



# INDUSTRIAL & MANUFACTURING FACILITIES

BUILDINGS & INFRASTRUCTURE FOR ADVANCED PROCESSES

WDG | ARCHITECTS ENGINEERS

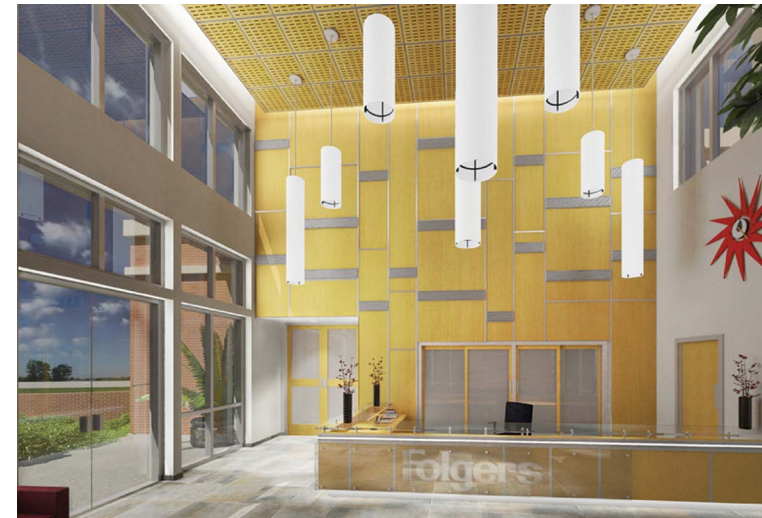


WDG was formed in 1990 as an in-house Industrial Architecture and Engineering department within a larger, established process engineering firm. The department was founded on the principle that industrial clients need design experts who understand their work and can design industrial buildings. In 2009, WDG was purchased by the department's general manager, officially marking WDG as a separate entity. Staffing, leadership, qualifications, and experience have remained the same.

# architecture, engineering and masterplanning

Working as a collaborative entity, the architects and engineers of WDG continue to work on a variety of projects for industrial and manufacturing clients including laboratories, control rooms, administration buildings, warehouses, and more.

WDG has the vitality and energy of a young organization but the experience and breadth of knowledge of a firm over 40 years old. We understand what you do because we have four decades of experience working for industrial and manufacturing clients.







## MARATHON OIL

MAJOR EXPANSION, GARYVILLE, LA

In 2009, WDG provided comprehensive architectural and engineering services to Marathon Oil in the design of seven critical refinery buildings including:

GME ADMINISTRATION BUILDING

Two-story, 65,000 square foot building

NORTH ZONE SHOP

Maintenance and workshop space

SOUTH ZONE SHOP

Maintenance and workshop space

LABORATORY BUILDING

Renovation and 9,170 square foot addition

MAINTENANCE MACHINE SHOP

Space for repair and storage

WAREHOUSE BUILDING

Materials storage

SECURITY BUILDING

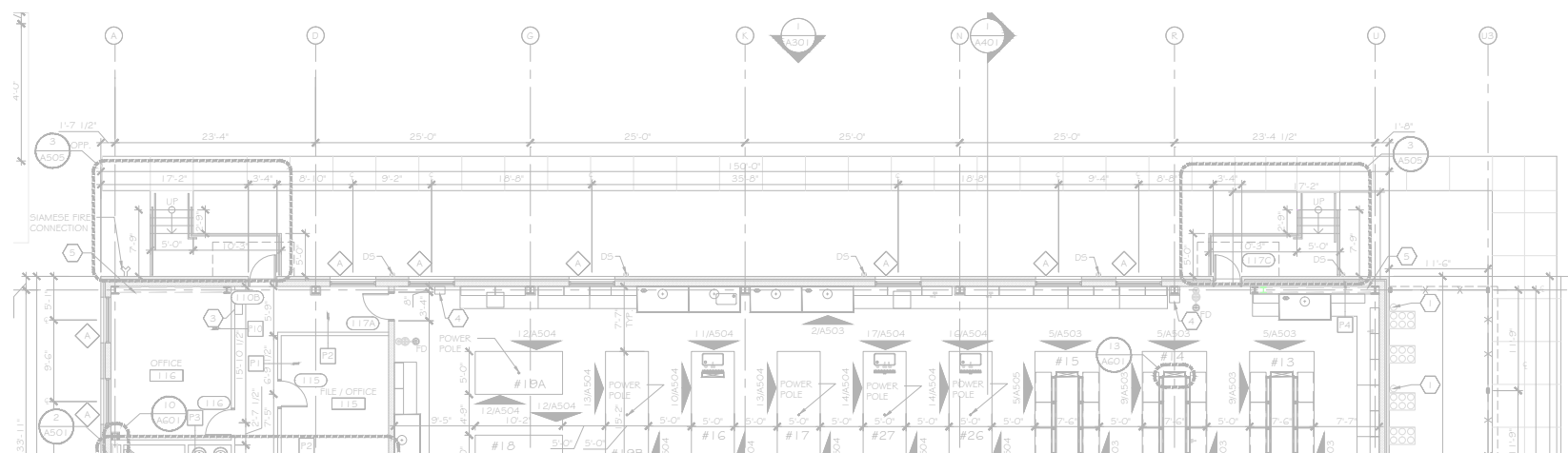
7,440 square foot training and office space



## MURPHY OIL USA, INC.

QUALITY CONTROL LABORATORY BUILDING, MERAUX, LA

WDG provided architectural and engineering design services for a new blast resistant 15,000 square foot Quality Control Laboratory adjacent to an existing refinery. The laboratory contains 21 chemical fume hoods and 15 general exhaust valves to maintain flow and pressure relationships in the main laboratory, hydrofluoric acid laboratory and knock engine octane test room. The HVAC system is a variable air volume system with chilled water cooling, SCR-controlled electric heating, and DDC controls for precise temperature, humidity, and air flow control. Special acid-resistant plumbing systems and an extensive laboratory gas distribution system were provided for this facility. The project was awarded the ABC Award for Excellence.



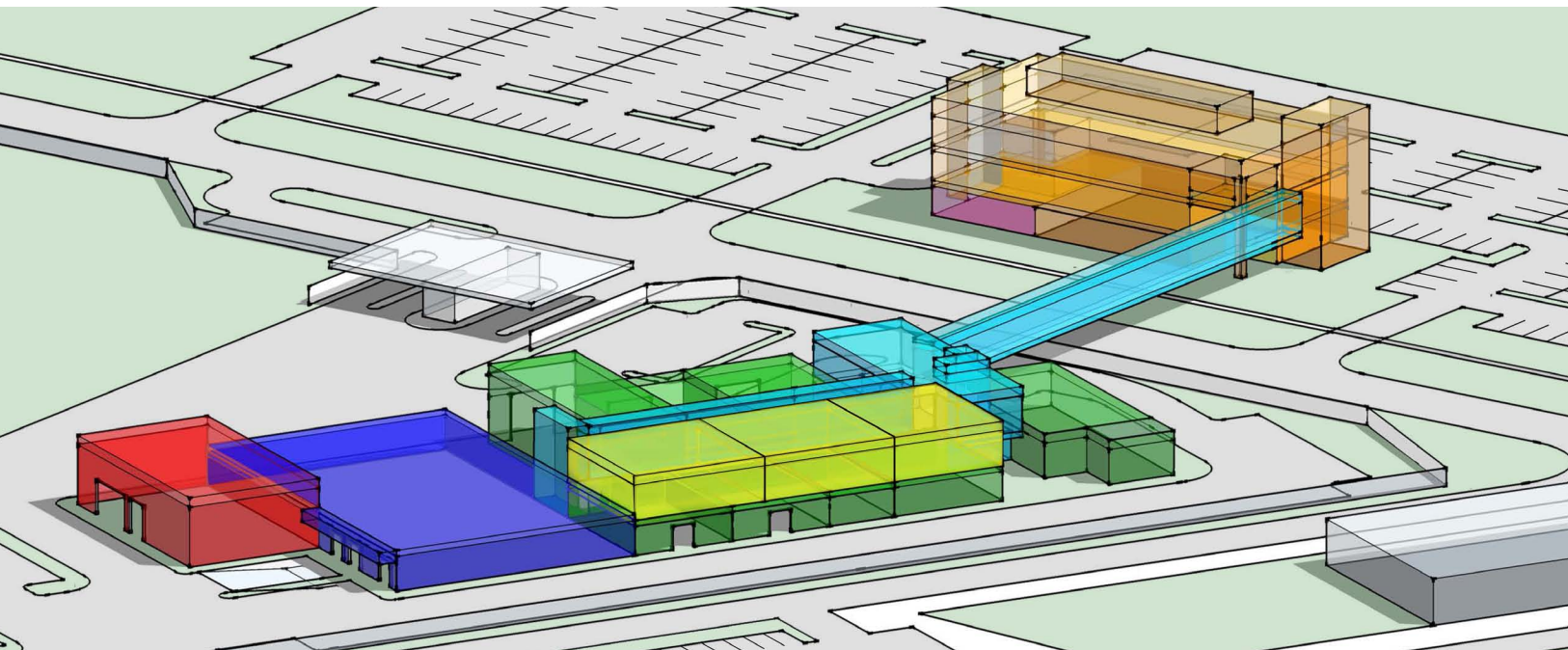




### VALERO REFINING COMPANY

#### CAMPUS MASTERPLANNING, SOUTHEAST LOUISIANA

WDG is providing on-going campus masterplanning services to Valero. The plan will accommodate refinery operations, maintain safety and security, allow for ease of travel, and support projected growth. WDG completed the programming and code review phase and developed conceptual site plans, which will result in redefined pedestrian and vehicular circulation and establish a plan for new plant buildings and infrastructure. Associated budgets and construction schedules were included in the package to assist the client with capital projects forecasting. In concert with masterplanning, WDG has begun design for several plant buildings such as administration, warehouse, maintenance, and firehouse facilities.



**QUALITY CONTROL LABORATORY & BLAST REINFORCEMENT, NORCO, LA**  
WDG provided comprehensive architectural and engineering services to Valero St. Charles for the design of a new 11,000 square foot laboratory. Since that time, Valero built a new process unit near the laboratory, thus including the lab in the blast zone. In 2012, WDG assisted Valero with an assessment of various options for reinforcing or relocating the lab. In 2013, WDG provided design services to reinforce the laboratory to meet blast resistance criteria including foundation, columns and beams, structural, roofing, roof trusses, door/window hardening, and relocation of some required openings and components of egress.



#### MeOH CONTROL ROOM, LABORATORY & CHANGE ROOM COMPLEX, NORCO, LA

WDG designed an MeOH Control Room and Laboratory Building for Valero's St. Charles Refinery. The new one-story, 18,000 square foot building is a combination laboratory and control room with a change facility for field operations personnel.



**ADMINISTRATION BUILDING ASSESSMENT & RENOVATION, NORCO, LA**  
WDG performed facility assessments and provided design services for comprehensive renovations to an existing 25,600 square foot administration building at Valero's St. Charles Refinery. The assessment was initially undertaken to inform the direction of design for a renovation to the cafeteria area of the facility, but grew to include the roof, windows, and exterior skin to ascertain and mitigate the cause of persistent water infiltration.

**WAREHOUSE BLAST RESISTANT REINFORCEMENT, MERAUX, LA**  
WDG provided architectural and engineering design services for the reinforcement of existing Warehouse No. 1 offices and storage area at Valero's Meraux facility. An evaluation determined the building could be subject to a building damage level outside Valero's acceptable risk criteria. In response, WDG designed roofing, wall covering and window and door covering, reinforcing the building to withstand the overpressure and impulse, within the safe range.





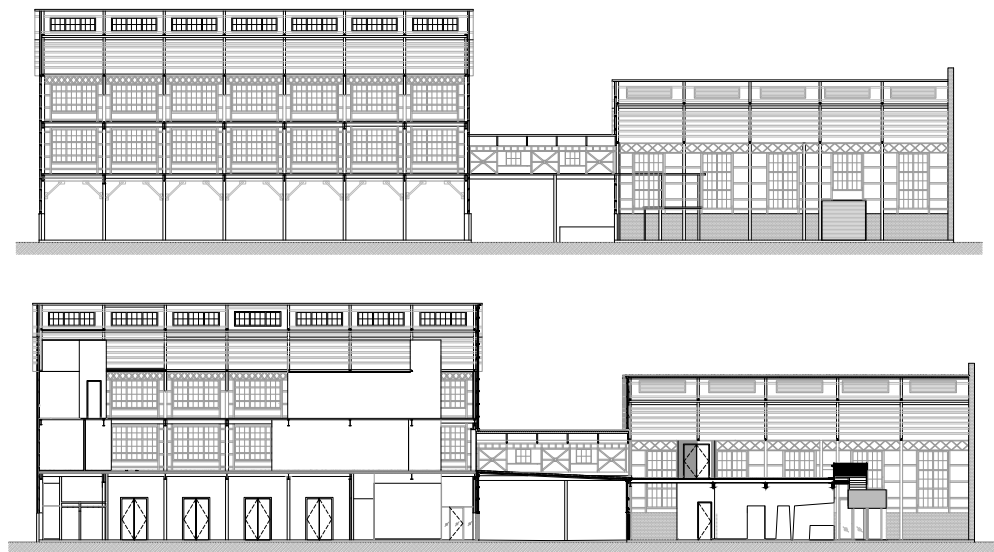
## THE FOLGER COFFEE COMPANY

### MULTIPLE PROJECTS, SOUTHEAST LOUISIANA

Since 2009, WDG has been awarded various projects for Folgers facilities, owned by The J.M. Smucker Company. The firm was initially tasked with the renovation of locker rooms at the largest Folgers production facility located in Orleans Parish. Since then, WDG has formed a trustworthy and lasting relationship with Folgers and The J.M. Smucker Company, completing more than 70 architectural and engineering design projects. The projects—including warehouse additions, HVAC design, campus masterplanning, as well as design for two new administration buildings—were completed for various Folgers facilities located throughout the Greater New Orleans area.

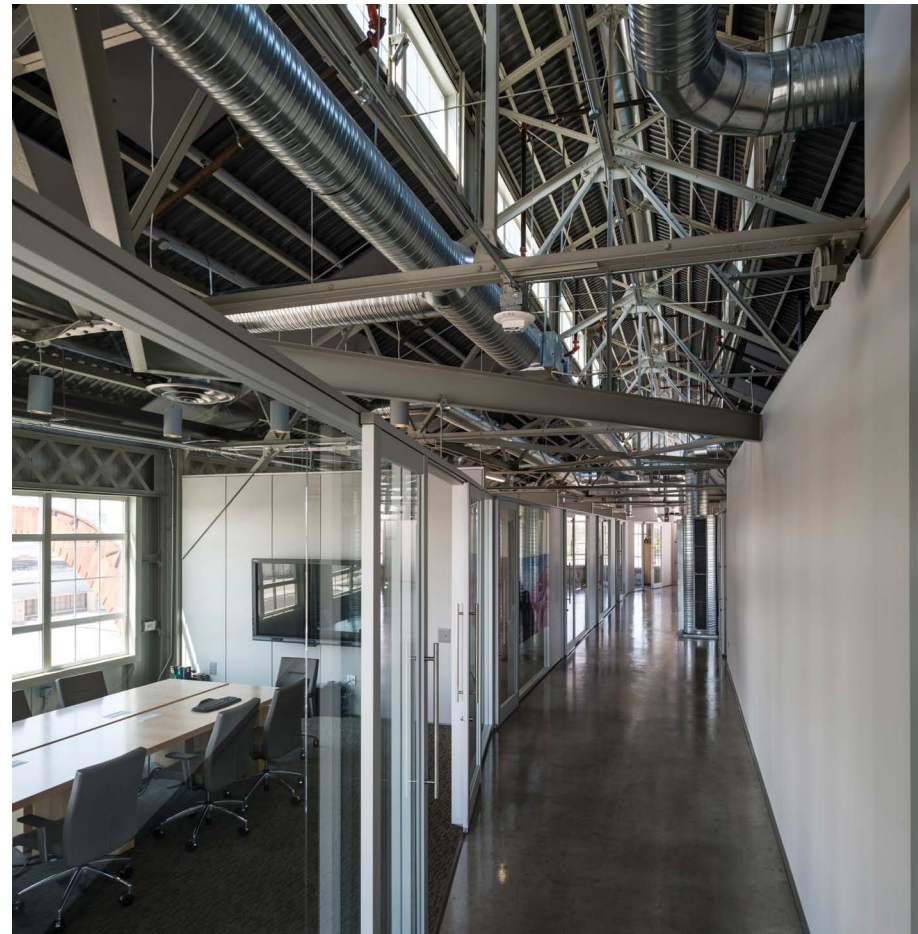
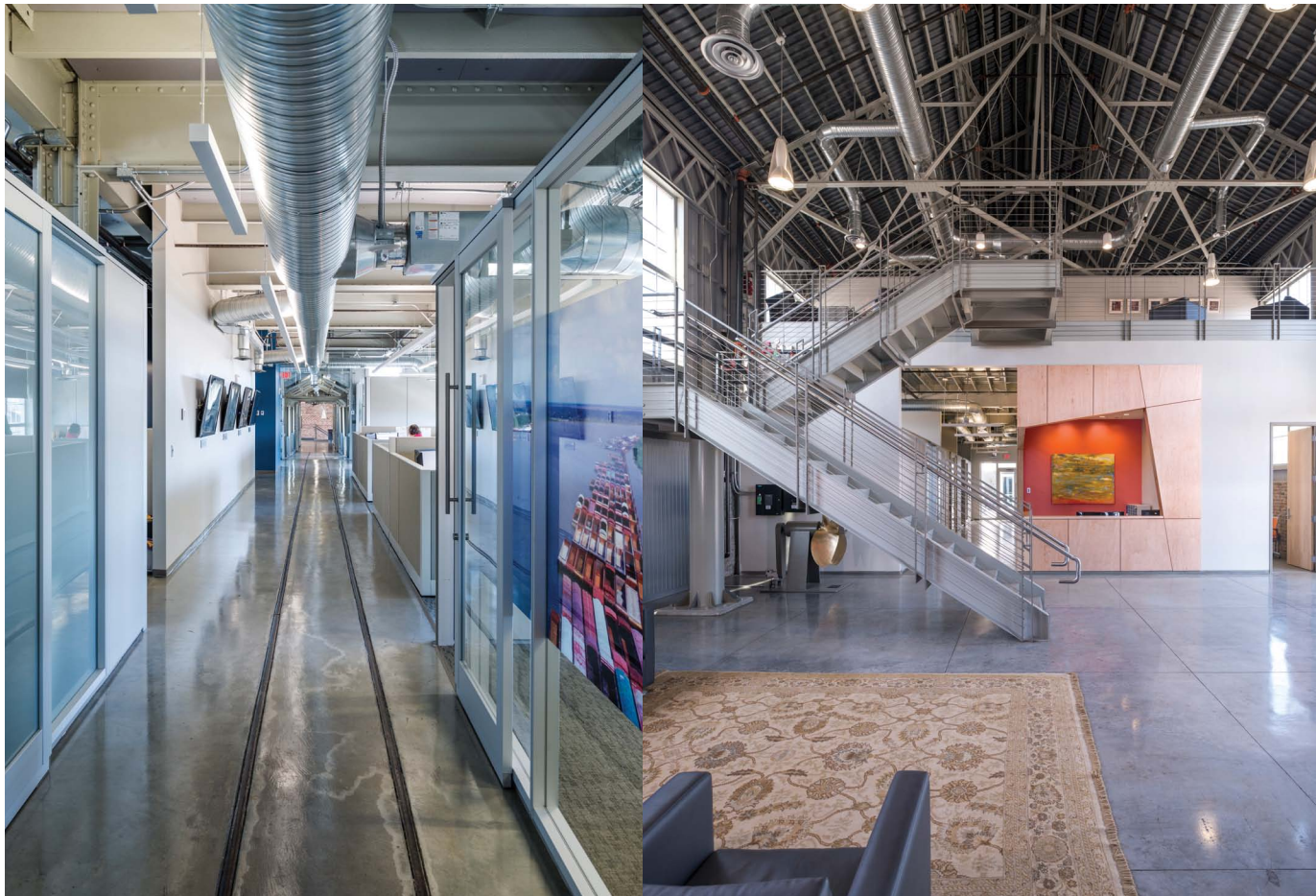






## TURN SERVICES BARGE FLEETING COMPANY

ADMINISTRATIVE & OPERATIONS COMPLEX, NEW ORLEANS, LA  
WDG provided architectural and engineering design services for the adaptive-reuse of a 26,000 square foot historical building located in New Orleans' Bywater neighborhood. The building was originally an alms house, then a Civil War hospital, and later, housed a molasses and syrup company. The current owners of the property converted the building into office space to include regulatory compliance, sales and executive offices. The facility also includes space for tug boat monitoring and dispatch, storage for tug crew supplies, and an area for boat engine maintenance. The project was awarded the Louisiana Landmark Society Award for Excellence and the AIA Merit Award for Restoration & Rehabilitation.







## ST. BERNARD PORT, HARBOR & TERMINAL DISTRICT

ADMINISTRATIVE OFFICE & SECURITY COMPLEX, CHALMETTE, LA  
WDG provided architectural and engineering services for a new 26,000 square foot office space with and an additional 8,000 square feet of covered parking and core area. The structure encompasses three stories of steel, metal panel skin and glass and houses the operations and administration offices for the port. The new space includes a 1,000 square foot executive board room and more than 6,000 square feet of public leasable space. The project was FEMA funded.



## ASSOCIATED TERMINALS

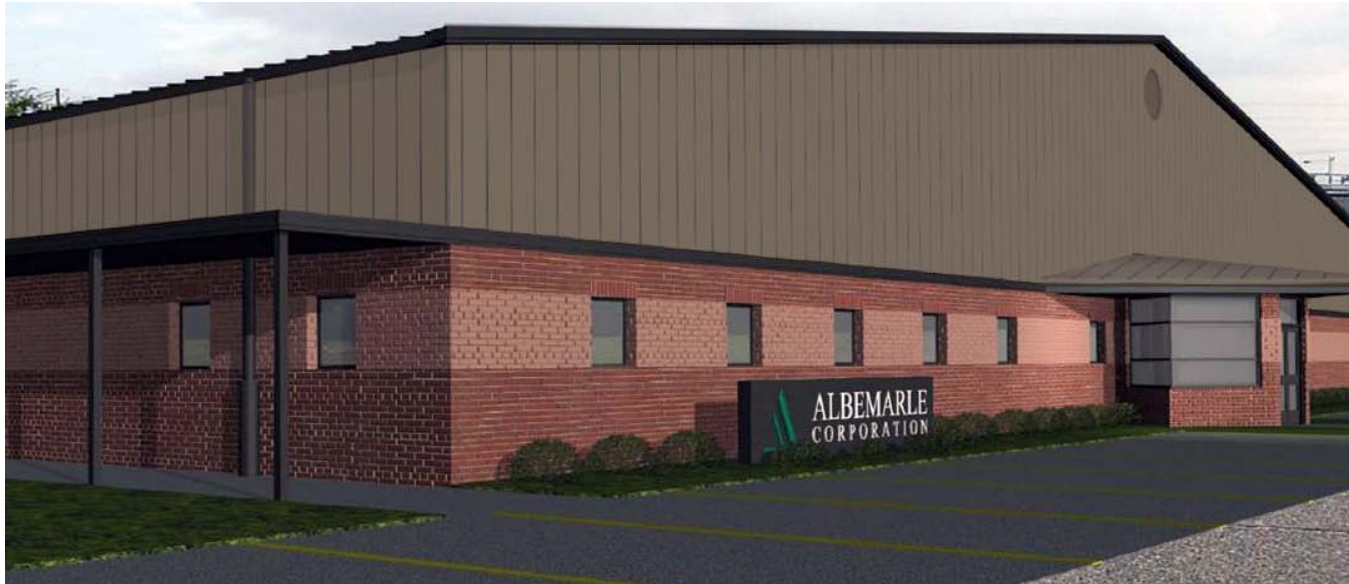
OFFICE BUILDING, ST. BERNARD PORT, HARBOR & TERMINAL DISTRICT, ARABI, LA  
WDG provided architectural and engineering services for the major exterior and interior renovation of an existing shell office building. The concept for the project was to incorporate views of the river and port activity from a roof level terrace. Windows were enlarged to provide more views of the river and natural light for the occupants. The interior space is primarily offices and the entry is designed with a large open lobby space for gatherings. The project was FEMA funded.



## JOTUN PAINTS INC.

BLENDING FACILITY, BELLE CHASSE, LA  
WDG provided architecture and engineering design to Jotun Paints Inc. for a new Blending Facility. The scope of the project included a 14,000 square foot building for manufacturing paint products. Ancillary spaces included a 200 square foot retain storage room, 175 square foot labeling room, 525 square foot laboratory and toilets. Materials are stored in closed containers or pumped in through a closed system originating from a nearby location onsite.



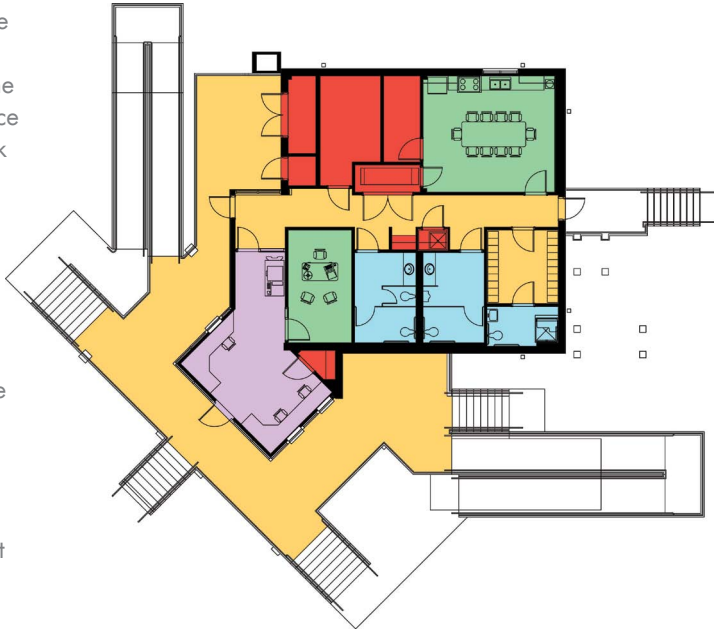


### ALBEMARLE CORPORATION

LABORATORY & OFFICE, BATON ROUGE, LA  
WDG provided design services for the development of a single story, 26,000 square foot facility to house testing laboratories and associated office space for the Albemarle Corporation. The laboratory spaces were classified as Class B & C in accordance with NFPA 45, and the pre-manufactured facility included brick veneer on the lower portion of the building and metal wall panels above with a standing seam metal roof.

### CONOCO PHILLIPS ALLIANCE REFINERY

SECURITY BUILDING, BELLE CHASSE, LA  
WDG provided design services for the construction of three security buildings at three different sites within the Belle Chasse Conoco plant. The three buildings—the 3,500 square foot Security Command Center, the 1,800 square foot Security Screening Building, and the 400 square foot Marine Security Screen Building—were part of an overall security upgrade project partially mandated and funded by the U.S. Department of Homeland Security.



### TULANE UNIVERSITY

CENTRAL PLANT EXPANSION, NEW ORLEANS, LA  
WDG provided architectural, mechanical, and electrical engineering services to increase the capacity of a chilled water plant and improve services for the entire campus-wide chilled water distribution system by means of engineering techniques and automated controls. The project included demolition of the Logistics Building and construction of an addition to an existing power plant designed to reflect the existing aesthetic and create a seamless edifice. The addition accommodates a new 4,500 ton chiller, pumps, cooling towers, control system, new and replaced 480V and 416V electrical switchgear, and space for logistical support.







# other industrial projects

## HONEYWELL INTERNATIONAL

GC LABORATORY, GEISMAR, LA  
WDG provided design services for the construction of a new GC Lab Facility for Honeywell, located within an existing plant. The new facility is approximately 7,200 square feet with a main lab space, as well as smaller specialized lab rooms, storage areas, conference room, break room, offices, toilet facilities, and supporting mechanical/electrical rooms.

## PLACID REFINERY

LABORATORY ASSESSMENT & RENOVATION, PORT ALLEN, LA  
WDG provided an existing conditions assessment of the laboratory at Placid Refinery and developed a full scoping document for renovations. Following the assessment, WDG provided architectural and engineering design services for the renovation, improving pressurization controls and environmental safety, updating laboratory finishes and cabinetry, replacing bottle wash station, upgrading all gas piping and gas piping management systems, as well as improving instrument air quality. The upgrades enable Placid to achieve consistent testing results and reduce lost time and cost from invalid tests. Additionally, WDG designed ventilation system improvements allowing for increased exhaust in high hazard areas and improved pressurization of the entire building.

## NEW ORLEANS PUBLIC BELT RAILROAD

CENTENNIAL RENOVATIONS, NEW ORLEANS, LA  
WDG provided architectural and engineering services for the restoration of and an addition to the Public Belt Railroad's 185,000 square foot, 100-year-old facilities. Services were provided for the Administration and Round-House Service buildings, storage facility and rail car sheds designed to house antique coaches. The scope of the project included renovation of existing interiors, masonry restoration, window and plaster replacement, re-roofing, flashing and waterproofing. Site improvements included parking, decorative fencing, sidewalks, landscaping, irrigation and lighting.

## LOUISIANA OFFSHORE OIL PLATFORM (LOOP)

SECURITY COMMAND CENTER, GALIANO, LA  
WDG provided architectural and engineering design for a 4,500 square foot addition to a security building used by LOOP and Lafourche Parish during emergencies. The building includes a conference center and communications components for an Emergency Operations Center and is tied to a central generator.

## RAIN CII

DUST COLLECTION POWER SUPPLY ENGINEERING, GRAMERCY, LA  
WDG provided electrical analysis and design for the Rain CII facility, which included the addition of a new transformer and associated HV switches to an existing site, electrical distribution for the addition of a new motor control center, as well as dust control.

# control room projects

VALERO ST. CHARLES, NORCO, LA  
MeOH Control Room, Laboratory and Change Room Complex

CHEVRON USA PRODUCTS CO.,  
PASCAGOULA, MS  
Coker Control Room and Iso2 Control Room

EXXONMOBIL CHALMETTE REFINING,  
CHALMETTE, LA  
#2 Crude Control Room, FCC Control Room, Alky Control Room, Central Control Room, Oil Movements Building

FIRST CHEMICAL COMPANY, PASCAGOULA, MS  
Administration Building and Control Room

MOTIVA NORCO REFINERY, NORCO, LA  
Control and RCCU HVAC Upgrades

MURPHY OIL COMPANY, MERAUX, LA  
Central Control Room, Area 2, Area 4 Control Room Renovations

OXYCHEM RIVER DOCK  
Control Room

SHELL CHEMICAL COMPANY, NORCO, LA  
Crude 1 Control Room

BP/CONOCOPHILLIPS, BELLE CHASSE, LA  
Control Room Pressurization

VALERO ST. CHARLES REFINERY, NORCO, LA  
Central Control Room and East Plant Control Room Renovations

VALERO KROTZ SPRINGS REFINERY,  
KROTZ SPRINGS, LA  
Central Control Room

CHEVRON ORONITE COMPANY, BELLE CHASSE, LA  
Ecology Control Room, Filter Building Control Room Expansion, Instrument Control Room, Mixer Building Control Room, Analytical & Quality Control Laboratory, Continuous Control Room, Special Chemicals Control Room Renovations





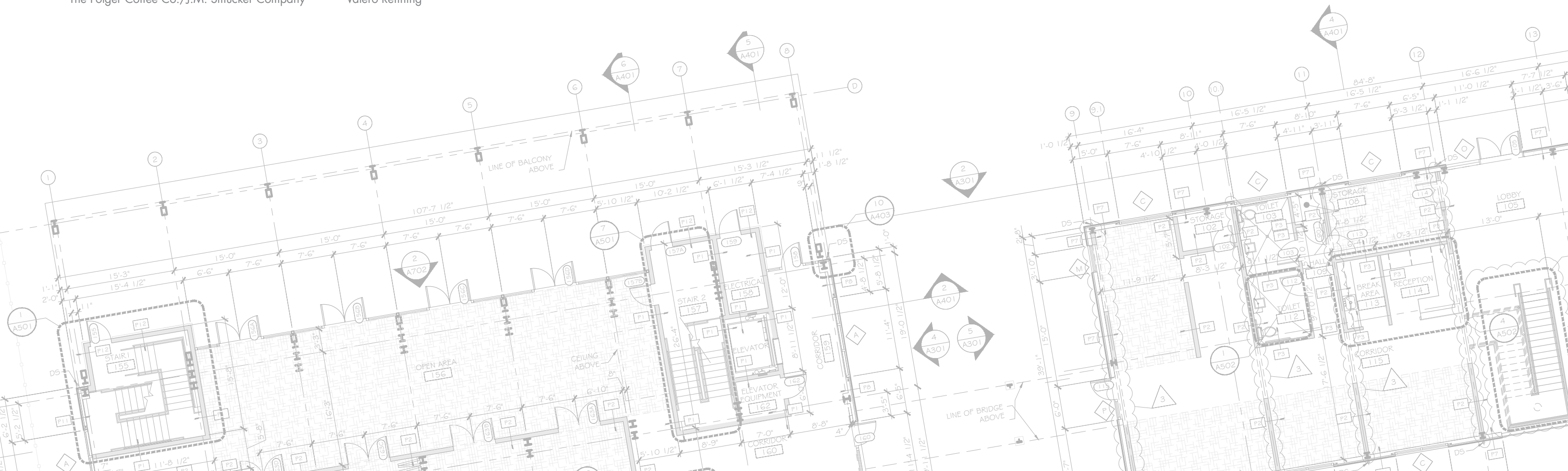
Associated Terminals  
Albemarle Corporation  
Axial Corporation  
Bechtel  
Bell Helicopter  
BP Gulf Coast Property Management  
Chevron Oronite  
Chevron USA Products Co.  
ConocoPhillips Alliance Refinery  
Entergy Thermal  
ExxonMobil Chalmette Refining  
ExxonMobil GREF Industrial Facilities  
The Folger Coffee Co./J.M. Smucker Company

Fluor  
GNOIEC  
Honeywell  
Jotun Paints  
Marathon Petroleum Company  
Murphy Oil USA  
New Orleans Public Belt Railroad  
Placid Refining  
Port of New Orleans  
Rain CII Carbon  
St. Bernard Port, Harbor, and Terminal District  
Turn Services Barge Fleeting Company  
Valero Refining

- Planning
- New Construction
- Building Renovations
- Control Rooms
- Operator Shelters
- Laboratories
- Pressurized Buildings
- Blast Resistant Buildings
- Zone Shops
- Maintenance Buildings
- Warehouses
- Manufacturing Facilities

- Administration Buildings
- Uniform and Restroom Facilities
- Data Centers
- Firehouses
- Chilled Water Systems
- Steam Systems
- Environmental Control Systems
- Compressed Air Systems
- Water Treatment Systems
- Wastewater Treatment Systems
- Laboratory Gas Systems  
and Fume Exhaust Systems

- Medium Voltage Power Distribution Systems
- Low Voltage Systems
- UPS Systems
- Standby Generation Systems
- Lighting Systems
- Power Flow Analysis
- Ground Fault, Short Circuit, and Coordination Studies
- Arc Flash Studies
- Fire and Explosion Detection and Suppression Systems







WDG | ARCHITECTS ENGINEERS

821 BARONNE ST  
NEW ORLEANS, LA 70113  
(504) 754-5280  
[www.wdgnola.com](http://www.wdgnola.com)

WDG is certified by the City of New Orleans as a State and Local Disadvantaged Business Enterprise (DBE) and by the State of Louisiana as a Small Entrepreneurship (Hudson/SE vendor). The firm is licensed in Louisiana, Mississippi, Texas, Tennessee, Florida and Arkansas.



For further information about WDG | Architects Engineers, please visit  
[www.wdgnola.com](http://www.wdgnola.com)