

**BLA, Inc.**

**CONSULTING ENGINEERS**

**ESTABLISHED 1978**

# about BLA

BLA is a civil engineering consulting firm specializing in transportation, structures, construction management and water/wastewater projects. Established in 1978, our top priority is client service.

We combine creativity and hard work to produce successful projects. BLA provides our clients with a trusted firm proven capable of completing projects ranging from small drainage improvements to major capital projects which exceed \$100 million in construction cost.

Communication is a key to our success. Close coordination with our clients, the contractor and the public is necessary to successfully complete a project. BLA also recognizes the importance of a strong project public information program. Projects impact many people, both residents and businesses; keeping these stakeholders informed and listening to their concerns is important to a successful project.

BLA has a complete staff of professional design and construction engineers, structural engineers, water resource professionals and technical staff. Shown below is our leadership of corporate officers and key staff.



**DAN BRUCKELMEYER, P.E.**

President and  
Chief Executive Officer



**KERRY FIELD, P.E.**

Vice President  
Director of Construction Engineering



**JOEL IHDE, P.E., S.E.**

Vice President  
Director of Structural Engineering



**FRED PAGE, P.E.**

Vice President  
Senior Resident Engineer



**JOHN O'NEILL, P.E.**

Vice President  
Senior Project Manager



**JESSE COMBS, P.E.**

Vice President  
Director of Indiana Operations



**ED LEBBOS, CFM, CWS, DECI**

Director of  
Environmental Engineering



**JENNIFER MITCHELL, P.E., PTOE**

Director of  
Preliminary Design Services



**MATT CESARIO, P.E.**

Associate  
Project Manager



**DARREN FRANZEN**

Associate  
Senior Resident Engineer



**ASHLEY NEWTON**

Senior Marketing Coordinator  
Public Information Officer





## TRANSPORTATION DESIGN

*BLA staff are experts in transportation planning and geometric design. Our projects range from major widening and reconstruction to resurfacing. From municipal road and street programs to complex intersection and interchange design, we are proud to have served the greater Chicagoland and Indianapolis areas for more than 40 years.*



## CONSTRUCTION ENGINEERING

*BLA provides construction engineering services from simple grind and overlay projects to major expressway widening and reconstructions. As construction engineers, we represent the community and our client which is often a stressful time for residents, businesses and the motoring public. We often incorporate a comprehensive public outreach effort on sensitive projects which includes website development, project brochures, public meetings, door-to-door contact and social media.*



## STRUCTURAL ENGINEERING

*BLA has extensive experience with the design of transportation structures ranging from simple box culverts to multi-span highway and railroad bridges over streams and other facilities. BLA structural engineers pride themselves on their ability to develop creative and innovative solutions to solve structural challenges.*



## LAND DEVELOPMENT ENGINEERING

*BLA provides land development services for new site construction as well as redevelopment and/or expansion of existing facilities. Our experts possess an understanding of how end users will utilize a site and enhance the architectural vision. On projects both large and small, our team helps our clients navigate challenges from the zoning board approval process through final engineering.*



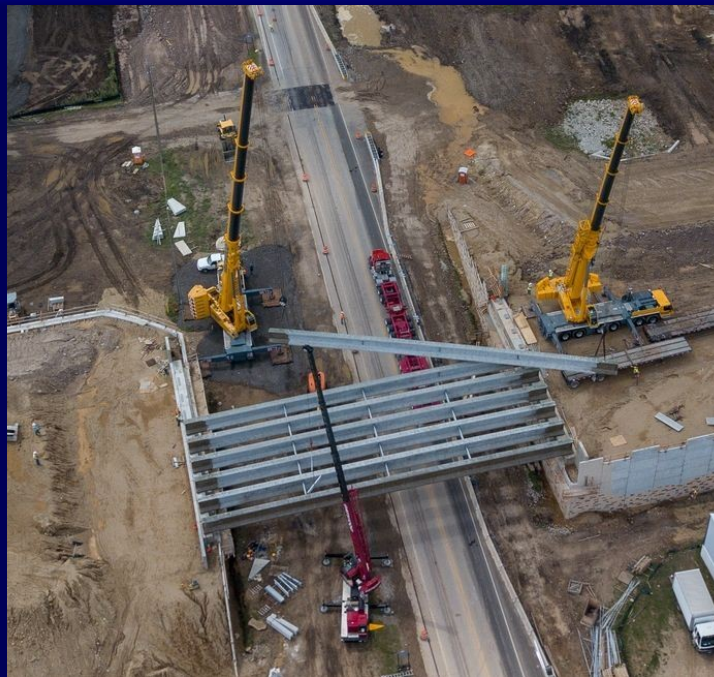
## WATER RESOURCES

*BLA provides comprehensive design services for watershed planning, hydraulic and hydrologic modeling, master stormwater plans, permitting and floodplain mapping. BLA's expert designs of rural and urban water drainage systems are often what set us apart in our industry. Many of our projects involve determining floodplain elevations and ensuring compensatory storage is provided while also meeting detention needs and improving water quality.*



## WATER/WASTEWATER

*BLA provides a wide range of subsurface infrastructure engineering. This ensures clean drinking water, proper wastewater treatment and reliable stormwater drainage. From capacity issues, infiltration and inflow concerns, poor water pressure or water source investigations, our engineers provide services that integrate modern technology with a detailed approach in order to maintain the health of the public.*



## **LONGMEADOW PARKWAY (SECTION B)**

***Kane County Division of Transportation***

***\$40 million***

### **TRANSPORTATION DESIGN**

This landmark project was more than 25 years in the making from planning to approval. A 5.5-mile corridor extending from Huntley Road to Algonquin Road (IL 62), this project created a new Fox River bridge crossing helping to alleviate northern Kane County congestion. BLA designed the widening and extension of Longmeadow Parkway (Section B) located in the Village of Algonquin and unincorporated Kane County for 2.32 miles and the widening and reconstruction of IL 31 and Sleepy Hollow Road for 0.81 miles; the project also included a new bridge for a grade separation carrying Longmeadow Parkway over IL 31, five multi-barrel box culverts and two soldier pile retaining walls.

## **RIVER ROAD AT ROBERTS ROAD**

***Lake County Division of Transportation***

***\$7 million***

### **TRANSPORTATION DESIGN**

The project converted a signalized T-intersection into a multi-lane roundabout – *the first multi-lane roundabout in Lake County*. The project was faced with significant environmental and constructability challenges ranging from ADID wetland impacts to extremely poor soils where organic material extended 50 feet below grade and required experimental ground improvement technologies never used in the State of Illinois. An additional feature was the connection of the Lake County Forest Preserve trail leading up to and through the new roundabout. Several water quality BMPs were designed for retention and groundwater quality improvements.



## **BRIERHILL ROAD**

***Village of Deerfield***

***\$2.5 million***

### **TRANSPORTATION DESIGN**

Brierhill Road is a 0.75-mile, no-outlet road that was failing along with its infrastructure. The project included roadway reconstruction, a new watermain, new sanitary sewer manholes, lining of the existing sanitary system and several drainage improvements. Challenges included maintaining traffic during construction, landscaping/mature trees extending to edge of pavement, paver and exposed aggregate driveways and stabilizing a severely eroded drainageway carrying large offsite flow from Briarwood Country Club to the North Branch of the Chicago River.

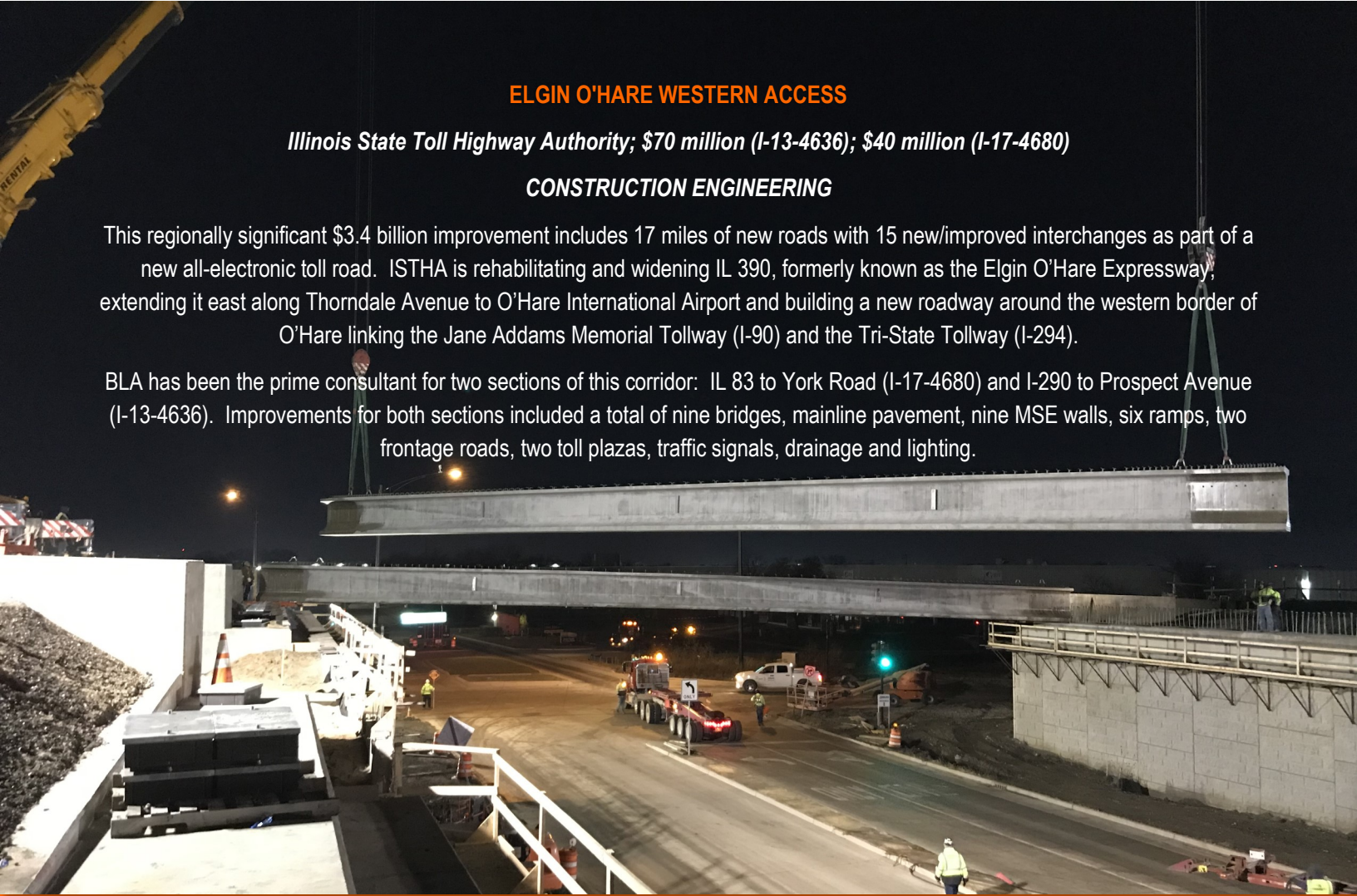
## ELGIN O'HARE WESTERN ACCESS

*Illinois State Toll Highway Authority; \$70 million (I-13-4636); \$40 million (I-17-4680)*

### CONSTRUCTION ENGINEERING

This regionally significant \$3.4 billion improvement includes 17 miles of new roads with 15 new/improved interchanges as part of a new all-electronic toll road. ISTHA is rehabilitating and widening IL 390, formerly known as the Elgin O'Hare Expressway, extending it east along Thorndale Avenue to O'Hare International Airport and building a new roadway around the western border of O'Hare linking the Jane Addams Memorial Tollway (I-90) and the Tri-State Tollway (I-294).

BLA has been the prime consultant for two sections of this corridor: IL 83 to York Road (I-17-4680) and I-290 to Prospect Avenue (I-13-4636). Improvements for both sections included a total of nine bridges, mainline pavement, nine MSE walls, six ramps, two frontage roads, two toll plazas, traffic signals, drainage and lighting.



## PLUM GROVE ROAD

*Village of Schaumburg; \$13.7 million*

### CONSTRUCTION ENGINEERING

BLA provided construction management, public relations and utility coordination for the reconstruction of the 1.4-mile Plum Grove Road corridor between Higgins Road (IL 72) and Wiley Road; the project also included Schaumburg's first two roundabouts. This multi-year project affected many as the arterial corridor was near Woodfield Mall and home to many residents, retailers and commercial and industrial businesses.



## LOCUST ROAD

*Village of Wilmette; \$4.2 million*

### CONSTRUCTION ENGINEERING

The half-mile reconstruction of Locust Road between Lake Avenue and Wilmette Avenue also included a public information program and watermain and storm sewer replacement. Besides many residents, this section of Locust Road also housed Regina Dominican High School, Wilmette Junior High School and the District 39 office.



## **IL 64 OVER DES PLAINES RIVER**

**Illinois Department of Transportation; \$8.1 million; STRUCTURAL ENGINEERING**

BLA provided structural design services for the reconstruction of IL 64 over the Des Plaines River. BLA designed a three-span, seven-lane, steel beam bridge to be constructed in stages while maintaining traffic in both directions. Bridge work also included accommodations for a multi-use path. Because of hydraulic requirements, one abutment was a closed vertical face abutment and the other was an open abutment. Cofferdams were required for construction of the piers and one of the abutments. Substructures were supported on steel piles driven to bedrock. Coordination with MWRD was required because of an eight-foot diameter sewer passing through the east abutment.



## **SHORT STREET BRIDGE**

**Village of Lisle; \$1.5 million; STRUCTURAL ENGINEERING**

BLA provided complete Phase I and II design services for the reconstruction of the Short Street bridge over the East Branch of the DuPage River into a three-span deck slab bridge. Many architectural elements were proposed for the structure and were reviewed with the Village for incorporation during the preliminary engineering phase. Phase II activities included the preparation of contract documents consisting of design plans and specifications. In addition to bridge reconstruction, roadway and approach slab work was also included in the scope. This project was designed for quick construction to be open in time for the Village of Lisle's Eyes to the Skies Festival occurring over the July 4th holiday.



## **GREAT WESTERN TRAIL**

**Village of Lombard; \$6 million; STRUCTURAL ENGINEERING**

BLA provided Phase I and II services for the Great Western Trail improvements. The project included multiple bridges to alleviate dangerous at-grade crossings. Design plans included bridges over Grace Street, St. Charles Road and the Union Pacific Railroad. Bridges were designed to highway loading standards and consisted of precast concrete girders supported on pile abutments with mechanically stabilized walls. One of the structures used a Geosynthetic Reinforced Soil Integrated Bridge System (GRS-IBS) developed by the FHWA – this was the first time in the State of Illinois.



## RIVERVIEW WEST FOR INTERFORUM HOLDINGS

BLA prepared the final design for the new development of 364 luxury apartments in Warrenville. BLA guided the project through multiple approvals including obtaining a LOMR from FEMA, PUD approval through the City of Warrenville and both a stormwater and access permit with DuPage County.

The project features luxurious amenities such as business and conference center, state-of-the-art fitness center, media room, elegantly detailed great room and cyber cafe. Additional amenities include a clubhouse with a custom-designed resort-style spa with pool and spacious lounge area, outdoor fireplace and BBQ area with lounges, playground, roof deck for private parties, party room with full kitchen, dog park and dog washing station, golf putting area, picnic area, concierge service, doorman and onsite management.

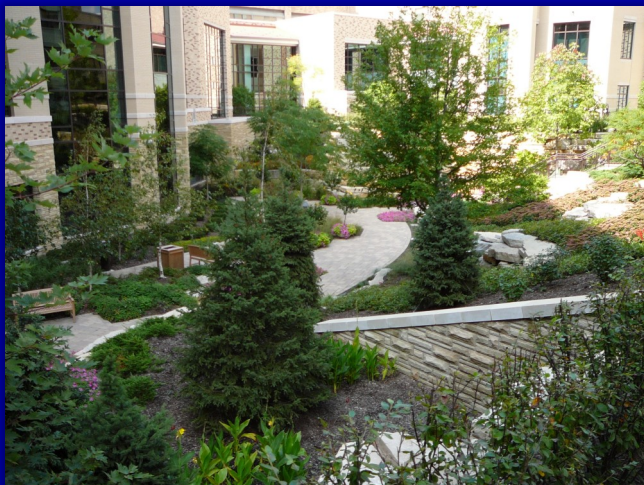


## LAND DEVELOPMENT ENGINEERING



## CENTRAL DUPAGE HOSPITAL

The Central DuPage Hospital Campus project was a 55-acre redevelopment and expansion of the existing hospital buildings, parking structures, roadways and utilities; existing utilities and buildings were demolished to make way for the expansion. BLA provided master stormwater management studies as redevelopment of the campus required stormwater detention under current ordinances. Floodplain/floodway analysis was completed as the campus borders the North Branch of the DuPage River and work required impacts to floodplain areas. All aspects of redevelopment were looked at from detention calculations/design, drainage calculations, utility studies, parking lot design, roadway design and grading.



BLA prepared construction documents and specifications for the various phases of redevelopment on the hospital campus. Design considerations included design of stormwater management facilities, demolition plans for existing structures, floodplain/floodway remapping, revisions to roadway alignment and geometry, expansion of existing parking facilities, pavement design, grading plans, analysis of traffic patterns, preservation of emergency vehicle access throughout construction, handicapped accessibility, preservation of pedestrian traffic through the construction zones, preparation of project budgets, coordination with contractors, construction assistance and coordination with state and local government agencies in securing required construction permits.

## SHERMER ROAD OVERFLOW

**Village of Northbrook; \$3.2 million; WATER RESOURCES**

BLA provided Phase II and III engineering for a 72-inch storm sewer through utility-congested right-of-way to help alleviate Northbrook's significant chronic flooding along Shermer Road.

The project included a micro-tunnel auger of an 87.5-inch steel casing sleeve under the Metra railroad tracks followed by pulling a 64-inch ductile iron pipe through the new casing pipe.

Two transmission main watermains, a 30-inch prestressed cylindrical concrete pipe and a 16-inch ductile iron pipe both ran parallel to the storm sewer and crossed in several locations. Because of the size of the pipe, traditional circular manholes were not feasible; BLA custom-designed several box structures to facilitate pipe size and directional changes.

A 72-inch backflow preventer was installed at the outlet to the West Fork North Branch Chicago River in order to prevent tailwater from backing up into the new sewer system.



## WAYNEWOOD SUBDIVISION DRAINAGE IMPROVEMENTS

**DuPage County Public Works; \$1.6 million; WATER RESOURCES**

BLA provided design and construction for the addition of storm sewers and drainage swales to a subdivision to solve flooding problems. Work included hydraulic design of swales and storm sewer; construction documentation; restoration of private property; rear, side and front yard swales; driveway repair; erosion control; pay estimates and liaison with residents. New storm sewer construction was incorporated without relocating utilities and was coordinated during construction.

## BUCKBEE CREEK STABILIZATION

**City of Rockford Public Works; \$500,000; WATER RESOURCES**

BLA prepared design alternatives to address bank erosion and scour at the Buckbee Creek Rock River outfall. The creek and project area are in the mapped floodplain. BLA performed hydraulic modeling and developed multiple alternatives to stabilize the channel bottom, reconstruct the streambanks and protect the channel from future scour/erosion. A combination of rock-filled mats, riprap and sheet piling was used to stabilize the granular soils of the outfall. BLA also provided construction engineering services.







## **WESTERN AVENUE**

*Cities of Highland Park and  
Highwood;*

*\$3.5 million;*

### **WATER/WASTEWATER**

BLA designed, oversaw the construction and provided public information services for Western Avenue. The project converted a rural section into an urban section, upgraded the existing 15-inch sanitary sewer to a 21-inch sewer, replaced the existing six-inch cast iron watermain with a new 12-inch ductile iron main, reconstructed the roadway and installed a new storm sewer system. Because the many challenges on this project were overcome and the residents were so thankful, they threw a barbeque for the construction crew.



## **CROSTOWN WATERMAIN SEGMENT IV**

*Village of Lincolnshire; \$800,000; WATER/WASTEWATER*

BLA designed and managed the construction and public information of this project which placed 3,700 feet of new 12-inch watermain in the roadway to help improve water pressure and reliability throughout the Village. This project was a challenge as the residential subdivision houses Laura B. Sprague Elementary School and has no sidewalk and almost no curb/gutter making string lining pipe a challenge.



## **UNIVERSITY DRIVE**

*Village of Buffalo Grove; \$2 million; WATER/WASTEWATER*

This project rehabilitated 0.50 miles of residential University Drive. Because of frequent breaks, the 10-inch forcemain and eight-inch watermain needed to be replaced and the roadway reconstructed. Challenges included an expedited schedule, an undocumented interconnection with Arlington Heights's water system and resident coordination. Permitting was required from IEPA, Cook County and MWRD in an expedited timeframe in order to construct.



# CLIENTS

ABBOTT LABORATORIES/ABBVIE

ALGONQUIN

ALGONQUIN TOWNSHIP HIGHWAY DEPARTMENT

AT&T

BARRINGTON

BARTLETT

BATAVIA

BENSENVILLE

BLOOMINGDALE

BOLINGBROOK

BUFFALO GROVE

BURR RIDGE

CAROL STREAM

CARY

CENTRAL DUPAGE HOSPITAL

CHICAGO DEPARTMENT OF TRANSPORTATION

CHRISTIAN BROTHERS AUTOMOTIVE

CLARENDON HILLS

COMCAST

COOK COUNTY DEPARTMENT OF  
TRANSPORTATION & HIGHWAYS

CRYSTAL LAKE

DEERFIELD

DOWNERS GROVE

DOWNERS GROVE PARK DISTRICT

DUPAGE COUNTY DEPARTMENT OF  
DEVELOPMENT & STORMWATER

DUPAGE COUNTY DIVISION OF  
TRANSPORTATION

ELGIN

ELMHURST

FONTANA

FOREST PRESERVE DISTRICT OF DUPAGE  
COUNTY

GENEVA

GLENDALE HEIGHTS

GURNEE

HAINESVILLE

HANOVER PARK

HIGHLAND PARK

HIGHWOOD

HINSDALE

HOFFMAN ESTATES

ILLINOIS DEPARTMENT OF NATURAL  
RESOURCES

ILLINOIS DEPARTMENT OF TRANSPORTATION

ILLINOIS STATE TOLL HIGHWAY AUTHORITY

INDIANA DEPARTMENT OF TRANSPORTATION

INDIANAPOLIS DEPARTMENT OF PUBLIC WORKS

INTERFORUM HOLDINGS

ITASCA

KANE COUNTY DIVISION OF TRANSPORTATION

LAKE COUNTY DIVISION OF TRANSPORTATION

LAKE COUNTY STORMWATER MANAGEMENT  
COMMISSION

LAKE VILLA

LEMONT

LIBERTYVILLE

LINCOLNSHIRE

LISLE

LOMBARD

McHENRY

McHENRY COUNTY DIVISION OF  
TRANSPORTATION

METRA

NAPERVILLE

NAPERVILLE COUNTRY CLUB

NORTHBROOK

OAK BROOK

OAK BROOK PARK DISTRICT

OAK PARK

ORLAND PARK

PALATINE

PULTE HOME CORPORATION

RIVER FOREST

ROCKFORD

SCHAUMBURG

SOUTH BEND

SOUTH ELGIN

THE SHAW COMPANY

U.S. ARMY CORPS OF ENGINEERS

WAUKEGAN

WEST CHICAGO

WHEATON

WILL COUNTY DIVISION OF TRANSPORTATION

WILLOW SPRINGS

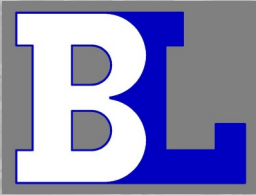
WILMETTE

WISCONSIN DEPARTMENT OF TRANSPORTATION

WOOD DALE

ZION





**BLA, Inc.**

*BLA is a professional engineering firm with operating offices in Illinois and Indiana. Since 1978, BLA has worked with more than 45 municipalities and government agencies.*

*BLA prides itself on maintaining a diverse clientele and cross section of projects. This diversity allows our firm to provide extensive knowledge and experience, thus providing comprehensive consultation services to our clients on a variety of professional topics and issues.*

**CORPORATE HEADQUARTERS**

333 PIERCE ROAD

SUITE 200

ITASCA, ILLINOIS 60143

630-438-6400

630-438-6444 FAX

**INDIANAPOLIS OFFICE**

8720 CASTLE CREEK PARKWAY

SUITE 329

INDIANAPOLIS, INDIANA 46250

317-842-4500

317-842-4506 FAX

**BLA-INC.COM**