773-6247 E-mail: <u>Stephanie@habitatsalinecountyar.org</u>

Troy Ellis, P.E. City Engineer City of Bryant 210 SW Third Street Bryant, Arkansas 72022 Phone: (501) 943-0450 E-mail: <u>ttaylor@cityofbryant.com</u>

Dee Fiser Developer Fiser Development P.O. Box 914 Bryant, Arkansas 72089 Phone: (501) 454-4070 E-mail: dee@fiser.com

Chris Boutzale, P.E. Wastewater Plant Superintendent Hot Springs Village POA 895 DeSoto Blvd. Hot Springs Village, Arkansas 71909 Phone: (501) 922-5523 E-mail: <u>cboutzale@hsvpoa.org</u>

Roger Barker Owner Barker Excavation, Inc. 10085 Congo Road Benton, Arkansas 72019 Phone: (501) 860-3873 E-mail: <u>barkerexcavation@gmail.com</u> Kim Cupples East End Water Improvement District #1 20621 Arch Street Little Rock, Arkansas 72206 Phone: (501) 951-1924 E-mail: <u>eastendwater@att.net</u>

Jeff Arey County Judge, retired Saline County, Arkansas 200 N. Main Street, Room 117 Benton, Arkansas 72015 Phone: (501) 840-2270 E-mail: <u>rga.rent@gmail.com</u>

Brian Black, AIA Principal Black, Corley, Owens & Hughes, P.A. 219 West South Street Benton, Arkansas 72015 Phone: (501) 249-4443 E-mail: <u>brian@bcoandh.com</u>

Brooks Livers Owner Liveco Construction + Real Estate 12057 I-30 Benton, Arkansas 72015 Phone: (501) 412-5838 E-mail: <u>blivers@livecoteam.com</u>

Dickie Kentner Board President Salem Water Users Association PWA 620 Airlane Drive Benton, Arkansas 72015 Phone: (501) 840-2200 E-mail: waterusers@sbcglobal.net



Part 5 – Proof of Insurance

ACORD	

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

CERTIFICATE OF LIABILITY INSURANCE						/7/2024			
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 CONTACT David Donnell									
Donnell Insurance Agency				(A/C, No	o, Ext): (501) 2	24-6881	(Â/Ĉ, No):		
2719 Cody Rd						eagency.com			
Benton			AR 72015	INSURER(S) AFFORDING COVERAGE					NAIC #
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CERTIFICATE OF LIABILITY INSURANCE

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CERTIFICATE OF LIABILITY INSURANCE						/7/2024			
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Garnat Engineering LLC				INSURE	RC: StarSton	e Natl Ins Co			
PO Box 116				INSURE	RD:				
				INSURE	RE:				
Benton			AR 72018-0116	INSURE	RF:				
COVERAGES CEI	TIFIC	ATE	NUMBER:				REVISION NUMBER:		
INDICATED. NOTWITHSTANDING ANY REC CERTIFICATE MAY BE ISSUED OR MAY PE EXCLUSIONS AND CONDITIONS OF SUCH	UIREN RTAIN, POLICI	JRANI IENT, THE ES. LI	TERM OR CONDITION OF A INSURANCE AFFORDED BY MITS SHOWN MAY HAVE BE	NY CON THE PO	NTRACT OR OT NICIES DESCR DUCED BY PAI	THER DOCUM RIBED HEREIN D CLAIMS.	ED ABOVE FOR THE POLIC ENT WITH RESPECT TO WI I IS SUBJECT TO ALL THE "	HICH TH	IS
INSR LTR TYPE OF INSURANCE	ADDL	SUBR	POLICY NUMBER		POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMI	rs	
								\$	1,000,000
CLAIMS-MADE X OCCUR							PREMISES (Ea occurrence)	\$	100,000
	-		53 007400 01		00/01/0004	00/01/0005	MED EXP (Any one person)	\$	5,000
	-		53-02/409-01		02/01/2024	02/01/2025	PERSONAL & ADV INJURY	\$	2,000,000
								3 e	2,000,000
							PHODUCIS-COMP/OF AGG	\$	2,000,000
							COMBINED SINGLE LIMIT (Ea accident)	\$	
ANY AUTO							BODILY INJURY (Per person)	\$	
OWNED AUTOS ONLY SCHEDULED AUTOS							BODILY INJURY (Per accident)	\$	
HIRED AUTOS ONLY AUTOS ONLY							PROPERTY DAMAGE (Per accident)	\$	
	_							\$	
							EACH OCCURRENCE	\$	
	-						AGGREGATE	\$	
WORKERS COMPENSATION							PER OTH-	3	
AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE	<u>.</u>						E.L. EACH ACCIDENT	ŝ	1,000,000
B OFFICER/MEMBER EXCLUDED? (Mandatory in NH)] \^^		ACPWC013058770190		06/13/2024	06/13/2025	E.L. DISEASE - EA EMPLOYEE	\$	1,000,000
If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIMIT	\$	1,000,000
Drofossional Linkility							Each claim		1,000,000
C Professional Liability			82453L242APL		02/01/2024	02/01/2025	Aggregate		2,000,000
Image: Second state of the second s									
CERTIFICATE HOLDER				CANC	ELLATION				
***FOR OFFICE RECORDS ONLY**				SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.					
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