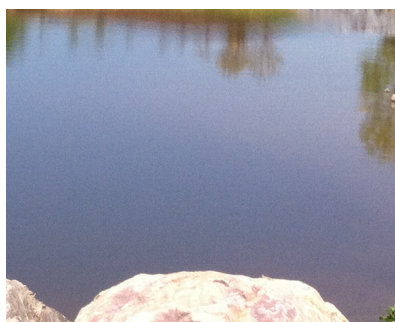
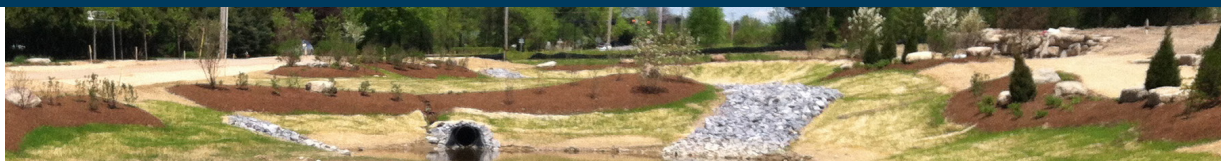


ENGINEERS

CONSULTANTS

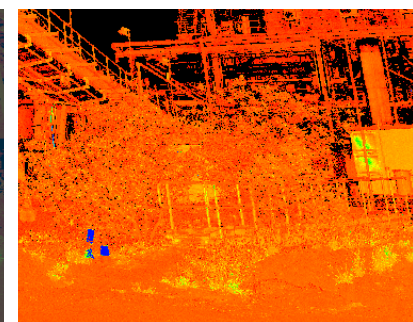
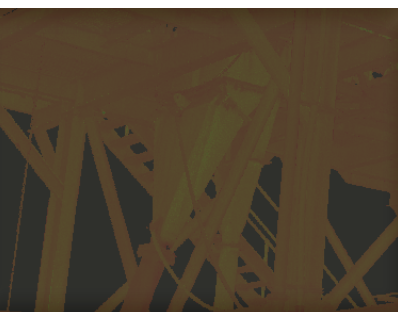
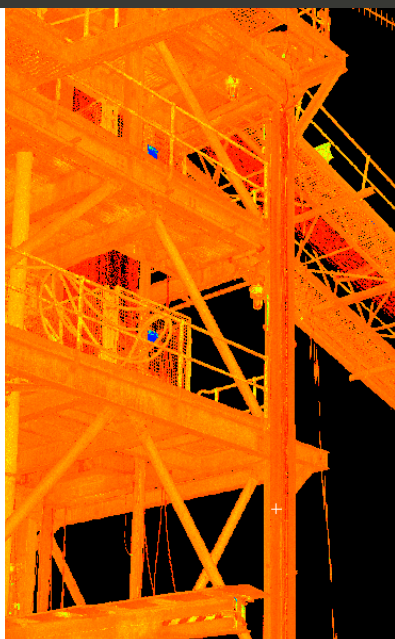
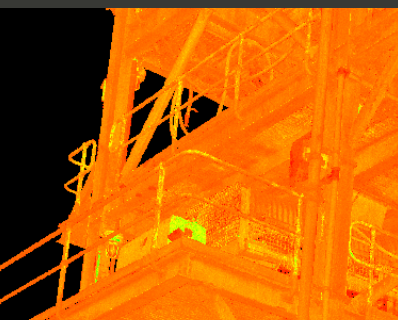
DESIGNERS

SURVEYORS



CIVIL & SURVEY

FULL DISCIPLINE CONSTRUCTION ENGINEERING



SAMUEL, SON & CO.

COLUMBIA, TN



Constructed on a 30 acre Greenfield site, this facility houses a world-class hybrid automotive blanking line with a width capability up to 2050mm and is further enhanced with the ability to inspect, clean, level and lubricate sheet and produces rectangular, chevron, and other custom shapes. GSE provided civil, rail, architectural, life safety, and foundation design for Phase 1 and 2 of this project. Phase 1 was completed as a design-build partnership with Brasfield & Gorrie, LLC. The facility consists of over 200,000 square feet of environmentally controlled process and coil storage along with an administrative office building, tornado shelter, and pallet storage. Phase 2 includes a new 2133mm wide slitter.

UNIVERSITY OF MOBILE

EIGHT MILE, AL



University of Mobile is a private Baptist university which has seen rapid growth since its inception in 1952. This growth warranted the addition of new residence halls, additional student parking areas, new baseball field house and main entrance redesign. GSE completed ALTA and subdivision platting of the entire campus property and performed several topographic surveys on campus which aided in the design of all updates throughout the campus.

CENTENNIAL PLAZA

GULFPORT, MS



Centennial Plaza is a historical site which once housed a Veterans Administration facility. It is being converted to a traditional neighborhood development. GSE provided topographic and tree surveying to aid in the design of the site improvements. Civil design for the overall site has included infrastructure improvements. GSE has also provided civil engineering services for the Holiday Inn resort, the first anchor tenant for this development. GSE will continue to provide services as new phases are developed.

AIRBUS FINAL ASSEMBLY LINE

MOBILE, AL

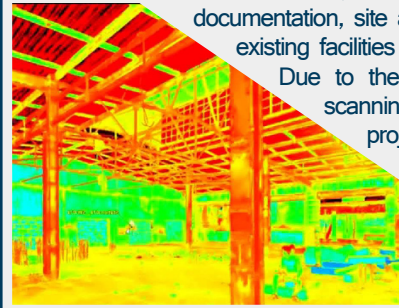
Along with being the engineer of record for Airbus Final Assembly, GSE was the third party certifying surveyor for Brasfield and Gorrie during the construction of the final assembly line and logistics building. GSE survey crews also performed construction layout for several contractors. This included layout for the overhead cranes, baseline and station points in the final assembly line. Additionally, GSE was selected as the layout surveyors of record for the MAAS Aviation paint hangar. Lastly, GSE survey crews performed pile As-Builts on all buildings on-site.



D E S I G N

3D SCANNING

GSE utilizes a Leica P20 Scanstation for a variety of applications, and through experience has discovered that even the more complicated projects can be completed with ease when utilizing a 3D scanner. Application of a 3D scanner include, but are not limited to, raw material volume documentation, site as-built, pipe and steel modeling of existing facilities for retrofit, and roadway surveying.



Due to the effectiveness and timeliness, 3D scanning has allowed GSE to complete projects for clients that would not traditionally need a surveyor.

- Raw Material
- Roadway
- Industrial Facilities
- Commercial Buildings

SITE DESIGN & LAYOUT

GSE performs site design and site layout services to assist clients in planning their developments. We work with our client to understand their needs for the project. Our staff then researches the local, state and federal codes for the project location at hand and combines this information to find the most economical, efficient and permissible layout and design for the project.



- Industrial Facilities
- Commercial Properties
- Residential
- Government
- Developers

CONSTRUCTION SERVICES

GSE provides services prior to construction including contractor selection assistance and bid analysis. During construction, GSE provides services including construction observation, SWPPP/erosion and sedimentation control monitoring services and full time on-site construction monitoring, if required. Post-construction services include assistance with close out paperwork, as-built drawing review and construction certification, if required.



- Industrial Facilities
- Commercial Properties
- Residential
- Government
- Developers

STORMWATER DESIGN & MODELING

GSE provides full design services for paving, grading and drainage projects. We utilize the latest software to model stormwater systems. The sizes of these systems range from small commercial developments to large industrial sites with complex multi-faceted systems. Our engineers and designers are proficient in stormwater design for both water quality treatment and water quantity attenuation.



- Roadway Design
- Multi-Family Complexes
- Industrial Facilities
- Site Improvements

S E R V I C E S

PERMITTING

GSE has worked hard to gain the respect of state and local regulatory agencies with our professionalism and adherence to quality standards, as well as our vigilance on behalf of our clients. Our in-depth knowledge of the regulations ensures our ability to anticipate the challenges. GSE provides the following permitting services: application preparation, plan submittal, response to review comments and any necessary meetings with permitting agencies. We strive to streamline this procedure to ensure the client receives their documents as quickly as possible.

- Developers
- Private Landowner
- Industrial Facilities
- Commercial Properties



TOPOGRAPHIC / AS-BUILT / ALTA

GSE performs topographic/as built surveys to assist in the design and/or the documentation of properties as required by clients. GSE utilizes the latest in survey technology to complete these surveys. GSE manages the entire process of developing an accurate survey whether it be to determine property lines, developing a map with contour, physical features and other physical representations of any portion of property, or meeting the requirements set forth by title insurers.



- Civil Site Design
- Banks
- Private Landowners
- Insurance Companies
- Title Companies
- Developers

CRANE & RAIL SURVEYING

Perform squareness surveys of overhead and container cranes, wheel surveys for cranes to confirm alignment and tilt, as well as, runway straightness, span and elevation as required by the crane manufacturers and national standards. Improper tracking leads to premature wheel and rail wear, resulting in costly repairs and downtime.

- Industrial Facilities
- Ports and Harbors
- Crane Service Companies



CONSTRUCTION LAYOUT

The process of interpreting construction plans and marking the location of the proposed new structures such as roads, buildings bridges and utilities to ensure a project is built according to engineering design plans. These staked reference points guide the construction of proposed improvements on the property. This service is helpful in ensuring the construction project is completed on schedule, on budget and as intended.



- Construction Firms
- Industrial Facilities
- Commercial Properties
- Residential
- Developers

BILSTEIN

BOWLING GREEN, KY



GSE provided full engineering services for Bilstein's first mill constructed outside of Germany. Strategically located to serve the region's growing automotive industry, the facility is constructed on a 61 acre Greenfield site. GSE provided site layout, paving and grading design, stormwater modeling, water and sanitary sewer service design, coordination of utilities, rail spur design, and permitting with local and state agencies for this project. Phase I included the main steel processing facility with adjacent driveways and access, separate access points for truck/employee/visitor traffic, stormwater collection and detention facilities, and planning for future rail spur.

SSAB

AXIS, AL

GSE has supported SSAB with full engineering design, survey, and 3D scanning for over a decade. Civil projects include roadway design and modifications, drainage studies which led to numerous improvements, site grading, rail spur modifications, and utility coordination. GSE's 3D scanning capabilities have been utilized at the lime injection, solids handling, vacuum tank degasser, and QL5 facilities. Crane rail surveys were performed in QL6 and Blastech areas. GSE's survey teams have established horizontal and vertical controls for most of the improvements throughout the site.



MOBILE COUNTY

MOBILE, AL

GSE provides survey and civil engineering services for Mobile County Pay-As-You-Go roadway projects. Survey services include right of way survey, map and deed preparation, and field monumentation. Civil Engineering design includes roadway centerline alignment, profile, cross sections, drainage facilities, intersection design, pavement sections, erosion and sediment control, traffic control, utility coordination and cost estimate development. Construction services include bid evaluation, full time on-site monitoring, review of geotechnical tests, monthly pay estimate preparation, and As-Built documentation.



LA MAISON APARTMENTS

SARALAND, AL

GSE provided survey and civil engineering design for the 216 unit multi-family development including civil design and permitting services of for the 23 acre gated apartment complex. Scope of work included site plan, paving, site grading, storm water management system, utility design, erosion and sediment control, and construction observation and certification. Previous to commencing design, GSE also performed topographic and boundary survey of the property.



SERVICES

CIVIL

Site Plan Development/Master Planning
Paving, Grading & Drainage Design
Storm water Modeling
Site Utilities
Erosion Control/SWPPP
SWPPP Compliance Inspections
Roads/Transportation

SURVEY

Boundary
Construction Staking
Elevation Certificate
Roadway Layout
Topographic
Utilities
Crane Alignment
Control Surveying
As-Builts
Easements
ALTA Survey
3D Scanning
Laser Tracker Technology / Metrology

CONSTRUCTION SERVICES

Environmental Permitting
Construction Inspections
Cost Estimating
Program Management
Construction Management
Procurement

ELECTRICAL

Medium Voltage
Transformers
Switch Gears
Ductbank/Distribution
Substation Layout
Motors
Grounding
Low Voltage
Panel boards
MCC/Switch Boards
Lighting
Lightning Protection
Data/Telecom
Security
Access Control
PA Systems
Wireless Access Points
Fiber Optics
Photovoltaics
Power Studies
Arc Flash
Short Circuit
OCPD Coordination

SPECIALTY

Design-Build
BIM
LEED
Fast-Track
Site Selection

MECHANICAL

HVAC Systems
Plumbing
Ventilation Systems
Dust Collection
Medical Gas
Hazardous Exhaust Systems
Paint Booths
Fume Hoods
Smoke Evacuation
Stairwell Pressurization
Clean Room Design
Boiler System Design
Conveyors/Material Handling
Building Automation
Energy Modeling

BUILDING

General Arrangement
Interior Design
Life Safety

PROCESS/CHEMICAL

Piping
Instrumentation
PFD
P&ID
Equipment Specification
Pressure Vessels
Stress Analysis

STRUCTURAL

Deep Foundations
Equipment Foundations
Steel Framing
Load Bearing Masonry
Load Bearing Metal Stud
Precast and Tilt-Up
ICF (Insulated Concrete Forms)
Concrete Restoration
Forensic Analysis
Historic Preservation
Seismic Retrofit
FEMA/Tornado/Wind Resistant Design
Blast Design

FIRE PROTECTION

Active System
Sprinkler/Stand Pipe
Fire Alarm
Clean Agent
Foam
Passive System
Life Safety
Fire Ratings
Performance Based Solutions
Insurance/Underwriter Consultation
Fire and Egress Modeling
Smoke Management
Fire Pumps/Water Supply
Failure Analysis

ABOUT US



Gulf States Engineering, Inc. (GSE) is a multidiscipline engineering firm with a wide variety of experience in heavy industrial, commercial, and government projects. GSE is an employee-owned consulting firm founded in 1998 staffing 90 highly experienced engineers and designers, most of whom have been with the company for over 10 years. The firm's staff includes planners, multi-disciplinary engineers (Structural, Civil, Mechanical, Chemical, Electrical, and Fire Protection), surveyors, and program/construction managers. GSE is headquartered in Mobile, AL and has regional offices located in Gulfport, MS and Nashville, TN.

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NASHVILLE, TN 37211

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