

GNE

GarNat Engineering, LLC

Designing our client's success



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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.

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 Fax: (888) 900-3068

E-mail: <u>garnatengineering@gmail.com</u> Website: <u>www.garnatengineering.com</u>

Vernon has worked as a consulting engineer in Arkansas for over 25 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.



The recent economic downturn 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 seven 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.
- Marc Bottjer Marc is a degreed civil engineer with 15 years of experience.
- 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 10 years of experience.
- Andrew Vanlandingham Andrew is a CADD tech that is well versed in AutoCAD and MicroStation civil engineering design software.

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 large-scale 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



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

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

On-call Bid & Construction Services

| Company | Comp



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 10^{th} 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

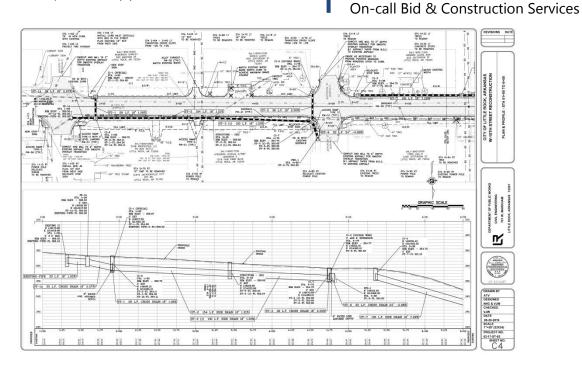
Completion Date

Design 2019 Construction 2020

Project Cost

\$800,000

Services Provided





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

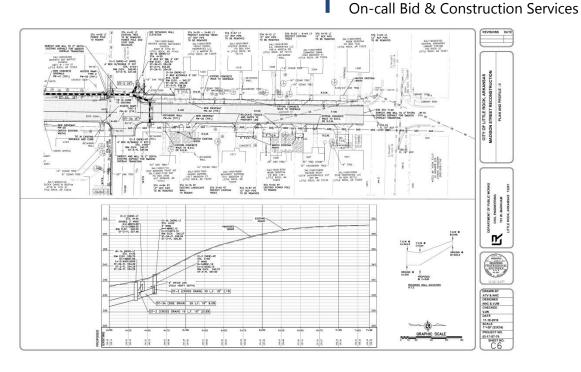
Completion Date

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
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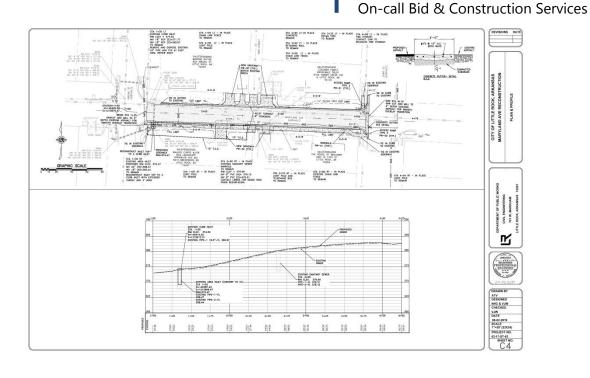
Completion Date

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

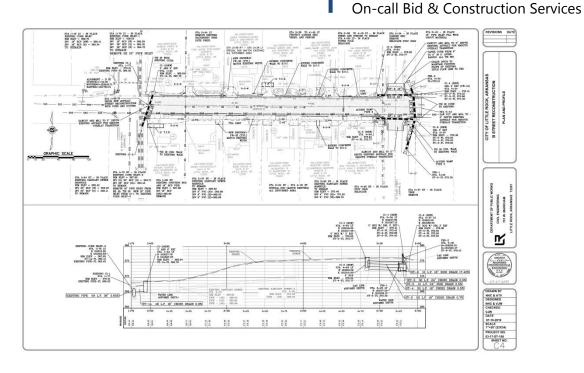
Completion Date

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

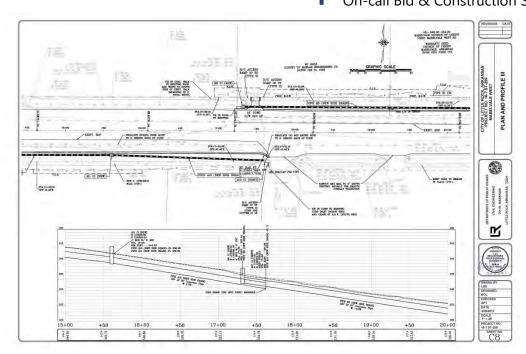
Completion Date

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 dhopkins@littlerock.gov

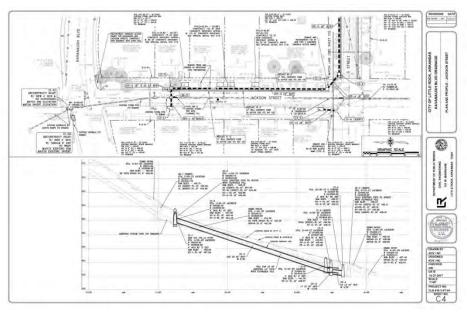
Completion Date

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

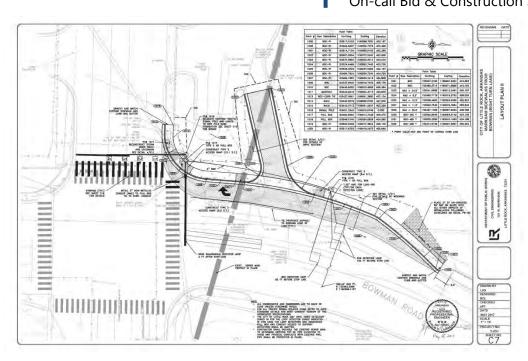
Completion Date

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. Mark Grimmett
Public Works Director
City of Bryant
1017 SW 2nd Street
Bryant, Arkansas 72022
(501) 943-0468
mgrimmett@cityofbryant.com

Completion Date

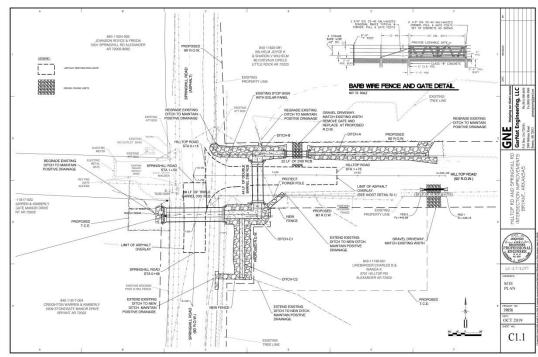
2020

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

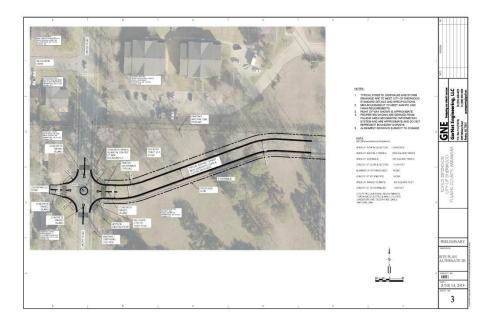
Completion Date

Spring 2019

Project Cost

\$250,000

Services Provided





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

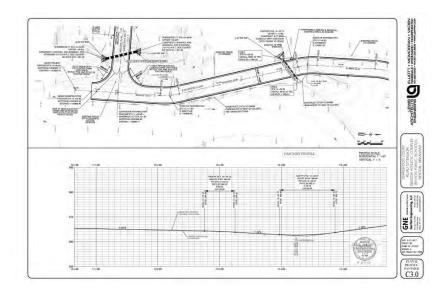
Designed 2017

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

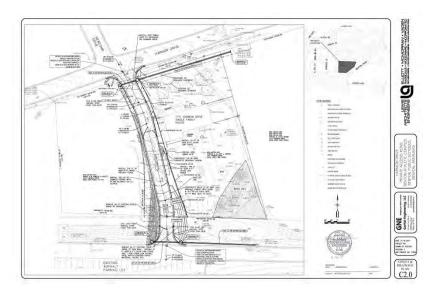
2017

Project Cost

\$215,000

Services Provided

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

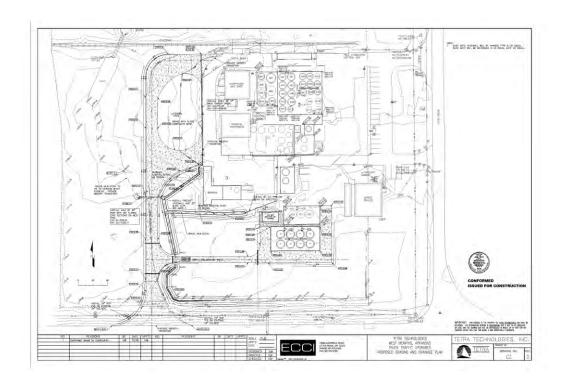
Early 2013

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 right-of-way and environmental clearances.

Client Contact

Brian Galloway
Public Works Director
City of Sherwood
6500 North Hills Blvd
Sherwood, AR 72120
(501) 835-3288
briang@cityofsherwood.net

Completion Date

Spring 2018

Construction Cost

\$260,000

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

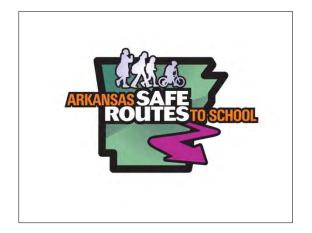
Summer 2017

Construction Cost

\$110,000

Services Provided









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

Mayor Dane Weindorf City of Hamburg 2520 Highway 229 Hamburg, AR 71646 (870) 853-5300 daneweindorf@gmail.com

Completion Date

Spring 2017

Construction Cost

\$300,000

Services Provided







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

Mayor Dane Weindorf City of Hamburg 2520 Highway 229 Hamburg, AR 71646 (870) 853-5300 daneweindorf@gmail.com

Completion Date

Summer 2013

Construction Cost

\$120,000

Services Provided







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 5-foot 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







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 5-foot 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





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





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. Mark Grimmett
Public Works Director
City of Bryant
1017 SW 2nd Street
Bryant, Arkansas 72022
(501) 943-0468
mgrimmett@cityofbryant.com

Completion Date

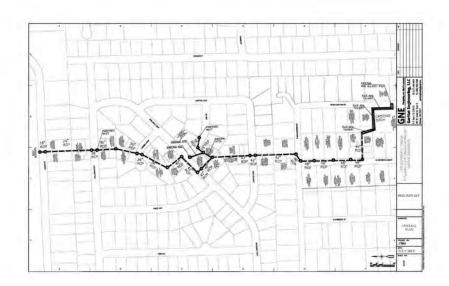
Preliminary Engineering Fall 2017

Project Cost

\$1,000,000

Services Provided

Topographic Surveys
Hydrology
Hydraulic Modeling
Public Involvement Meetings





Cambridge Drainage Bryant, Arkansas

Cambridge Subdivision was constructed approximately 20 years ago. On the evening of April 29, 2017 the City of Bryant received a large rainfall in excess of the 50-year event and two homes in this subdivision flooded. The City of Bryant engaged GNE to study this area and recommend improvements.

The resulting study recommended the construction of 700 linear feet of 6-foot x 3-foot box culvert and 300 linear feet of 8-foot x 3-foot box culvert to correct the flooding and to bring the subdivision's drainage system into compliance with Bryant's current drainage requirements.

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. Mark Grimmett
Public Works Director
City of Bryant
1017 SW 2nd Street
Bryant, Arkansas 72022
(501) 943-0468
mgrimmett@cityofbryant.com

Completion Date

Preliminary Engineering Fall 2017

Project Cost

\$600,000

Services Provided

Topographic Surveys Hydrology Hydraulic Modeling





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 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 40-feet. This required the acquisition of additional right-of-way. GNE prepared these easement documents and acquired the easements for the City of Bryant.

Client Contact

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

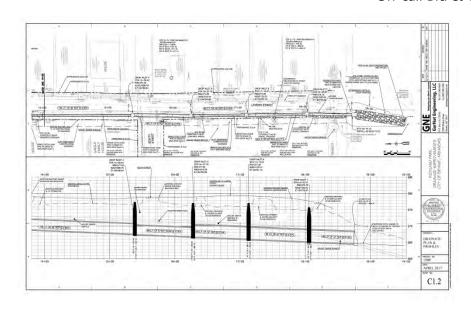
Completion Date

2017

Project Cost

\$210,000

Services Provided





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. Mark Grimmett
Public Works Director
City of Bryant
1017 SW 2nd Street
Bryant, Arkansas 72022
(501) 943-0468
mgrimmett@cityofbryant.com

Completion Date

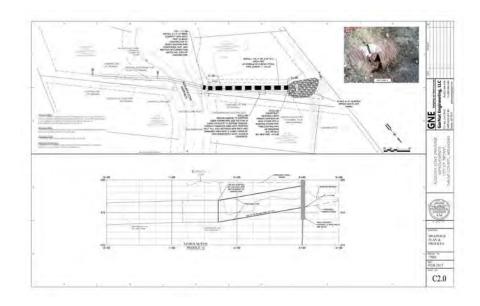
2017

Project Cost

\$125,000

Services Provided

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





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

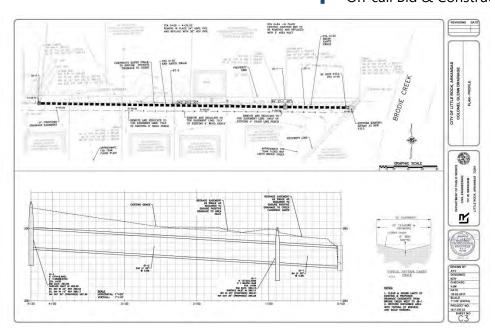
Completion Date

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
dhopkins@littlerock.gov

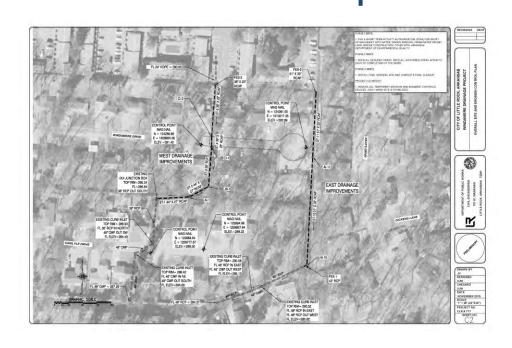
Completion Date

2016

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.

Client Contact

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

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
dhopkins@littlerock.gov

Completion Date

Fall 2014

Project Cost

\$150,000

Services Provided

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





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.

Client Contact

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

Completion Date

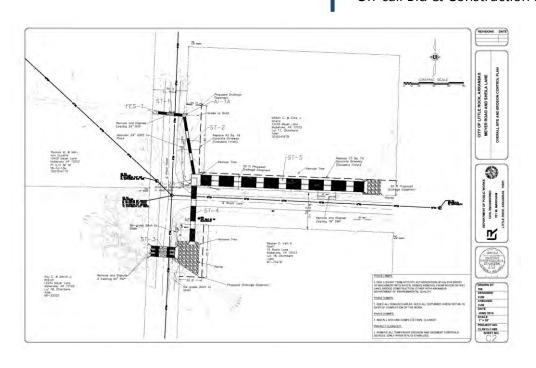
Fall 2014

Project Cost

\$300,000

Services Provided

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





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

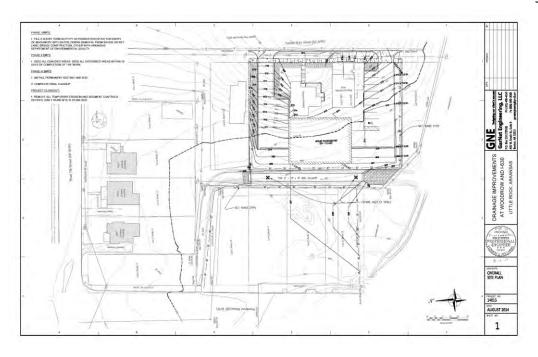
Summer 2015

Construction Cost

\$120,000

Services Provided

Drainage Design Hydrology USACE 404 Permitting ADEQ Permitting Box Culvert Design







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
brian@bcoandh.com

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. Jason Temple, P.E. Chief Operating Officer Hot Springs Village POA 895 DeSoto Blvd. Hot Springs Village, AR 71909 (501) 922-5522 itemple@hsvpoa.org

Completion Date

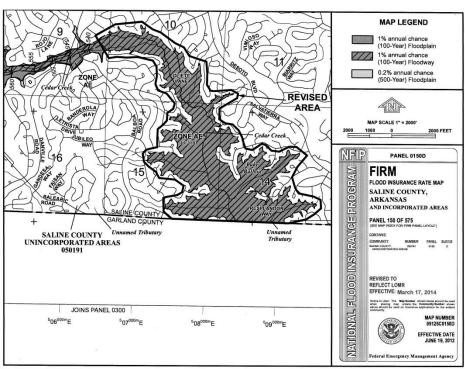
November 2013

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. Mike Hood Little Rock Public Works 701 West Markham Little Rock, Arkansas 72201 (501) 371-4820 mhood@littlerock.gov

Completion Date

April 2009

Project Cost

\$75,000

Services Provided

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







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
epetty@littlerock.gov

Completion Date

December 2012

Project Cost

\$9,500

Services Provided

Operation & Maintenance Preparation





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

Mayor Dane Weindorf City of Hamburg 2520 Highway 229 Hamburg, AR 71646 (870) 853-5300 daneweindorf@gmail.com

Completion Date

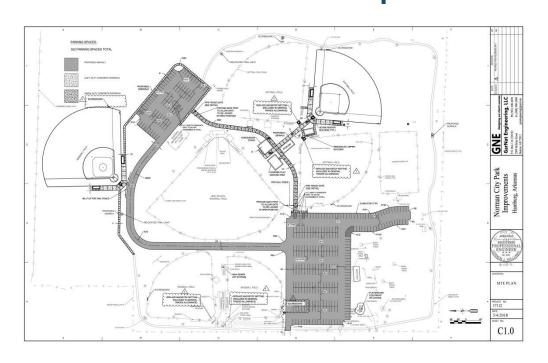
2019

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

Mayor Dane Weindorf City of Hamburg 2520 Highway 229 Hamburg, AR 71646 (870) 853-5300 daneweindorf@gmail.com

Completion Date

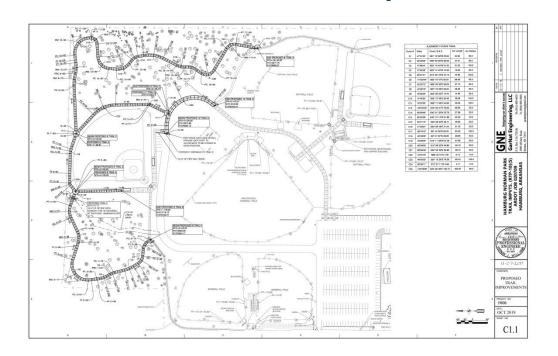
2020

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

Mayor Dane Weindorf City of Hamburg 2520 Highway 229 Hamburg, AR 71646 (870) 853-5300 daneweindorf@gmail.com

Completion Date

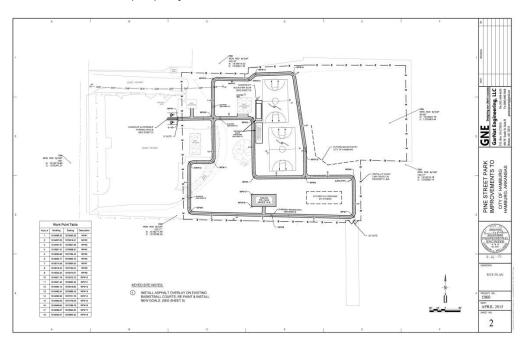
Fall 2016

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

2018

Project Cost

\$450,000

Services Provided

Surveying
Drainage Design
Floodplain Management
Landscape Architecture
Civil Site Design





Redfield Athletic Field Walking Trail AHTD Arkansas Recreational Trails Program

GNE assisted the City of Redfield in obtaining an Arkansas Recreational Trails Program Grant from the Arkansas State Highway and Transportation Department (AHTD), which allowed them to construct a 2300 linear feet asphalt trail around the F.P. Baugh Baseball Complex.

GNE coordinated with the AHTD and other review agencies to obtain right-of-way and environmental clearance for the project.

Contract documents were reviewed and approved by the AHTD. The contract documents were prepared in strict accordance with AHTD's Programs and Contracts 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 November of 2013. The project will be constructed in the Spring of 2014. GNE provided all survey, design, bid, and construction phase services on this project.

Client Contact

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

Completion Date

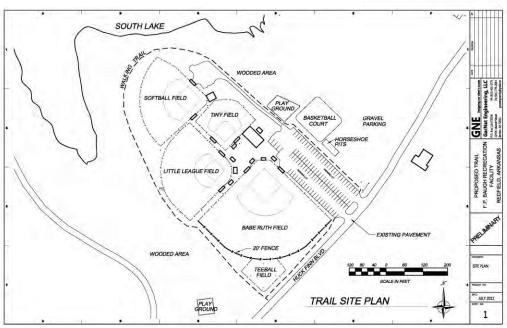
Spring 2014

Project Cost

\$70,000

Services Provided

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





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
smittyretired@hotmail.com

Completion Date

December 2011

Construction Cost

\$66,000

Services Provided

Structural Design
Funding Agency Coordination
Bid Phase Services
Construction Phase Services



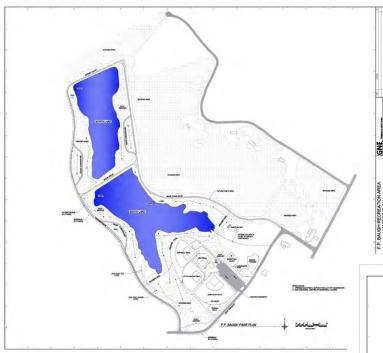




Park System Master Plan Redfield, Arkansas

The City of Redfield selected GNE to create a master plan for its two parks. Vernon Williams coordinated the master planning process that included a review of public needs surveys, meetings with the Parks and Recreation Commission, and one public involvement meeting.

Deliverables for the project included site drawings for both parks that showed existing and proposed facilities and cost estimates for all proposed improvements. To encourage additional public involvement, GNE hosts these documents on its website, so they can be downloaded.



Client Contact

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

Completion Date

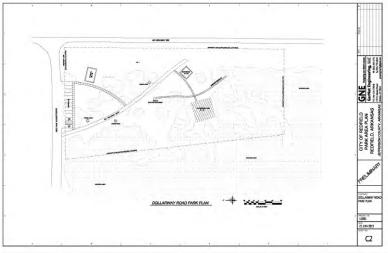
July 2011

Project Cost

\$2,500

Services Provided

Master Planning Cost Estimating





Field Lighting Repairs F. P. Baugh Recreation Facility Redfield, Arkansas

GNE provided bid and construction phase services for a field lighting project for the City of Redfield that Vernon Williams designed, while with another firm.

The project included the replacement of several wooden poles that had been damaged by woodpeckers. The budget for the project was very tight. Vernon coordinated the donation of materials from multiple sources including the Cities of Greenwood and Sherwood. The damaged poles were replaced with a combination of donated wood and metal poles. All new and existing wood poles were fitted or retrofitted with a protective metal mesh.

The existing electrical system was also upgraded to bring it into compliance with the National Electrical Code.

Client Contact

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

Completion Date

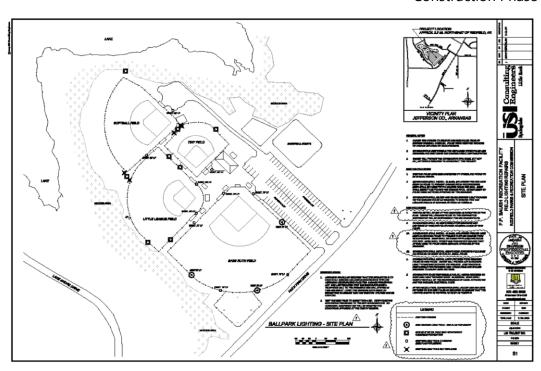
April 2011

Construction Cost

\$65,000

Services Provided

Field Lighting Design
Bid Phase Services
Construction Phase Services





GarNat Engineering, LLC

Designing our client's success

William E. Clark Presidential Park Wetlands Little Rock, Arkansas



While with another firm, Vernon Williams, P.E. was selected to design this \$3.8 million parks project. Initially, Vernon's main task was to value engineer the project to bring it within the city's budget of \$2.0 million. In addition to successfully modifying the project scope, Vernon was also able to identify and obtain a \$353,000 grant from the Arkansas Natural Resources Commission that allowed the project to be realized.

The site for the project is located within an existing revetment on the Arkansas River, adjacent to the Clinton Presidential Library. It includes 1,060 feet of boardwalk, two covered pavilions, and a raised wetland cultivated with native vegetation. Other site amenities include a channel cut through the revetment to allow wildlife to enter the site, a water feature that flows through the raised wetland, a large freestanding bat house (sized to provide habitat for 50,000 bats), and a litter trap designed to catch floating debris discharged to the site from an existing box culvert.

Client Contact

Mr. Eric Petty, P.E.
Manager
Public Works Operations
City of Little Rock
3313 J. E. Davis
Little Rock, AR 72209
(501) 918-3630
epetty@littlerock.gov

Awards

APWA – 2011 Large Civil Engineering Project of the Year

Completion Date

Summer 2011

Construction Cost

\$2.06 Million

Services Provided

Value Engineering
Timber Bridge/Pavilion Design
Civil Site Design Services
Construction Phase Services





William E. Clark - Presidential Park Wetlands - Little Rock, Arkansas



Litter Trap



Bat House





Since the project is located in the Arkansas River, it is subject to flooding. The following pictures show the site during flood conditions experienced in the spring of 2011. Since the project was designed for such an event, it handled these conditions flawlessly.







GarNat Engineering, LLC

Designing our client's success



Loco Ropes Ozark Folk Center State Park

While with another firm, Vernon Williams, P.E. designed the civil site work and coordinated Arkansas State Parks approval for the Loco Ropes course at the Ozark Folk Center State Park.

Loco Ropes is a heart-pumping ropes course with over 30 challenges to test participant's nerve, endurance, agility, and strength.





Client Contact

Ms. Judy Cox
Managing Member
Loco Ropes, LLC
1025A Park Ave
Ozark Folk Center State Park
Mountain View, AR 72560
(870) 269-6566
judycox@locoropes.com

Completion Date

October 2010

Construction Cost

Not disclosed

Services Provided

Civil Site Design
Coordination with ASP







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





Diamond Park Softball Complex Maumelle Parks & Recreation

While with another firm, Vernon Williams, P.E. managed the design and construction of a five-field softball complex adjacent to the Diamond Center, an existing boy's baseball complex in Maumelle.

Since the City of Maumelle lacked the necessary funds to build the entire project, it was decided to phase the project. Phase One was completed in 2007 and included two girls' softball fields, one men's softball field, concession and restroom facilities, and parking. When the project is eventually built out, it will include another men's and girls' softball field, a walking track, playground equipment and other amenities. Design services included in Phase One included landscaping, irrigation, parking lot and field lighting, site design, stormwater retention, utilities and environmental permitting. Over half of the existing site had to be raised out of the 100-year floodplain and Vernon coordinated all necessary permitting.

Client Contact

Mr. Jack Stowe
City of Maumelle
550 Edgewood Drive
Maumelle, AR 72113
(501) 851-2500 ext 254
jack@maumelle.org

Completion Date

Fall 2007

Construction Cost

\$1.7 million

Services Provided

Master Planning
Athletic Field Design
Parks & Recreation Design
Civil Site Design
Environmental Permitting







Rolling Oaks Athletic Complex Maumelle Parks & Recreation

While with another firm, Vernon Williams, P.E. designed improvements to the City of Maumelle's existing Rolling Oaks Athletic Complex. The project included a multipurpose area used for football and soccer, a soccer field, a half-mile walking trail, two parking lots, and an 1890 square foot restroom/concession stand. Additional design services provided included landscaping, irrigation, parking lot lighting, athletic field lighting, field drainage system, site drainage, stormwater retention, utilities, and environmental permitting.



Client Contact

Mr. Jack Stowe
City of Maumelle
550 Edgewood Drive
Maumelle, AR 72113
(501) 851-2500 ext 254
jack@maumelle.org

Completion Date

April 2006

Construction Cost

\$845,000

Services Provided

Master Planning
Civil Site Design
Environmental Permitting
Bid Phase Services
Construction Phase Services







UAMS Rooftop Garden



GNE worked as a subconsultant for Landscape Architecture, Inc. on the design of the Rooftop Garden on the Campus of the University of Arkansas for Medical Sciences. Located next to the new 12-story hospital, the project consisted of converting a section of an existing parking deck into a garden to be used by staff, visitors, and patients. The focal point of the project was large fountain with three water falls.

Vernon Williams, P.E. was responsible for all engineering design including plumbing, electrical, and civil. The water and electrical supply for the project originated in an adjacent building, two stories below the garden. Vernon closely coordinated the installation of fountain and irrigation piping, pumps and treatment equipment for the fountain, and electrical components. The landscaping beds blocked flow to the parking deck's existing area drains. Vernon designed extensive drainage system modifications including wall drains to intercept runoff and bed drains to prevent the buildup of excessive water weight on the structure. As with all floor penetrations, the drainage system modifications were complicated by the fact that pre-stressed cables in the floor had to be avoided. X-rays of the parking deck slab were used as a damage prevention measure.

Client Contact

Ms. Cinde Drilling
Landscape Architecture, Inc.
2300 Cottondale Lane
Suite 202
Little Rock, AR 72202
(501) 374-5610
cinde@lai-ar.com

Completion Date

August 2011

Construction Cost

\$500,000

Services Provided

Civil Site Design
Plumbing Design
Electrical Design
Construction Phase Services





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 6,000 customers that is located in Saline County.

In 2018, GNE completed a 20-year master plan for Salem's system. In 2019, GNE was asked to design the immediate improvements outlined in the master plan which included a 2-million gallon composite elevated storage tank, 22,000 LF of 18-inch water line, 4,000 LF of 16-inch water line, 17,000 LF of 12-inch water line, and appurtenances.

The project was funded through the Arkansas Natural Resources 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 wage rates, and verifying compliance with the American Iron Steel requirements.

GNE also closely coordinated its work with Salem's attorney, easement acquisition staff and appraiser.

Client Contact

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

Completion Date

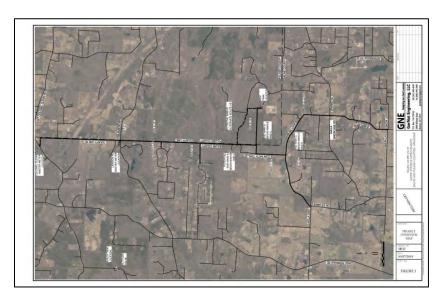
Design Spring 2020 Construction 2021

Project Cost

\$9,000,000

Services Provided

Water Distribution Design
Bid Phase Services
Construction Phase Services
Coordination with ANRC
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 6,000 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

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

Completion Date

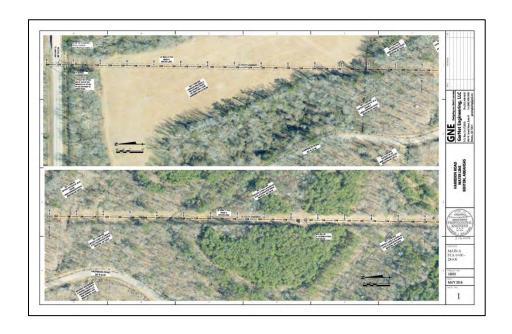
2018

Project Cost

\$1,700,000

Services Provided

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





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 6,000 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

Mr. 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





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 6,000 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

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

Completion Date

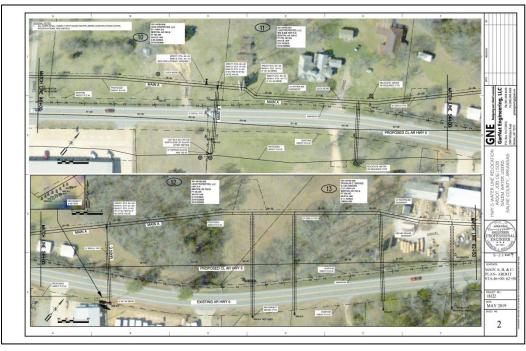
Design 2019 Construction 2020

Project Cost

\$300,000

Services Provided

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





Water Line 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 6,000 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

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

Completion Date

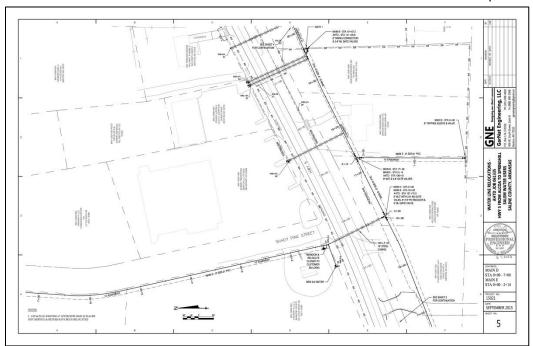
Spring 2017

Project Cost

\$300,000

Services Provided

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





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

Mayor Dane Weindorf City of Hamburg 2520 Highway 229 Hamburg, AR 71646 (870) 853-5300 daneweindorf@gmail.com

Completion Date

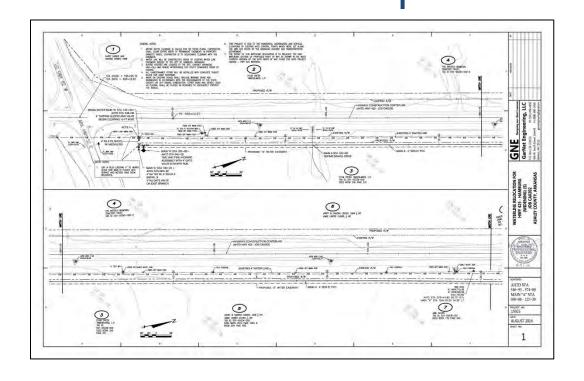
2017

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

Mayor Dane Weindorf City of Hamburg 2520 Highway 229 Hamburg, AR 71646 (870) 853-5300 daneweindorf@gmail.com

Completion Date

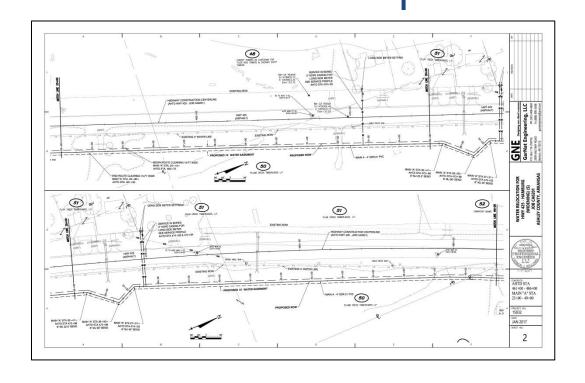
2017

Project Cost

\$100,000

Services Provided

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





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





Water System Master Plan East End Improvement District #1

GNE serves as the engineer of record for East End Improvement District #1 (East End) - a rural water provider with approximately 2,300 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

Mr. Chris Mabry
East End Improvement Dist. #1
20621 Arch Street
Little Rock, AR 72206
(501) 951-1924
eastendwater@att.net

Completion Date

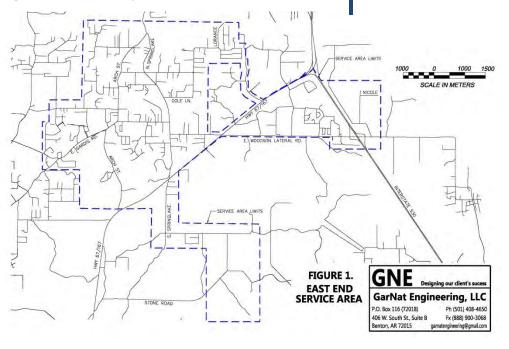
October 2013

Project Cost

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

Services Provided

Master Planning
Cost Estimation
Hydraulic Modeling





Water Improvements Nature Land Subdivision East End Improvement District #1

GNE serves as the engineer of record for East End Improvement District #1 (East End) - a rural water provider with approximately 2,300 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 6-inch and 4,000 linear feet of 3-inch water mains. East End gained around 50 new customers.

Client Contact

Mr. Chris Mabry
East End Improvement Dist. #1
20621 Arch Street
Little Rock, AR 72206
(501) 951-1924
eastendwater@att.net

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

GNE serves as the engineer of record for East End Improvement District #1 (East End) - a rural water provider with approximately 2,300 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

Mr. Chris Mabry
East End Improvement Dist. #1
20621 Arch Street
Little Rock, AR 72206
(501) 951-1924
eastendwater@att.net

Completion Date

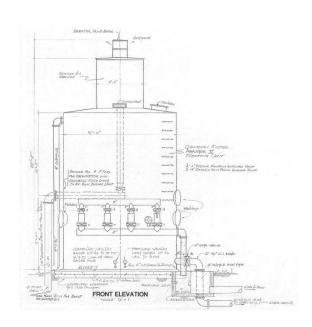
April 2015

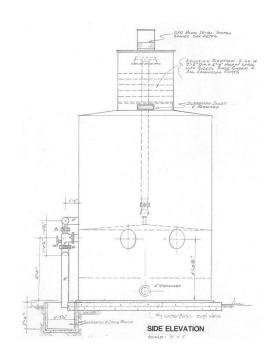
Project Cost

\$80,000

Services Provided

Coating Design
Bid Phase Services
Construction Phase Services







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

GNE serves as the engineer of record for East End Improvement District #1 (East End) - a rural water provider with approximately 2,300 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

Mr. Chris Mabry
East End Improvement Dist. #1
20621 Arch Street
Little Rock, AR 72206
(501) 951-1924
eastendwater@att.net

Completion Date

2016

Project Cost

\$130,000

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.

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Client Contact

Mr. Jason Temple, P.E. Chief Operating Officer Hot Springs Village POA 895 DeSoto Blvd Hot Springs Village, AR 71909 (501) 922-5522 itemple@hsvpoa.org

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

Mr. Jason Temple, P.E. Chief Operating Officer Hot Springs Village POA 895 DeSoto Blvd Hot Springs Village, AR 71909 (501) 922-5522 itemple@hsvpoa.org

Completion Date

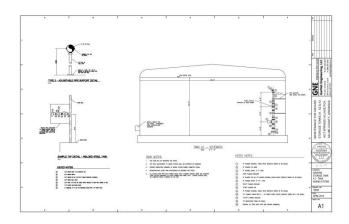
2016

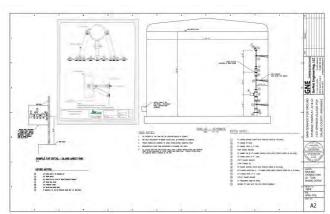
Construction Cost

\$150,000

Services Provided

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







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

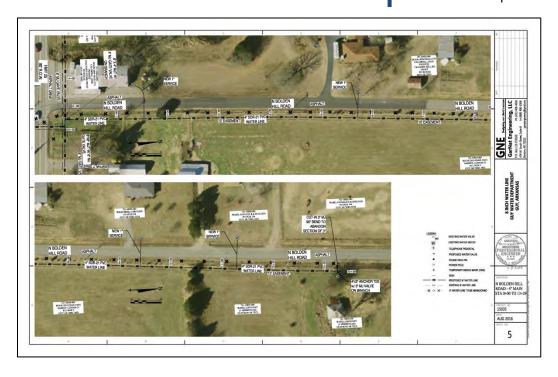
January 2017

Project Cost

\$150,000

Services Provided

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





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







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

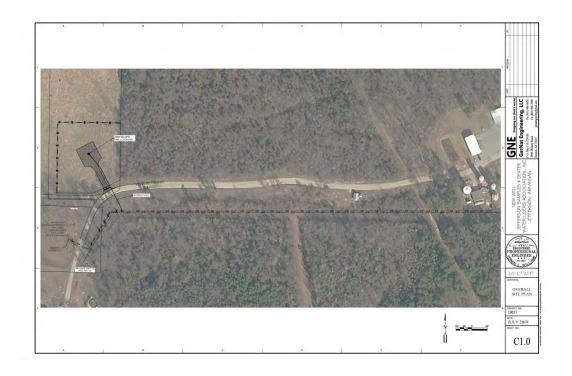
2020

Construction Cost

\$700,000

Services Provided

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





North Belt Water Transmission Lines Central Arkansas Water

While with previous firm, Vernon Williams, P.E. designed two segments of the North Belt Water Transmission project for Central Arkansas Water. Both segments were located along Hwy 107 in Gravel Ridge between Kellogg Creek and Bayou Meta. The segments included 6,000 linear feet of 30-inch and 3,000 linear feet of 24-inch along Hwy 107.

The projects were designed across multiple jurisdictions and required coordination with multiple entities including the Arkansas State Highway and Transportation Department, Pulaski County Public Works, the City of Sherwood, and several utility companies.

One section of the 30-inch water transmission line was located in close proximity to a rectifier that provided cathodic protection for an existing gas main. Vernon coordinated with the Ductile Iron Pipe Research Association to perform a stray current study for the area and design counter measures to protect the water transmission line from corrosion caused by the rectifier and its anode bed.

Client Contact

Mr. Jim Ferguson, P.E. Central Arkansas Water 221 East Capitol Avenue Little Rock, AR 72202 (501) 377-1298 jim.ferguson@carkw.com

Completion Date

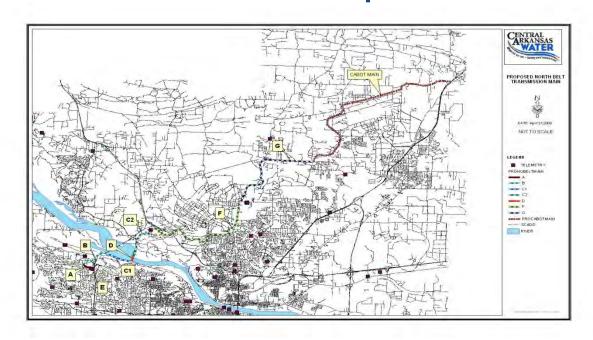
October 2008

Construction Cost

\$3 Million

Services Provided

Water Transmission Design
Easement Preparation
Environmental Permitting
Utility Permitting
Surveying
Bid Phase Services
Construction Phase Services





Water System Improvements Cabot, Arkansas

While with another firm, Vernon Williams, P.E. managed the design and construction of a two-phased water project for Cabot WaterWorks that was funded by ANRC's Safe Drinking Water Fund.

The first phase included two contracts for improvements to an existing booster district on the west side of town. Contract One included the construction of a two million gallon pre-stressed concrete storage tank, SCADA improvements, and the removal of a 35,000 gallon steel storage tank. Contract Two included 35,000 linear feet of 12-inch and 1,500 linear feet of 10-inch water line.

The second phase was designed to provide Cabot with a new surface water drinking supply from Central Arkansas Water's North Belt Water Transmission Project. The project, referred to as Contract Three, included 56,000 linear feet of 30-inch water transmission line, a master metering station in Gravel Ridge, a leak detection station, and SCADA improvements. The master meter station was designed to deliver water at a programmable, constant rate between zero and 11 MGD. A sodium hypochlorite feed system was also provided to provide booster chlorination. Finally, the project included improvements to Cabot's distribution system including 16,000 linear feet of 24-inch and 1,500 linear feet of 12-inch water line.

Client Contact

Mr. Tim Joyner, P.E.
Cabot WaterWorks
P.O. Box 1287
Cabot, Arkansas 72023
(501) 605-1741
tim.joyner@cabotwaterworks.com

Completion Date

December 2010

Project Cost

\$15 million

Services Provided

Feasibility Study
Rate Analysis
Water Transmission Design
Water Storage Tank Design
Hydraulic Modeling
Environmental Permitting
Easement Preparation & Acquisition
Bid Phase Services
Construction Phase Services
Revolving Loan Fund Coordination







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

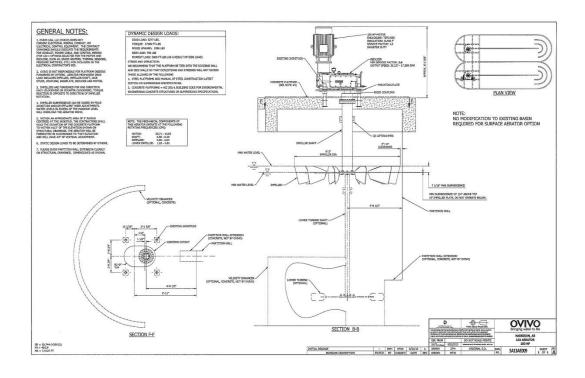
2014

Construction Cost

\$400,000

Services Provided

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





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







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





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

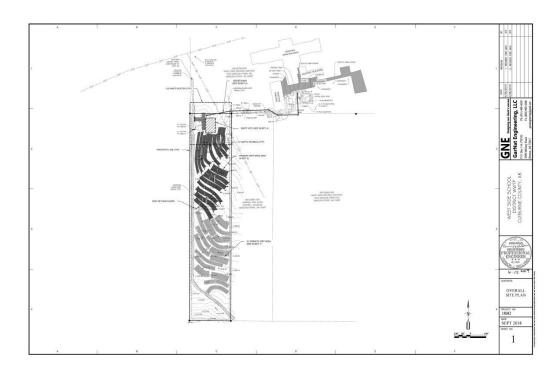
Prior to 2020-2021 School Year

Construction Cost

\$600,000

Services Provided

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





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

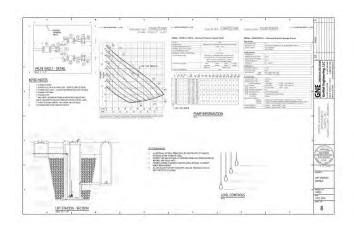
Spring 2017

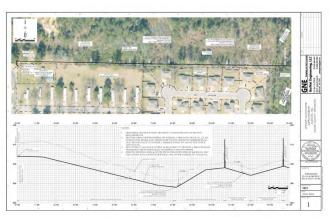
Construction Cost

\$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

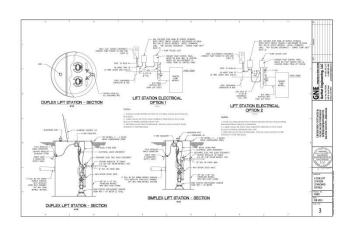
Spring 2016

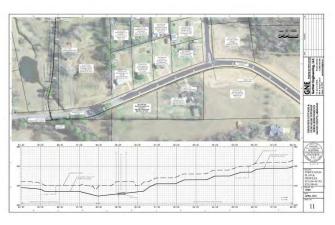
Construction Cost

\$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







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. Jason Temple, P.E. Chief Operating Officer Hot Springs Village POA 895 DeSoto Blvd Hot Springs Village, AR 71909 (501) 922-5522 itemple@hsvpoa.org

Completion Date

2015

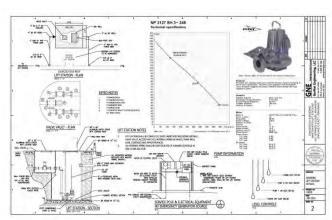
Construction Cost

\$150,000

Services Provided

Lift Station Design







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-of-way 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
duane.purtell@gmail.com

Completion Date

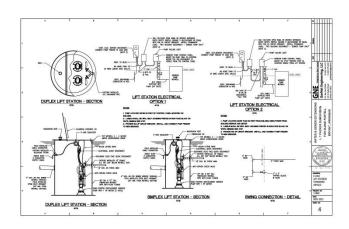
May 2013

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

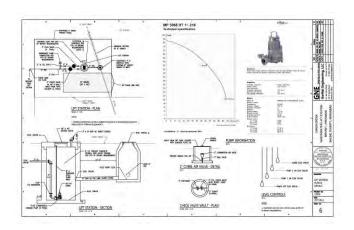
December 2013

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 ken@pbwastewater.com

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 ken@pbwastewater.com

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 ken@pbwastewater.com

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.

CIPP



Pipe Bursting



Client Contact

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

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 ken@pbwastewater.com

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 ken@pbwastewater.com

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
brian@bcoandh.com

Completion Date

Design 2019 Construction 2021

Construction Cost

\$4,000,000 (site work)

Services Provided

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





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

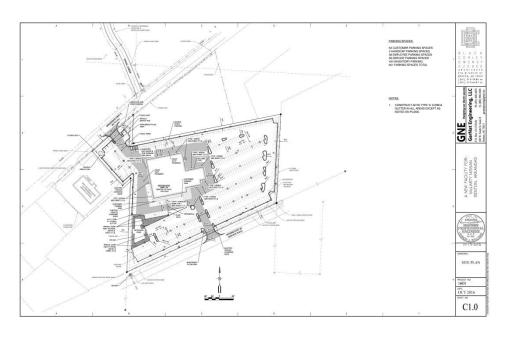
Completion Date

2017

Construction Cost

\$2,000,000 (site work)

Services Provided





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

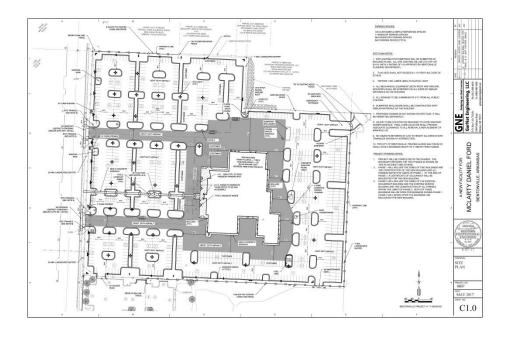
Completion Date

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

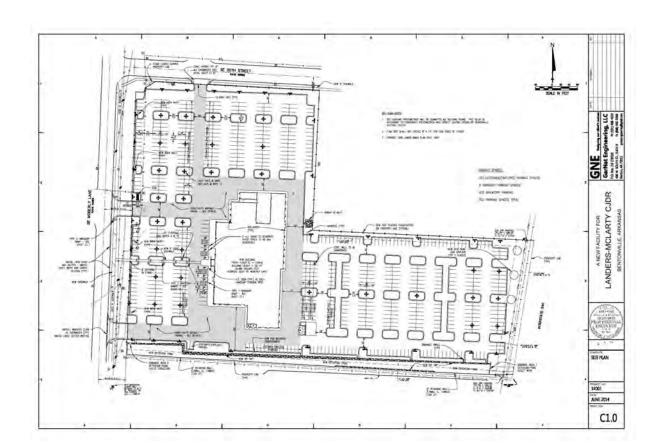
Completion Date

Summer 2015

Construction Cost

\$2,000,000 (site work)

Services Provided





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

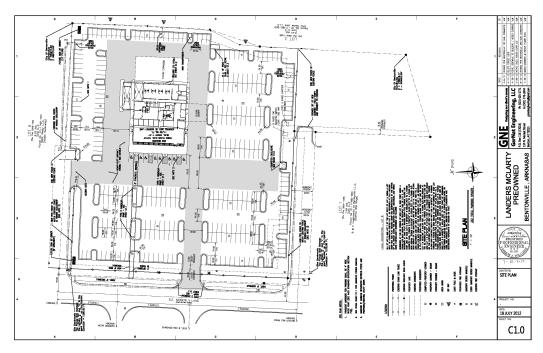
Completion Date

Spring 2013

Construction Cost

\$600,000 (site work)

Services Provided





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
ipjordan@cityofbryant.com

Completion Date

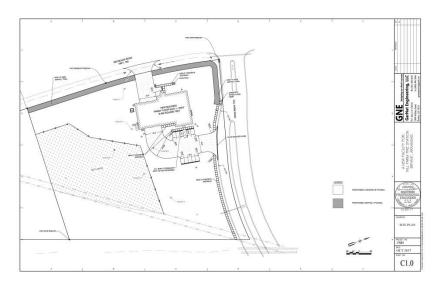
2018

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

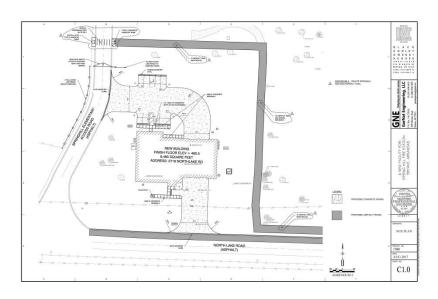
2018

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

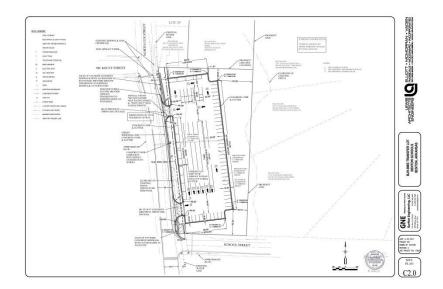
2017

Project Cost

\$210,000

Services Provided

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

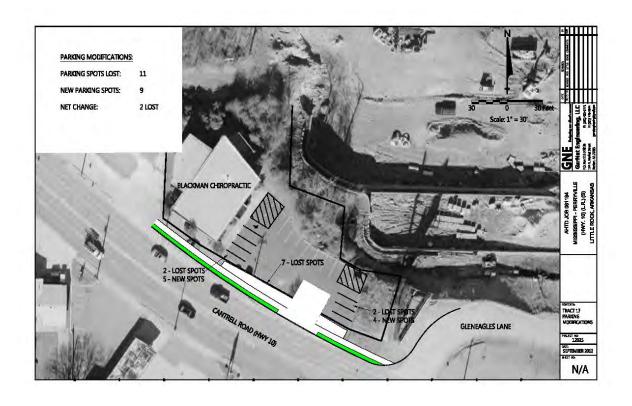
September 2012

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

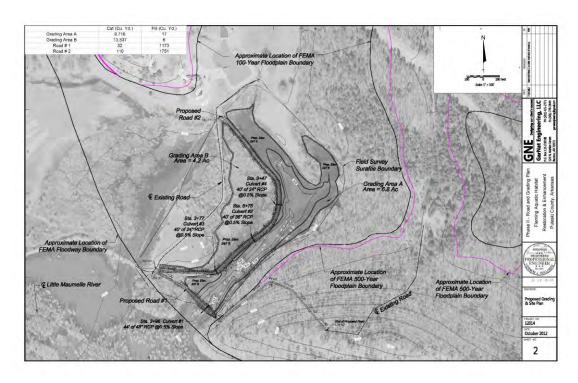
Summer 2013

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 right-of-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

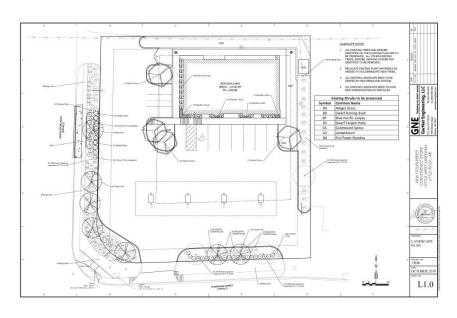
Design 2019 Construction 2019 & 2020

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







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

lteeter55@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

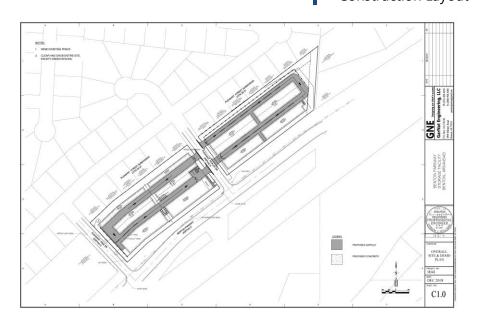
Civil Site Design

Half Street Improvements

Sidewalk Design in R-O-W

Planning Commission Approval

Construction Layout





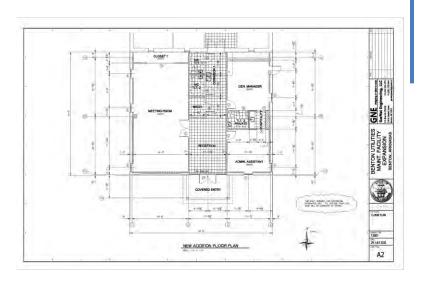
Maintenance Facility Expansion Benton Utilities Benton, Arkansas



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. Terry McKinney
General Manager
Benton Utilities
1827 Dale Street
Benton, AR 72015
(501) 776-5984
tmckinney@bentonar.org

Completion Date

Spring 2012

Construction Cost

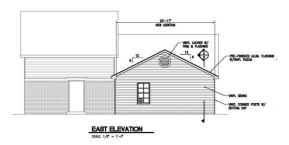
\$200,000

Services Provided

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

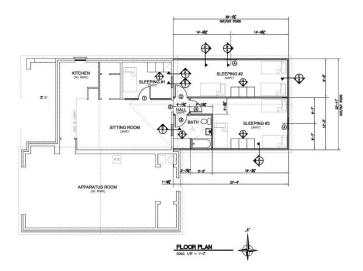


Northside Fire Station Expansion Benton Fire Department Benton, Arkansas



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 Bill Ford
Benton Fire Department
220 South Main Street
Benton, AR 72015
(501) 776-5964
bford@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



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

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

Completion Dates

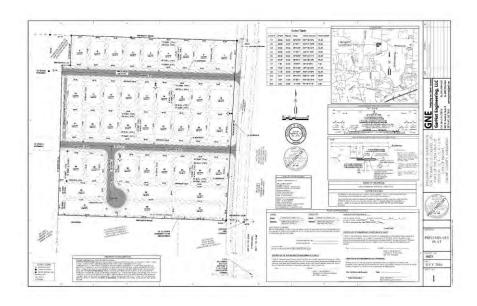
Phase 1 – 2016 Phase 2 - 2017

Project Cost

Not Disclosed

Services Provided

Surveying
Drainage Design
Utility Design
Subdivision Design
Environmental Permitting





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

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

Completion Dates

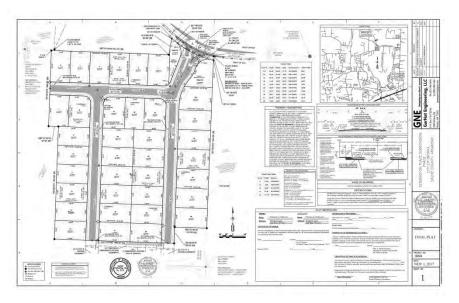
Phase 1 – 2017 Phase 2 - 2018

Project Cost

Not Disclosed

Services Provided

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





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

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

Completion Date

Phase 1 - 2016

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
- Marc Bottjer
- Tariq Morshed, E.I.
- 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 25 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
- 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



Jennifer Williams, P.E. GarNat Engineering, LLC

Jennifer Williams retired from the Arkansas Department of Transportation (ARDOT) with 28 years of experience as a civil engineer. During her career, she has 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



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



Marc Bottjer Project Engineer / Survey Party Chief GarNat Engineering, LLC

Marc Bottjer is a degreed civil engineer who serves as a project engineer and survey party chief for GarNat Engineering, LLC (GNE). Marc has 15 years of experience working on civil engineering, surveying, and heavy civil construction projects around the world. His primarily responsibilities at GNE include the design of utility extensions and drainage projects, preparation of easements for his design projects, construction layout as a survey party chief, and construction observation as a field engineer. Marc's construction experience makes him a very practical designer, which results in constructible designs that provide the contractor with the information he needs and demonstrate an attention to detail.

After graduating and prior to his employment at GNE, Marc initially worked as a construction engineer in the UK for 3 years for a heavy civil contractor on reinforced concrete pours and utility/drainage projects on various industrial sites. The next 6 years he worked in the UK and internationally for a large UK surveying firm. Project locations included all of the UK (England, Scotland and Ireland), Azerbaijan, Uganda, Libya, Angola, and Qatar. While working in Uganda, he married a girl from Arkansas and went to work as a field engineer for father-in-law's company – an asphalt paving company in Uganda named Jetpatcher Uganda Ltd. Shortly before his children reached school age, Marc immigrated to the United States to live in Little Rock where his wife was raised. While waiting for a green card, Marc worked a couple years as a carpenter/laborer on deck, fencing, and remodeling jobs.

Education

B.S. Civil and Coastal Engineering, University of Plymouth, 2002

Professional Credentials

- UK Offshore Oil Industry Safety Pass
- Part 4 Commercial diving pass
- CSCS Construction pass
- Confined space pass
- Advanced First Aid



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, 2019 B.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



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

Michael Cornish is a survey party chief/CADD Tech with over 10 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



GarNat Engineering, LLC

Designing our client's success

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: bvance@cityoftulsa.org

Chuck Harper

President

Harco Constructors

8060 Counts Massie Road

North Little Rock, Arkansas 72113

Phone: (501) 804-7207

chuck@harco.net

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: tshaw@cwswater.org

Greg Hooten

Water Superintendent

Guy Water Works

P.O. Box 12

Guy, Arkansas 72061

Phone: (501) 679-4585

E-mail: gphooten@yahoo.com

Eric Petty, P.E.

Manger, Operations Division

Little Rock Public Works

3313 J.E. Davis

Little Rock, Arkansas 72209

(501) 690-8109

E-mail: epetty@littlerock.gov

Daniel Freeman

Manager

Jefferson Water Users Association

111 Wishbone Farm Road

Jefferson, Arkansas 72079

Phone: (501) 425-6493

jefferson_water@centurytel.net



GarNat Engineering, LLC

Designing our client's success

Stephanie Griffin Executive Director

Habitat for Humanity of Saline County

404 W Walnut Street Benton, Arkansas 72015 Phone: (501) 773-6247

E-mail: Stephanie@habitatsalinecountyar.org

Ted Taylor, P.E. City Engineer City of Bryant 210 SW Third Street Bryant, Arkansas 72022 Phone: (501) 943-0450

E-mail: ttaylor@cityofbryant.com

Dee Fiser Developer

Fiser Development

P.O. Box 914

Bryant, Arkansas 72089 Phone: (501) 454-4070 E-mail: dee@fiser.com

Jason Temple, P.E.

Director of Public Services Hot Springs Village POA

895 DeSoto Blvd.

Hot Springs Village, Arkansas 71909

Phone: (501) 326-8244 E-mail: <u>jtemple@hsvpoa.org</u>

Roger Barker

Owner

Barker Excavation, Inc. 10085 Congo Road Benton, Arkansas 72019 Phone: (501) 860-3873

E-mail: barkerexcavation@gmail.com

Kim Cupples East End Water

Improvement District #1

20621 Arch Street

Little Rock, Arkansas 72206 Phone: (501) 951-1924

E-mail: eastendwater@att.net

Jeff Arey

County Judge

Saline County, Arkansas 200 N. Main Street, Room 117

Benton, Arkansas 72015 Phone: (501) 840-2270

E-mail: <u>ieff.arey@salinecounty.org</u>

Brian Black, AIA

Principle

Black, Corley, Owens & Hughes, P.A.

219 West South Street
Benton, Arkansas 72015
Phone: (501) 249-4443
E-mail: brian@bcoandh.com

Brooks Livers

Owner

Liveco Construction + Real Estate

12057 I-30

Benton, Arkansas 72015 Phone: (501) 412-5838

E-mail: blivers@livecoteam.com

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



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 08/25/21

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

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 NAME:					
NATIONWIDE INS - STILWELL AGENCY									FAX (FO1)	215 1001	
PO Box 67										312-1001	
Benton, AR 72018						ADDRESS: nsuru@sbcglobal.net					
The state of the s						INSURER(S) AFFORDING COVERAGE					
INSURED GarNat Engineering IIC						INSURER A: Nationwide General Insurance				23760	
Carnat Bigineering and						INSURER B :					
GarNat Properties LLC						INSURER C:					
PO Box 116					INSUR	ER D :					
Benton, AR 72018						ER E :		N. V. 1822 VAN DE BESTELLE SE			
						INSURER F:					
COVERAGES CERTIFICATE NUMBER:						REVISION NUMBER:					
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.											
INSR LTR	TYPE OF INSURANCE		SUBR	POLICY NUMBER		POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)		LIMITS		
	X COMMERCIAL GENERAL LIABILITY							EACH OCCURRENC		000,000	
	CLAIMS-MADE X OCCUR							DAMAGE TO RENTE PREMISES (Ea occu	-D	300,000	
								MED EXP (Any one p	and the comment of the state of	5,000	
A		x			813			PERSONAL & ADV IN		000,000	
	GEN'L AGGREGATE LIMIT APPLIES PER:			ACPBPOG3008463		02/01/21	02/01/22	GENERAL AGGREG		000,000	
	POLICY PRO- JECT LOC									000,000	
	OTHER:							PRODUCTS - COMP	OP AGG \$ 2,	000,000	
	AUTOMOBILE LIABILITY		-					COMBINED SINGLE			
	ANYAUTO OWNED AUTOS ONLY HIRED AUTOS NON-OWNED							(Ea accident)			
								BODILY INJURY (Per			
								BODILY INJURY (Per PROPERTY DAMAG	- 1	200.00000000000000000000000000000000000	
	AUTOS ONLY AUTOS ONLY							(Per accident)	• •		
	UMBRELLA LIAB OCCUP								\$		
	EXCESS HAD OCCUR							EACH OCCURRENCE	CE \$		
	EXCESS LIAB CLAIMS-MADE					-		AGGREGATE	\$		
	DED RETENTION \$ WORKERS COMPENSATION								\$		
	AND EMPLOYERS' LIABILITY	N/A		54000000-05 100-107000 821000 820-00000000000000000000000000000000	190	06/13/21	06/13/22	PER STATUTE	OTH- ER		
A	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?			ACP WC 3008770				E.L. EACH ACCIDEN	T \$ 1,	000,000	
	(Mandatory in NH)							E.L. DISEASE - EA E	MPLOYEE \$ 1,	000,000	
	If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLI		000,000	
В	Professional Liab			PGIARK09263-02		02/01/21	02/01/22	1Mil/2Mil			
			<u></u>								
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)											
N N											
CEF	RTIFICATE HOLDER		CANC	CANCELLATION							
TH							SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.				
		1									
AUTHORIZED REPRESENTATIVE											

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