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CITY OF GOSHEN

SOUTH BEND 2

Request for Proposals New South Fire Station Study

October 12, 2020





October 12, 2020

Ms. Becky Hutsell Redevelopment Project Manager City of Goshen Redevelopment Commission 204 E. Jefferson Street, Suite 6 Goshen, IN 46528

Re: Request for Proposals New South Fire Station Study

Dear Mr. Hutsell and Review Committee,

We are pleased to present our proposal to the City of Goshen Redevelopment Commission for Architectural and Engineering Services to prepare a New South Fire Station Study. We believe our team will be an excellent partner for this study and are eager to provide the City with the highest caliber professional design and engineering services at the best value. The Keystone Team is client focused and committed to this project, with professionals ready to start immediately and remain focused through completion.

Together, with Eye4Design Architects and Marbach, Brady & Weaver, Inc., our team will devote ourselves to create an unrivaled partnership with the City of Goshen. Eye4Design is also a talented WBE consultant that adds diversity to our highly qualified team. Our project team is a collaboration of innovative professionals committed to excellence and service. Our experienced team will work collaboratively with the City to provide a thorough, practical, and cost-effective solution with the design and engineering expertise to ensure the most successful project.

The team we have assembled represents the level of effectiveness and efficiency that is needed for this project. In no other team will you find this balance of project understanding, alignment of skills and collaborative initiative. Our team members develop excellent working relationships with our clients, and are very conscientious of the quality of service, attention to detail, and workmanship we provide during each project.

Thank you for your consideration of our qualifications and proposal. If you have any questions regarding our team or this submittal, please contact Brian Kronewitter at 630.209.7525 or email at bkronewitter@cordoganclark.com.

Respectfully submitted,

Keystone Architecture

Brian K. Kronewitter, AIA, DBIA Executive Vice President

Eye4Design Architects

acquelyn S. Hilderbrandt

Jacquelyn S. Hilderbrandt, AIA Founder & President



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ABOUT US

Keystone is a full service architectural, engineering, interiors, planning and construction management firm of innovative professionals committed to excellence. We are passionate about our work, inspired by our clients and committed to providing exceptional service through integrated and sustainable design and construction solutions. We believe that the best projects arise from a collaborative journey of discovery and overcoming challenges with our clients that reveals insights and spurs innovation. Keystone Architecture has designed and built a wide variety of award-winning projects of similar characteristics to the Goshen New South Fire Station's scope of work and will utilize our practical, cost effective design and construction expertise.

Louis C. Cordogan, AIA, founded Cordogan Clark in Chicago in 1951 and added a second office in Aurora, Illinois in 1968 John Cordogan, Managing Partner, joined the firm in 1973. The office incorporated the two locations in 1984 under the direction of Principals John Cordogan, AIA, and John Clark, AIA, to become Cordogan Clark & Associates. Since then, the firm has grown with over 90 professionals, five offices, Lafayette (Keystone), Chicago, Aurora, Fairfield Heights, and St. Louis, Missouri. Each office works together and combines industry expertise and personal attention to deliver exemplary customer experiences and innovative high value services.

Established

Ownership Corporation

Expertise

Municipal Educational Recreational Health Care Commercial Cultural Hospitality Residential Master Planning

Web Address

www.keystonearch.com

Staff Formation

Architecture – 56 Mechanical Engineering - 4 Electrical Engineering - 2 Structural Engineering - 5 Project Development Mgmt – 1 Construction Management - 13 Interior Design - 3 Technical Support Staff - 14

Office Location

Courthouse Square 322 Main Street Lafayette, IN 47901 T : 765.420.7400

Point of Contact Brian Kronewitter, AIA, DBIA

T: 630.209.7525 bkronewitter@cordoganclark.com We are innovative professionals who are passionate about our work, inspired by our clients, and committed to providing excellent service.



PROFESSIONAL SERVICES PERFORMED IN-HOUSE

ARCHITECTURE

- New Construction
- Building Additions
- Renovations and Rehabilitations
- Sustainable / LEED Design

ENGINEERING

- Electrical Engineering
- Mechanical Engineering
- Plumbing Engineering
- Structural Engineering
- Forensic Engineering
- Sustainable / LEED Engineering Design
- Energy Modeling
- Renewable Energy Analysis
- Photovoltaic Design

PLANNING

- Master Planning
- Site Planning
- Strategic Planning
- Campus Planning
- Capital Planning
- Phased Development Planning
- Planning for Sustainability
- MetaDesign

INTERIOR DESIGN

- Space Planning
- Color and Material Selection
- Furnishing Inventory
- Sustainable / LEED Design
- Furniture Procurement Services
- Furniture Installation Management

CONSTRUCTION

- Design / Build Construction
- Design / Build Construction Delivery
- Integrated Project Delivery
- Pre-Construction Services
- Cost Estimating
- Guaranteed Maximum Price Delivery
- Construction Administration
- Fixtures, Furniture, and Equipment Procurement
- Construction Logistics Analysis
- Constructibility Analysis
- Value Engineering

CONSULTATION

- 3D Laser Scanning
- Code Analysis
- Zoning Analysis
- Facilities Evaluation and Needs Assessment
- Facilities Planning
- Public Engagement
- Project Scope Definition
- Site Selection Assistance
- Life-Safety Remediation
- Life-Safety Surveys
- ADA / Accessibility Surveys
- Life-Cycle Cost Analysis
- MEP System Capacity / Condition Assessments
- Roofing Design and Evaluation
- Waterproofing Design and Evaluation
- Exterior Wall Design and Evaluation
- BIM Modeling
- Owner Representation Services
- Construction Monitoring
- LEED Design



ABOUT EYE4DESIGN

Jacquelyn S. Hilderbrant, has founded Eye4Design Architects on the values of trust and honesty. These values which are critical in developing long term relationships.

As an architect, the goal is to develop balanced designs which meets the needs, budget and goals of the client. Designs should be simple as well as aesthetically pleasing, durable, and utilize resources efficiently. Operational expenses often exceed the initial construction cost of a building. Sustainability is a social responsibility and sustainable design has the power to create communities and buildings which advance long lasting public and environmental well-being. Agreeing to a realistic schedule and then following through with the schedule is also important.

We believe that there is value in discovering solutions by utilizing a multidicisplinary team approach, with the client as the most important team member. Every team member has a voice which must be heard. Project teams are customized depending on the scope and needs of each individual project.

Our knowledge base is deep and broad and we are continually increasing our knowledge base to serve our clients. The world we live in is changing faster every day. Our focus is dedicated to public projects such as municipal, K-12 education and higher education, scientific, office, manufacturing and single/multi-family projects.

Ms. Hilderbrant understands the importance of diversity and the need for diversity in our world today. As a woman business owner, she is proud to have Eye4Design certified as a Woman-owned Business Enterprise by the State of Indiana. Copy of the certificate is available upon request.

Founded on the principles of trust, honesty, balance, simpilicity, and sustainibility.





DEPARTMENT OF ADMINISTRATION

Division of Supplier Diversity

Indiana Government Center South 402 West Washington Street, Room W469 Indianapolis, IN 46204 (317) 232 - 3061

August 28, 2020

Ms. Jacquelyn Hilderbrandt Eye4Design Architects LLC 460 Stull St., Suite 300 PMB 12 South Bend, IN 46601

Subject: Application for WBE Certification

Dear Ms. Hilderbrandt,

Congratulations! The Indiana Department of Administration, Division of Supplier Diversity is pleased to inform you that Eye4Design Architects LLC, is hereby certified as a Women's Business Enterprise (WBE).

Your company provides a commercially useful function in the areas listed below. Only work performed in these areas will be counted towards Women's Business Enterprise participation:

Code	Description					
55101517	Clearance or dimensional drawings					
55101518	Technical diagrams or drawings					
72153612	Interior design or decorating					
80101601	Feasibility studies or screening of project ideas					
80101602	Regional or location studies for projects					
80101603	Economic or financial evaluation of projects					
80101604	Project administration or planning					
80101606	Project monitoring and evaluation					
81101502	Technical drawing					
81101508	Architectural engineering					
82141505	Computer generated design services					

UNSPSC CODE(S)

On September 13, 2010, the Governor's Commission on Minority and Women's Business Enterprises approved the department's effort to streamline its recertification process. Instead of conducting an onsite visit to each company seeking recertification, the department now has the discretion to waive the visit after a thorough review of the company's file and recertification documents. We have approved your certification and it is valid through **August 31, 2023**. Please note that IDOA continues to reserve the right to conduct a site visit or phone interview at any time to certified companies.

Although your certification is valid for a three-year period, you are required to submit an annual *Affidavit of Continued Eligibility (ACE)* form, located at <u>www.in.gov/idoa/mwbe/files/ACE_Form.pdf</u>. Please remember you must notify us immediately if any changes occur. Failure to notify us of changes or to provide an ACE form annually will result in revocation of your certification. Changes include, but are not limited to, changes in location, contact information, ownership and control.

We encourage you to visit IDOA's procurement website, <u>www.in.gov/idoa/2464.htm</u>, and update your Business Registration Profile. It is important that you review and update your profile regularly, because state purchasing agents and prime contractors may use this information to contact you for business opportunities. For questions regarding your registration profile, you may contact our office at 317-232-3061.

While this letter serves as notification of certification, it does not serve to prove continued eligibility. Please visit <u>www.in.gov/idoa/mwbe/2743.htm</u> to verify certification status. Please contact our office at (317) 232-3061 if you have any other questions.

We ask that you please contact Ralph W. Adams Jr, Deputy Commissioner of Certifications, at (317)234-2820 or <u>RaAdams@idoa.IN.gov</u> if you have any questions or concerns about your letter.

Sincerely,

Ralph W. Adams Jr.

(Approved Electronic Signature COVID-19)

Ralph W. Adams Jr, Deputy Commissioner of Certifications Indiana Department of Administration Division of Supplier Diversity

RWA/cl



ABOUT MARBACH

Accuracy and precision. These are our goals as Civil Engineers and Land Surveyors. At Marbach, Brady & Weaver, Inc., we have been reaching those goals for over ninetyyears. Accuracy comes from having the knowledge and expertise to complete the job right the first time, whether the job is locating one property corner or designing two miles of water main. Precision comes from having the wisdom and experience not only to find thecorrect solution to a problem, but the best one as well, and to have the same level of excellence on any task undertaken.

At Marbach, Brady & Weaver, we are proud of our fine history. Harmon Weaver served as engineer for the City of Elkhart in the early part of the 20th century and laid out many of the most visible neighborhoods in the city, including the Greenleaf Boulevard area. His son, John Weaver was registered as both a professional engineer and a land surveyor and planned or designed a variety of different facilities including the John W. Weaver Parkway (formerly the Nappanee Street Extension) in the City of Elkhart and the sewage treatment plant for the City of Nappanee, Indiana. Byron Brady surveyed hundreds of miles of utility lines throughout northern Indiana, platted many subdivisions in Elkhart County, and laid out a variety of construction projects, including the field of Stanley Covelski Regional Stadium in South Bend, Indiana.

Our past is rooted in two fine companies. Harmon Weaver began practicing privately in 1918 and formed the foundation of Weaver and Associates. From the 1950's through the 1990's, Weaver and Associates was responsible for the planning and design of numerous projects throughout Elkhart County and John Weaver was one of the most prominent civil engineers and land surveyors in the area. In 1958, Byron Brady founded Brady Land Surveying. For thirty years, the firm specialized in large-scale utility and control surveys reauirina highly accurate data and the design and layout of land development projects. In 1988, Mr. Brady passed on the leadership of the firm to Christian Marbach and the name changed to Marbach and Brady Land Surveying.

Since 1918, Marbach, Brady & Weaver has attained a high level of excellence while striving to meet these goals in every project, whether large or small.



REFERENCES

Provide a list of clients, including your primary contact at each municipality.

CITY OF AURORA

Richard Irvin, Mayor 44 East Downers Place Aurora, IL 60506 T: 630.844.3612

VILLAGE OF SCHAUMBURG

Amanda Stuber Facilities Project Manager 714 S. Plum Road Schuamburg, Illinois 60193 T: 847.895.4500

HUNTLEY FIRE PROTECTION DISTRICT

Scott Ravagnie, Fire Chief 11808 Coral Street, #1 Huntley, Illinois 60142 T: 847.669.2995

VILLAGE OF TINLEY PARK

John Urbanski Interim Public Works Director jurbanski@tinleypark.org T: 708.444.5500

TIPPECANOE COUNTY COMMISSIONERS

Tom Murtaugh, President County Office Building 20 North 3rd Street Lafayette, Indiana 47901-1214 T: 765.423.9215

HOWARD BUCHANON

Retired Fire Chief South Bend Fire Department T: 574.235.7553

Our team specializes in a full range of municipal design and engineering. Our work includes state and county as well as local municipal design and planning services from state compliance issues to county governmental centers to local municipal offices and public works facilities.

RELEVANT MUNICIPAL / GOVERNMENTAL EXPERIENCE INCLUDES:

- City of Aurora, Fire Station 5
- City of Aurora, Fire Station 9
- City of Aurora, Fire Station 10
- City of Aurora, Fire Station 12
- Huntley Fire Protection District, Fire Station 1
- Huntley Fire Protection District, Fire Station 5
- Hampshire Fire Protection District, New Fire Station
- City of Naperville, Fire Station 9
- Village of Sugar Grove, New Satellite Fire Station Planning
- Village of Elburn, Fire Station Addition and Modernization
- · Kane County, New Multi-Use Facility
- DuPage County, Vehicle & Maintenance Facility
- Kane County, Public Works Remodel
- City of Aurora, Police & Public Safety Headquarters
- Village of Sugar Grove, New Public Works Facility
- Kane County, Clerk's Office
- Kane County, Adult Correctional Facility
- Ogle County, Public Safety Complex
- Kane County, Regional Training Center
- Village of Sugar Grove, New Police Station Planning and Design
- Illinois State Highway Toll Authority, Oases Redevelopments

- Kane County, Clerk's Office
- City of Aurora, Master Plan and Space Needs
- Village of Schaumburg, Prairie Arts Center Revitalization
- Village of Schaumburg, Pilot Pete's Outdoor Deck Addition
- Village of Schaumburg, Gun Range
- Village of Schaumburg, Public Safety Building Renovations
- Village of Glenview, North Metra Station Masonry Study
- Village of Glenview, Public Works Interior and Exterior Programming
- Village of Glenview, Municipal Center Building Maintenance
- Village of Glenview, Metra Station Interior Renovations
- Village of Glenview, West Lake Reservoir Exterior Envelope
- Village of River Forest, Community Center Planning

PROJECT UNDERSTANDING

The City of Goshen is seeking a site evaluation and site design for the preferred, chosen site for a New South Fire Station. The scope will include the development of a site plan, building design and associated cost estimates. Our team of experienced experts will examine the proposed site, located along Dierdorff Road, to determine if it is a suitable location for the New South Fire Station. If it is deemed not suitable, we will evaluate alternative sites designated by the City. A joint decision on a suitable site will be made by the Fire Station Study Committee and our team. Keystone has experience conducting hundreds of site assessments. We provide practical and realistic solutions to evaluation and design and will bring expertise to bear for the City of Goshen. Our team includes licensed civil, structural, and professional engineers, licensed architects, and professional surveyors that allows us to provide a comprehensive analysis across all site inspection and building disciplines.



PROJECT APPROACH

Our approach will begin by gaining a detailed understanding of the specific building needs of the fire department as it relates to the South Fire Station. This will start with examination of any previous work that may have already been done. Our team will meet with the Fire Department and Fire Station Study Committee in order to gain a comprehensive clarity of the facility needs that will result in final site plan, building design and associated cost estimates.

We usually recommend that these meetings be considered work sessions in which staff are highly engaged so that they are aware of progress at each step of the process. We propose to create work product at each phase of the process, in the context of the collaborative work sessions where questions may be discussed, alternatives considered and resolutions be reached in a collaborative environment with key participants. We prefer to conduct these sessions in the fire department conference or briefing room if it can be worked out with fire staff. Our experience shows that this methodology works very well to keep key individuals well informed, important considerations be thoroughly addressed and the numerous details followed through on.

The initial work sessions will result in a finalized **Space Needs Analysis** that will be supported by a cost estimate confirming that the project envisioned is within the limits of the project budget.

It is important for the Planning and Design team to gain a clear and thorough understanding of the existing facility currently in use by the Fire Department. Our team will complete an analysis of the existing facility and site, followed by a report with recommendations.

Our Planning and Design team is experienced in assisting our clients with **Site Evaluation and Selection**. We have developed a process and tools that enable our clients to evaluate alternative candidate sites that may be available for consideration. Our process leverages our expertise to assemble pertinent facts so as to enable key decisionmakers to make an objective, fact-based comparison of the relative strengths and weaknesses of each site. We utilize "test fit" diagrams that show how a new facility may be configured on each candidate site. We prepare a matrix of evaluation criteria and rank and score each site based on objective criteria. We have found this process to achieve successful and well-supported site selection outcomes.

Once the Space Needs are understood, the existing facility evaluated and the site selection process concludes, the

OUR APPROACH

- Gather detailed understanding of specific building needs
- Hold collaborative work sessions to answer any questions, discuss alternatives, and reach resolutions
- Consider alternative sites by using fact-based comparison of the strengths and weaknesses of each site
- Create a concept design that is architectually appealling, based off the input of stakeholders
- Additional consideratoins such as site civil engineer, building heating and cooling, and electrical and technology features will be integrated to create a schematic design
- Verify schematic design to be within budget

process proceeds to focus on translating the space needs to preliminary site plans and floor plans in the form of a concept design. The **Concept Design** scaled drawings will reflect the space needs and will fit within the limits of the site, and carefully consider the proximity of adjacent buildings and the functions that may need to be housed there.

The concept design will respond to the need for an appealing architectural appearance. This is important from many perspectives and will be addressed with great care in order to achieve the result that community leaders, the fire department and city residents can be proud of. A building design will be developed that works well with other city buildings and reflects a wise use of taxpayer dollars. This will be accomplished by engaging the input of stakeholders and by using tools such as computer generated three dimensional images and physical models that enable viewers to accurately understand what the building will look and feel like.

Once a concept design is completed in the work sessions, additional considerations of site civil engineering, building heating and cooling, electrical and technology features will be integrated into the concept design. Utility services to the building and the accommodations for public and staff vehicles will be integrated into the design. Existing site features, to include an antenna tower, storm drainage accommodations and other technical concerns will be factored in. The design that incorporates these conceptual concerns and pragmatic concerns will become the successful **Schematic Design**.

Once the design is verified to be within budget limits and approved by key decision makers, the project process will proceed by developing the documentation necessary to address the many constructability and building performance criteria commensurate with a high quality building.



SCHEDULING

Keystone Architecture believes that the best approach to scheduling is through detailed up-front planning.

The pre-construction schedule is developed by our Project Management team in collaboration with the City and the design team. This schedule is utilized by the entire team and includes design activities, community engagement, municipality collaboration, City Council updates / approvals, bidding process and material procurement. This schedule is updated as often as necessary to help guide the process from beginning of pre-construction through the start of construction.

As the project comes to life, we develop a detailed critical path schedule for the entire program that includes specific projects within that program. The comprehensive schedule considers all activities of the project including: bidding process, permitting, client approvals, as well as construction, commission and closeout. The schedule is developed by Brian in agreement with the City and the design team. The pre-construction schedule is tied with the detailed construction schedule which is included in the bid documents. This project schedule is updated monthly.

The schedule includes project milestones such as design and City approvals. These simple, focused schedules allow for a greater level of coordination among the different trades and can also alert the team of potential delivery or special event conflicts.

There are three fundamental elements of responsible project scheduling described:

PLAN THE PROJECT

Determine what needs to be done. Define the specific work tasks, coordinate activities, prepare work schedules that define the time and resources required to meet the schedule, assign and properly allocate the resources to complete the activity.

CONTROL AND MONITOR THE PROJECT

Review and Measure progress based on work output, monitor activities in relationship to the overall schedule and more detailed two and four week Look-ahead schedules. Suggest corrective action when needed, evaluate all options and devise workarounds.

MANAGE THE PROJECT

Communication with the Project Team to advise on what options are available to get the project on schedule and the ramifications of delay or acceleration.

Our experienced team will implement lean construction practices when it adds value to the project to ensure the project is executed in the most efficient manner possible. Pull Plan scheduling will be used to collaboratively create project schedules amongst the subcontractor team and, if desired, this scheduling can be extended to the design and owner team to help facilitate the execution of key design document or owner decision dates. We will also thoroughly review prefabrication opportunities across the project scope while focusing intently on MEP distribution and construction elements that repeat themselves a minimum of ten times throughout the project. Prefabrication will allow material to be assembled in a controlled shop environment resulting in improved safety, quality and efficiency for the field installation. Just-in-time delivery will be utilized as much as possible to keep the site safe, organized and efficient.



ESTIMATING

PROGRAM/CONCEPTUAL ESTIMATE

Keystone begins developing the program/concept estimate by taking the time to fully understand the desired program of the facility. By taking this time we are able to create a detailed budget. Utilizing a cost benchmarking process to validate estimates and establish target budgets for each component of the project allows us to begin defining parameters and replacing assumptions with decisions from day one. Our process frontloads the effort, establish a "reverse engineering" approach to pre-construction that defines the building component projected costs from benchmarking and past experience building municipal buildings. In addition, with having this knowledge we are able to develop more accurate project schedules and logistic plans that in turn help define early pricing.

FRONT LOADED EFFORT

We expend 80 percent of our pre-construction effort setting up the detail of the final estimate during the development of the first estimate. This approach advances the process significantly. Rather than building a first estimate based on generalities as placeholders until decisions are made and assumptions can be replaced with real information we take the time to detail all cost elements for the project. Additionally, leveraging our in-house Building Information Modeling (BIM) services as early as possible yields significant efficiencies as the project is developed.

VALUE OF ESTABLISHING DETAILED ESTIMATES EARLY

Our Program/Concept budgets are set up to a greater degree of detail specificity than industry norms. It is our practice to bring forth questions related to design decisions to the team, prior to decisions being made so that the cost implications can be explored in tandem with other critical issues. In this way, budget implications of design decisions can help shape the design instead of being carried until they have to be excluded as part of a traditional value engineering phase. In this way our early estimates can help the owner shape their vision for the project.

SCHEMATIC DESIGN (SD) ESTIMATE

We begin developing the Schematic Design (SD) Estimate by reconciling the construction estimate with the owner's budget and analyze any significant variances between the program budget.

It is important to understand the difference between the owner's budget and the construction estimate. With this understanding we are able to evaluate building systems and our established Target Value Analysis to focus on alternative ideas that will help align the estimate to the budget.

TARGET VALUE ANALYSIS AT SCHEMATIC DESIGN At no time is Target Value Management more critical than during the Schematic Design Estimate development.

During SD, by employing traditional value engineering activities, critical aspects of the project are often cut from the program. At Keystone, as the Program / Conceptual Estimate is being developed and the detail is being set up, we establish targets for key parts of the project that are most likely to impact the budget. Working towards these targets and remaining focused on the range of credible options for each major area of the project ensures no critical aspect of the project is value engineered out of the project late in process, after everyone is committed.

MEASUREMENT

As with each estimate, it is critical that the project team verify the design and estimate against the key performance indicators established during the development of the Program / Conceptual Estimate. It is also during the SD Estimate that we engage the subcontractors for preliminary input. This serves to verify costs carried in the budget, as well as critical project assumptions, with subcontractors that will play a role in constructing the project.

Getting started off on the right path in design and budgeting will be the most critical aspect of a smooth running project. Detailed scheduling and effective project management are the next critical component of a smooth running project.



IMPORTANT ISSUES IN FIRE STATION DESIGN

Included below are some guiding considerations that shape our approach and define the context in which we work through the process outlined above.

Security - Planning for safety and security of fire department staff and building visitors is different today than it was five and ten years ago. It begins with development of the earliest design concepts for the site and continues through to implementation of the technology and devices that are integrated into daily building operation. It is mission critical to employ "best practices" and a forward thinking approach to economically design for optimized security operations. Our planning approach will apply security measures that are appropriate in the new fire building as well as security measures that are appropriate to the building.

Functional Adjacencies - Building site plan and floor plan design should flow out of an intuitive understanding of how the different divisions of the fire department operate and the tasks, functions and equipment that need to be facilitated. We make it our mission to equip the fire department with a building that will facilitate effective and efficient fire operations. We do this through careful planning for the unique requirements of apparatus bays, support and vehicle maintenance as well as administration and training areas and residential areas. We will work to integrate the optimum flow of activities for fire staff of this growing department.

Planning for Growth - Many of our clients are faced with the challenge of designing a fire station that may grow rapidly to keep pace with population growth. Other communities may be at or near build out and planning for growth may focus on providing flexibility for the inevitable changes that will occur in fire department duties, programs and technology. We encourage our clients to visit past projects and talk with former clients to understand how to plan for an economical expansion that can be accomplished with the least disruption to ongoing operations.

Sustainability - Principles of sustainability are as old as civilization and have been employed by past and present generations to save both initial cost and long term operating cost. The renewed interest in sustainable design of recent years is bringing a new understanding and new approaches to building design that will reduce the ecological impact of buildings. The reduced environmental impact and the increased quality of work environment in these buildings is worth the extra design effort. We make it our practice to leverage proven strategies and continue to utilize innovative ideas toward the end goal of achieving higher levels first cost and long term cost for our clients.

Civic Architecture - What we build defines us and our communities. Our public buildings will stand for 30 to 50

IMPORTANT ISSUES

- **Security** Employ best practices and a forward thinking approach for optimized security operations
- Functional Adjacencies Site plan and floor plan should represent the understanding of how each individual division of the fire department operates
- **Planning for Growth** Talk with past clients to discuss how to properly plan for future growth, and create an economical expansion plan that can be accomplished with the least disruption
- **Sustainability** Incorporate the new understandings and new approaches to building design to reduce the ecological impact of the facility, making the new fire station LEED certified (unless asked otherwise)
- Civic Architecture Designing a facility that represents the community, standing to last as long as the community will need it

years and with good planning and maintenance, can last for much longer. The architecture of this building will be associated with the identity of the City of Goshen. Therefore, it should reflect what is most important to the community and community leaders. Careful, even frugal use of public funds, planning for future generations, lightly impacting the environment, using materials that engender what is best and most loved about the region are all ideas that may be appropriate. The best design team will strike an astute balance between a project that is not overly grand and yet not unduly plain. This happens by engaging key decision makers in a way that achieves a sense of authorship and a sense of ease that their concerns and sense of priorities have been heard and expertly responded to by the design team. When these things are well considered and well done, the finished project can achieve a sense of pride among community residents that marks a job well done in a timeless way. We work hard to achieve results like this.









EDUCATION Bachelor of Architecture, Bachelor

of Science in Environmental Design, Ball State University, 1988

CERTIFICATIONS

Licensed Architect: Illinois, Ohio

PROFESSIONAL ACTIVITIES

American Institute of Architects, Board of Directors

Design-Build Institute of America, Education & Legislative Committee

ILCMA, Committee Member

Society for College & University

Illinois Library Association

Illinois Parks & Recreation Association

Illinois Community College CFO's

Illinois Municipal League

- Will County Government League
 - DuPage Mayors & Managers

American Library Association

American Public Works Association

City of Naperville Building Council

BRIAN KRONEWITTER, AIA, DBIA PRINCIPAL ROJECT DIRECTOR

Brian Kronewitter is Project Director on many of the firm's key projects and also is in charge of strategic planning and ensuring all clients receive an exceptional experience. Client focused, Brian establishes a partnership with clients to maximize client satisfaction, provide sound design advice, and help ensure a completed project that meets their expectations.

Brian has over thirty years experience in the design and construction industry in various leadership capacities. This experience includes providing Architectural, Construction Management, and Design-Build management services in the public and private sectors with significant experience in the K-12, higher education and public sector / municipal facilities markets.

Brian is experienced in providing architectural, construction management and Design-Build management services in the public and private sector with significant experience in the education, public sector / municipal, hospitality, library and sports and recreation facilities markets. Brian received a Bachelor of Architecture and a Bachelor of Science in Environmental Design from Ball State University in Muncie, Indiana. He is a licensed architect in Illinois and Ohio, and a member of the Design Build Institute of America and the American Institute of Architects.

Significant past projects experience includes: DBIA Award-Winning International Ice Center, Romeoville, Illinois; Student Recreation and Residential Centers; Glenwood School, St. Charles, Illinois; City Center Campus, Joliet Junior College, Joliet, Illinois; Public Works Center, Oak Park, Illinois; School of Music, Addition, Ohio University Athens, Ohio; Addison Public Library, Addison, Illinois; and the Adult Justice Facility, St. Charles, Illinois.

RELEVANT EXPERIENCE

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- Village of Tinley Park, Fire Station Renovations
- Kane County, Multi-Use Facility
- Village of Schaumburg, Prairie Arts Center Revitalization and Addition
- Village of Schaumburg, Task Architect
- Village of Glenview, Task Architect
- Will County, Coroner & Recorder of Deeds Building
- Kane County, Regional Training Center
- Kane County, Diagnostic Center
- Lake County, Central Permit Facility
- Kane County, Adult Justice Facility
- City of Delafield, Public Safety & Library Complex
- Village of Shorewood, New Village Hall
- Village of Oak Park, New Public Works Center
- Will County, Sheriff's Office 1st Midwest Renovation
- Will County, Sheriff's Office Space Planning
- Kane County, Sheriff's Headquarters
- Kane County, Municipal Buildings Assessments
- Kane County, Justice Center Renovations
- Lake County, Courthouse Renovation
- Village of Streamwood, Police Station and Maintenance Facility
- Village of Montgomery, Police Station Feasibility Study





Certificate of Completion, Electrical Apprentice, Waubonsee Community College & IBEW

> Continuing Education, Basic Programming, Waubonsee Community College

CERTIFICATIONS

Registered Architect in Indiana, Illinois, Michigan Licensed Interior Designer in Indiana National Council of Architectural Registration Board Certified

PROFESSIONAL AFFILIATIONS

American Institute of Architects AIA Indiana

AIA Northern Indiana, Past President 1996

AIA Committee on Architecture for Education

United Way 2002-2016 Employee Campaign Coordinator

JACQUELYN HILDERBRANT, AIA CLIENT ADVOCATE

Ms. Hilderbrandt has been a licensed architect for over 35 years, has served hundreds of clients and designed a variety of types of projects. For the past 15 years she was been an architectural firm principal and leader in addition to being involved in designing and managing projects. Her experience includes Feasibility Studies, Programming, Design, Construction Drawings and Specifications, Bidding, and Construction Administration. She brings this extensive knowledge and experience to each project. She has extensive experience with designing public facilities including fire stations; industrial and single and multi-family residential projects. She has specialized in private and public education projects, K-12 and higher education, including academic, research, recreational/physical fitness, food service, and on-campus residential facilities. Ms. Hilderbrandt is attentive to detail, combining thorough documentation and superior communication skills to ensure that the outcome reflects the intent of all parties involved.

RELEVANT EXPERIENCE

- Allegius Credit Union
 - Burns Harbor, Indiana
 - Headquarters Remodeling
 - Michigan City Addition
- Argos Community Schools
- Performing Arts Auditorium
- Gymnasium and Classroom Addition
- City of South Bend
- South Bend, Indiana
 - Fire Department Equipment Storage Building
 - Fire Station No. 2
 - Fire Station No. 5
 - Fire Station No. 10
- Christ Child Society of South Bend
 - Renovation for New Location
- Culver Community Schools Corporation
 - Elementary School Addition & Renovation
 - Monterey Elementary School Addition & Renovation
 - Culver Community Middle and High School Addition & Renov.
 - Concession Building
- Goshen College

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- Goshen, Indiana
 - Kulp Hall Renovation
 - Yoder Hall Renovation
 - Kratz Hall Renovation
 - Miller Hall Renovation
- Coffman Hall Renovation
- Connector Addition to Kratz, Miller, and Yoder Halls
- Holy Cross College, Notre Dame, Indiana
 - Driscoll Hall Addition (Vincent Hall)
 - Vincent Hall Addition
 - Kitchen and Dining Hall Remodeling
 - Student Recreation Building





EDUCATION Master of Architecture, Ball State University

LICENSES / CERTIFICATIONS

Licensed Architect: Indiana

JUSTIN SORBER, RA, NCARB PROJECT MANAGER

Justin is an outstanding team member that contributes to the educational growth and success of Keystone Architecture, Inc. His work on a wide variety of building types including single-family homes, industrial facilities, multi-family complexes, downtown restorations, church and educational facilities has made him a valued team member.

RELEVANT EXPERIENCE

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- Whittaker Inn, West Lafayette, Indiana
- Columbian Park Memorial Island Bandshell, Lafayette, Indiana
- Columbian Park Carousel, Lafayette, Indiana
- Tippecanoe County Courthouse Renovations, Lafayette, Indiana
- Purdue Cordova Recreational Sports Center Renovations, West Lafayette, Indiana
 - Purdue Birck Nanotechnology Addition, West Lafayette, Indiana
- Lafayette School Corporation Greater Lafayette Career Academy, Lafayette, Indiana
- Lafayette School Corporation Jefferson High School, Lafayette, Indiana
- Lafayette School Corporation Tecumseh Junior High School, Lafayette, Indiana
- Lafayette School Corporation Jefferson High School Natatorium, Lafayette, Indiana
- Lafayette School Corporation Broncho Plaza, Lafayette, Indiana
- Tippecanoe School Corporation Career Academy, Lafayette, Indiana
- Madison Consolidated Schools Track and Field Replacement, Madison, Indiana
- Beta Theta Pi Fraternity Addition and Renovations, West Lafayette, Indiana
- University Lutheran Church Campus Ministry Center, West Lafayette, Indiana
- Sigma Alpha Epsilon Fraternity Addition and Renovations, West Lafayette, Indiana
- Alpha Gamma Delta Sorority Renovations, West Lafayette, Indiana
- Sigma Kappa Sorority Renovations, West Lafayette, Indiana
- M Power Yoga Studio, West Lafayette, Indiana
- 80/20 Inc. Headquarters Expansion, Columbia City, Indiana
- Lafayette Savings Bank Mortgage Center Renovations, Lafayette, Indiana
- Passageways Office Renovations, Lafayette, Indiana
- Arlton Residence, West Lafayette, Indiana
- Food Finders Food Resource Center, Lafayette, Indiana
- Franciscan Health Office and Maintenance Facility, Lafayette, Indiana
- Bioanalytical Systems Wellness Center, West Lafayette, Indiana
- Union of Associated Physicians Bone & Joint Center Renovations, Terre Haute, Indiana





EDUCATION Master of Architecture, University of Illinois at

Urbana-Champaign

Bachelor of Science of Architectural Studies with a Certificate in Urban Planning, University of Wisconsin - Milwaukee

LICENSES / CERTIFICATIONS

Registered Architect: Illinois

> LEED Accredited Professional BD+C

> > NCARB

TIM WEBER AIA, NCARB, LEED AP PROJECT ARCHITECT

As an Associate in the firm and project manager for a variety of projects, including restoration, higher education, municipal, financial, commercial, and religious, Tim has proven his ability to develop a sophisticated program, provide LEED Analysis, and successfully carry it from schematic design through to final punch-List. His attention to detail and knowledge of spatial relationships enable him to create pleasing spaces that satisfy the needs and wants of the owner while his understanding of building science, codes, ordinances and standard building practices for a variety of construction types allow him to accomplish this efficiently and effectively.

His active involvements in organizations like the Building Enclosure Technology and Environment Council (BETEC) and the Building Enclosure Council (BEC-Chicago), which guide the construction industry in proper application of the latest in building science knowledge, allow him to ensure cost effective, highperforming, and durable building enclosures in both new and renovation work.

- Huntley Fire Protection District, Station 1
- Huntley Fire Protection District, Station 5
- Hampshire Fire Protection District, New Fire Station
- Naperville Fire Station #9
- Village of Sugar Grove Fire Stations (6)
- Village of Sugar Grove Police Station (Silver Level LEED)
- Lisle-Woodridge, Fire Station 1
- Lisle-Woodridge, Fire Station 3
- Lisle-Woodridge, Fire Station 4
- Lisle-Woodridge, Fire Station 5
- City of Roselle, Police Feasibility Study
- Village of Clarendon Hills, Police Station
- Southwest Central 911, Feasibility Study
- City of Woodridge, Police Booking Room
- Village of Palos Heights, Fire Station 2
- Village of New Lenox, Fire Station
- Women's Correctional Facility
- Kane County, Historic Kane County Courthouse Parapet Repair
- Kane County, Historic Third Street School Building Assessment
- Fermilab, FCC Precast Repair
- Fermilab FCC2 Data Center Renovation
- Fermilab HACC Data Center Renovation
- Fermilab MuOn
- Plum Landing Retirement Center Exterior Restoration
- Devon Bank Wheeling Branch (LEED Gold)
- Northern Illinois University Gilbert Hall Renovation
- Northern Illinois University Cole Hall
- Northern Illinois University Holmes Student Center College Grind Renovation
- Waubonsee Community College Field House
- Village of Schaumburg, Firing Range Renovation
- Village of Schaumburg, Police Station Renovation





Master of Science in Civil Engineering, University of Illinois at Chicago

Bachelor of Science in Civil Engineering, University of Illinois at Chicago

CERTIFICATIONS

Registered Structural Engineer: Illinois

Registered Professional Engineer: Indiana, Iowa, Louisiana, New York, Missouri, Wisconsin

WAI CHIANG, S.E., P.E. PRINCIPAL STRUCTURAL ENGINEER

Wai Chiang, S.E. Is currently a registered structural engineer in State of Illinois and a registered professional engineer in multiple states. Wai has accumulated extensive structural design background in municipal facilities, industrial warehouses, retail buildings, theaters, schools, condominiums, equipment supporting platforms, telecommunication towers, single family residences and mid to high-rise mixed-use buildings from 14 to 40 stories in height. He was involved from the conceptual development all the way to completion with detailed coordination and communication throughout the process.

In addition to the design experience, Wai is also an experienced forensic engineer who had investigated hundreds of cases related to structural failures, building envelops, fire / moisture damage, catastrophes, foundation movements, construction accidents, defects, design errors, construction induced vibrations and etc. He had served as an expert witness in trials and given presentations on various forensic engineering topics to the legal, insurance and engineering industries.

RELEVANT EXPERIENCE

- Huntley Fire Protection District, Station 1
- Huntley Fire Protection District, Station 5
- Chicago Public Schools, Infrastructure Project
- Will County, Coroner & Recorder of Deeds Building Renovation
- Will County, Sheriff Office Space Planning
- Kane County, Courthouse Renovations
- Kane County, Municipal Buildings Assessment
- City of Aurora, Aurora Police & Public Safety Headquarters
- Aurora Public Library

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- Village of Sugar Grove, Fire Station #2
- Naperville Municipal Building, Cooling Towers Replacement
- Village of Schaumburg, Firing Range Renovation
- Village of Schaumburg, Police Station Renovation
- Fox Valley Park District, Prisco Community Center Addition and Renovation
- Clinton Unit School District #15, New Elementary School
- Byron School District #226, Mary Morgan Elementary Modernization Program
- Northern Illinois University, Cole Hall Renovation & Gilbert Hall Renovation
- Aurora University, New Dormitory & Alumni Hall Addition
- University of Chicago, Task Architect
- Illinois State University, Watterson Towers Renovation
- East Aurora School District, 84-Classroom Addition Program, New Freshman Center
- Argo Community High School, Facility Master Planning
- Argo Community High School, Science Department Renovation
- Argo Community High School, Multiple Infrastructure Projects
- Kishwaukee Family YMCA
- Greenleaf Manor





Bachelor of Science in Mechanical Engineering, Southern Illinois University

> Associate Degree in Science, Joliet Junior College

CERTIFICATIONS

Registered Professional Engineer: Indiana, Illinois, Iowa, Missouri, Michigan

Certified to use Carrier Energy Simulation Software for LEED Projects

LEED Accredited Professional

PROFESSIONAL AFFILIATIONS

National Fire Protection Association

American Society of Heating, Refrigerating, and Air Conditioning Engineers

DAVID ALLEN, PE, LEED AP SENIOR MECHANICAL ENGINEER

David is responsible for the implementation of all mechanical engineering design and coordination from schematic design through the completion of construction documents and final installation. His responsibilities include the establishment and monitoring of project budgets and schedules; value engineering; coordination of project trades; specification of project equipment and materials, as well as, preparation of specification documents.

David designs to reduce energy consumption in every facility, not just those that are pursuing LEED Certification through his design process and calculation. He has lead the mechanical team on several LEED projects where advanced energy saving strategies are implemented to meet and exceed thresholds.

His experience in energy efficient system include AHU with Variable Air Volume control boxes with reheat coils, high-efficiency Constant Volume AHU, and In-unit Geothermal Heat Pumps.

Besides his industry expertise, David brings to each project the ability to work well within a team structure and adept at creating good working relationships with all professionals associated with the project.

RELEVANT EXPERIENCE

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- Huntley Fire Protection District, Station 1
- Huntley Fire Protection District, Station 5
- City of Aurora, Police & Public Safety Headquarters
- Kane County Sheriff's Office, Regional Training Center
- University of Illinois at Springfield, Public Safety Building
- University of Illinois at Urbana-Champaign, Public Safety Building Feasibility Study
- Ogle County, Public Safety Complex
- Fox Valley Park District, Prisco Community Center
- Fox Valley Park District, Eola Community Center
 - Kaneland School District 302, Master Plan
- East Aurora School District 131, Master Plan
 - East Aurora School District 131, High School Expansion & Renovation
- West Aurora School District 129, Herget Middle School
- West Aurora School District 129, Greenman Elementary School
- Marmion Academy, Master Plan
- Village of Schaumburg, Firing Range Renovation
- Village of Schaumburg, Police Station Renovation





Certificate of Completion, Electrical Apprentice, Waubonsee Community College & IBEW

> Continuing Education, Basic Programming, Waubonsee Community College

CERTIFICATIONS

LEED Accredited Professional

Registered Energy Professional, Chicago Department of Buildings

PROFESSIONAL AFFILIATIONS

National Fire Protection Association Illuminating Engineering Society of North America

> International Brotherhood of Electrical Workers Local 461

DOUG SCHOMER, LEED AP ELECTRICAL SYSTEMS DESIGNER

With nearly 40 years of experience, Doug is a veteran of a diverse range of electrical design, management, and installation projects. He has direct knowledge of electrical construction methods and materials especially in the execution of lighting and power applications. His knowledge also extends to low voltage systems such as fire alarm and voice / data systems and infrastructure LAN and wireless networking. His working knowledge of local codes and AHJ expectations help expedite the permit process.

Doug has been directly involved in the electrical systems design, development and coordination of every project the firm has managed.

He brings to each project the ability to work well within a team structure and works hard to create good working relationships with all professionals associated with the work. His pragmatic approach has been successful in a broad range of educational, recreational, public, residential, financial and both light and heavy industrial projects.

Doug has been involved with all the firm's projects from the application of fire and communications systems, sustainable lighting to the installation of new technology systems for 100 year old buildings to new state-of-the-art facilities.

- Huntley Fire Protection District, Station 1
- Huntley Fire Protection District, Station 5
- Chicago Public Schools, Infrastructure Project
- Illinois State Highway Toll Authority Oases Redevelopment
- Kane County, Courthouse Renovations
- Kane County, Municipal Buildings Assessment
- Kane County Clerk Facility, Addition and Renovation
- Will County, Coroner & Recorder of Deeds Building Renovation
- Will County, Sheriff Office Space Planning
- Aurora Public Library
- City of Aurora, Aurora Police & Public Safety Headquarters
- City of Aurora, Civic Center
- City of Naperville, Municipal Building
- Village of Sugar Grove, Public Works Facility
- Village of Sugar Grove, Fire Station #2
- Naperville Park District, Community Center Renovation
- Naperville, Fire Station #9
- Naperville, Municipal Building
- Naperville, Police Station
- Fox Valley Park District, Prisco Community Center Addition and Renovation
- Sugar Grove Public Library
- Argo Community High School, Facility Master Planning
- Argo Community High School, Science Department Renovation
- Argo Community High School, Multiple Infrastructure Projects



CHRISTIAN MARBACH, PS PRESIDENT

Mr. Marbach is the owner and president of Marbach, Brady & Weaver, Inc. While overseeing the operations of the firm, Mr. Marbach continues to be actively involved in most of the projects undertaken by the firm. He directly manages a variety of projects including boundary surveys, route surveys, utility surveys, and land development projects. His areas of specific expertise include global positioning systems technology, photogrammetry, and large-scale control surveys. Mr. Marbach is a past president and a member of the Indiana Society of Professional Land Surveyors and is a member of the National Society of Professional Surveyors, Michigan Society of Professional Surveyors, Professional Land Surveyors of Ohio, Louisiana Society of Professional Land Surveyors, the International Right-of-Way Association, and the Elkhart Morning Rotary Club (Honorary). Appointee – Governor Rick Snyder: Indiana-Michigan Boundary Line Commission.

EDUCATION

1980 B.S., Land Surveying Engineering, Purdue University, West Lafayette, Indiana

CERTIFICATIONS

State of Indiana – Number 880002 State of Michigan – Number 037280 State of Louisiana – Number 04566 (Inactive) State of Ohio – Number 7563

- American Electric Power Various utility surveys and structures layout throughout Indiana and Michigan
- Elkhart and St. Joseph Counties Global positioning systems control for photogrametric mapping and GIS System development for both counties
- Elkhart County Landfill Earthwork layout using global positioning systems technology
- South Bend Regional Airport Pre-construction surveying and construction layout for airport infrastructure
- Moser Construction Autumn Ridge development, Mishawaka, Indiana
- NiSource Various utility surveys and structures layout throughout Indiana
- University of Notre Dame Pre-construction surveying and construction layout for Old Juniper Road rehabilitation, South Dining Hall, and Warren Golf Course
- Wagner Land Development Elkhart Industrial Park development, Elkhart, Indiana





B.S. Civil Engineering, Purdue University, West Lafayette, IN, December 1982 B.A., DePauw University, Greencastle, IN, May 1983, Cum Laude

CERTIFICATIONS

State of Indiana, 1988, PE60880266 State of Illinois, 1987, 062–043928 State of Michigan, 1991, 6201037615 State of Connecticut, 2009, 0027280 LEED Green Associate, 2010, 10602040 Green Globes Professional, 2014

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers, Past President, North Central Branch, Indiana Sect., 2011-12 Illinois Society of Professional Engineers, Distinguished Service Award, 1989 Illinois Society of Professional Engineers, Young Engineer of the Year, 1990 CTE Engineers, Inc., Outstanding Professional, 1991 Junior Achievement of Elkhart County, Outstanding Volunteer, 2008



larba

DEBRA HUGHES, P.E. SENIOR PROFESSIONAL ENGINEER

Mrs. Hughes has been in Professional Civil Engineering practice for 37 years. She started her career in Chicago. She served as Project Civil Engineer for the Chicago Transit Authority's Davis Street Station Reconstruction in Evanston for the City of Evanston and the Chicago Transit Authority.She served as Project Engineer for major roadway projects such as Civil Engineering construction plans and specifications for new freeway entrance ramp at new Illinois State Toll Highway Authority(ISTHA) Building to I-355, EIS and Preliminary Engineering for Relocation of Illinois 13 in Saline County for Illinois Department of Transportation(IDOT), Preliminary Engineering for a grade separation structure and railroad track relocation for the Indiana Harbor Belt and Wisconsin Central Railroads over Grand Avenue in Franklin Park for IDOT, and Preliminary Engineering for interchange improvements on I-94 at Baker and Zeeb Roads in Washtenaw County, Michigan for the Washtenaw County Road Commission. She prepared major drainage studies such as the construction plans and specifications for Wetland Mitigation at Ross Park, in Columbus, Ohio for Abbott Laboratories and for Stormwater Management Improvement Project at Chicago-Read Mental Health Center for the Illinois Capital Development Board. Sheserved as Coordinating Engineer for the City of Chicago Department of Transportation, Bureau of Bridges and Transit. She was responsible for technical activities on multidisciplinary transportation engineering projects in Chicago on moveable bridges, fixed bridges over waterways, and grade separation bridges to be constructed with Federal and State funds. She was responsible for programming and expenditure of the City's annual \$25 million bridge rehabilitation program and was responsible for direction of a staff of ten senior level engineering project managers and responsible for direction of up to 40 consulting engineering firms working on City bridge engineering projects. She served as Traffic Engineer for the City of Elkhart. Mrs. Hughes worked with Elkhart Community Schools in partnership to plan and install the first group of flashing School Reduced Speed Limit Signage in Elkhart. She conducted traffic studies and made recommendations for safety and traffic flow in Elkhart, including intersections, traffic signals, traffic speed studies, neighborhood traffic studies and working with the City Traffic Operations staff to implement needed changes.

Mrs. Hughes joined Marbach, Brady & Weaver, Inc. in 2003. She is responsible for the Civil Engineering Department as well as being Project Civil Engineer for a variety of Site Development, Roadway Designs, Traffic Engineering Studies and Drainage Studies and Plans for a variety of projects. Mrs. Hughes has served as Project Civil Engineer on many Elkhart Community Schools projects. Mrs. Hughes has served as technical counsel to several attorneys involved in litigation regarding traffic collisions, site development and drainage issues. Mrs. Hughes is a member of the American Society of Civil Engineers and served as President of the North Central Branch for the State of Indiana ASCE in 2011-2012. Mrs. Hughes has served as a member of the City of Elkhart's Brownfield Action Team. Mrs. Hughes has served as Associate Faculty at both Ivy Tech State College and Indiana University-South Bend's Elkhart Campus.

- Marbach, Brady & Weaver, Inc., Senior Professional Engineer, Elkhart, IN
- Traffic Engineer, City of Elkhart, IN
- Associate Faculty, Ivy Tech State College, Elkhart Campus
- Associate Faculty, IUSB, Elkhart Campus
- Coord. Engineer, Chicago DOT, Bureau of Bridges and Transit, Chicago, IL
- Senior Civil Engineer, Associate, CTE Engineers, Chicago, IL
- Office Mgr, Project Mgr, Wells Engineers, Inc., Chicago, IL
- Civil Engineer, Tornrose, Campbell & Assoc., Chicago, IL
- Civil Engineer, Department of Public Works, Chicago, IL



SOUTH BEND, INDIANA

The exterior design of the building reflects the period and character of the neighborhood of which it has become a symbol of revitalization and hope. True to historic precedent, it is a reflection of the City of South Bend's committment to its neighborhoods and the value of quality design and craftsmanship.

CLIENT

South Bend Fire Department Carl Buchanon Fire Chief 1222 South Michigan South Bend, Indiana 46601 T: 574.235.9255

PROJECT SIZE

12,000 SF

COST

\$2.13M DATE CONSTRUCTED

Completed 2007





SOUTH BEND, INDIANA

Fire Station No. 10 is a prototype design and will serve as a model for at least three future stations. The design elements reflect the scale and proportion of the adjacent residential neighborhoods as do the selection of exterior materials. The building is home to three shifts of 12 personnel and includes facilities for both male and female firefighters.

CLIENT

South Bend Fire Department Luther J. Taylor Fire Chief 1222 South Michigan South Bend, Indiana 46601 T: 574.235.9255

PROJECT SIZE

10,756 SF

COST

\$1.3M

DATE CONSTRUCTED

Completed 1999





HUNTLY FIRE STATION #1: STRUCTURAL ANALYSIS RENOVATION & ADDITION HUNTLEY, ILLINOIS

The Huntley Fire Protection District desired the consolidation and expansion of administrative, maintenance and reserve functions to a single location. After acquiring a warehouse, the District began using it as their fire station. This building, however, did not meet the criteria of an essential facility as defined by code (Category IV) and the District operated within the facility without knowing.

In 2018, Keystone was contracted to design the expansion of this station. We immediately noticed the Category IV code violations and provided various design options for the client's consideration to bring the building up to code. We proceeded with the option that was most financially feasible and least intrusive:

- We designed the new addition as a standalone structure that meets the Category IV requirements.
- The new addition would house all the essential operations in case of a catastrophe.
- The existing building was re-purposed to house other non-emergency related functions such as training, vehicle maintenance, fitness, and storage.

Keystone undertook the \$9.7M, 23,700SF, three story addition and renovations to the existing Annex Building that serve as a centralized hub for the Fire Protection District. Designs include substations featuring administration, training, vehicle maintenance, hose drying, oxygen/SCBA filling stations, reserve vehicle storage, and living quarters for up to eight firefighters. The design accommodates the unique needs of a fire station. It is sensitive to recent carcinogen concerns, featuring dedicated mechanical systems, segregation between hot and safe zones and a sauna. Living and apparatus relationships are optimized for minimized response time.

CLIENT

Huntley Fire Protection District Scott Ravagnie, Fire Chief 11808 Coral Street, #1 Huntley, Illinois 60142 Phone: 847.669.2995 Email: sravagnie@huntleyfpd.org

PROJECT SIZE

23,700 SF

COST

\$9.7M DATE CONSTRUCTED

Estimated 2020





HUNTLEY, ILLINOIS

Fire Station 5 is anticipated to improve response times to the neighboring Del Web Community in Huntley, Illinois. The new \$2.75M, 11,000SF substation incorporates a wide variety of elements designed to accommodate all of the station and stakeholder needs. The new station features two apparatus bays, individual bunk rooms, fitness room and living space for up to six firefighters. The design is sensitive to the station's needs, factoring in recent carcinogen concerns, featuring dedicated mechanical systems, segregation between hot and safe zones and a sauna. Living and apparatus relationships are optimized for minimized response time.

CLIENT

Huntley Fire Protection District Scott Ravagnie, Fire Chief 11808 Coral Street, #1 Huntley, Illinois 60142 Phone: 847.669.2995 Email: sravagnie@huntleyfpd.org

PROJECT SIZE

11,000 SF

COST

\$2.75M DATE CONSTRUCTED

Completed 2020





GENEVA, ILLINOIS

The new Kane County Multi-Use Facility is a 56,000 SF building that houses the Fleet Maintenance operations for the County for all non-KDOT fleet vehicles, a new Salt Dome and Fuel Island and Vehicle storage for the Building Management Department, Sheriff's Office of Emergency Management Division, a Seminar and Training Center for the Sheriff as well as the Sheriff's Impound lot. The facility also contains offices, workshops and support space for the Building Management Department. Additionally, there is a 5,000 SF Records Storage section and also the Headquarters for the Kane County Coroner, including the morgue and autopsy space. The new building will be located on the Main Judicial and Government Campus in St. Charles just east of the Adult Justice Center and south of the Juvenile Justice Center and will contain parking and site facilities for this operation.

CLIENT

Chris Lauzen, Chairman Kane County 719 Batavia Ave Geneva, IL 60134 630.232.5931 admin@lauzen.com

PROJECT SIZE

56,000 SF

COST

\$13,200,000 DATE CONSTRUCTED

Estimated 2021





AURORA, ILLINOIS

The design for the Aurora Police Headquarters and Branch Courts features state-of-the-art technology, substantial increases in the amount of physical space, and sustainable, LEED Gold Certified architecture. The Police Headquarters is classified as a "green" building due to its incorporation of on-site renewable energy technologies and conservation techniques, optimized daylighting, water efficient landscaping, and technologies that reduce water use by 50%. Additional LEED design credits include: Fundamental Commissioning of the Building Energy Systems; Development Density & Community Connectivity; Alternative Transportation, Roof Heat Island Effect Mitigation; and Light Pollution Reduction.

The City's Public Safety Complex features energy efficient and sustainable technologies throughout the 360,000 square foot complex with the help of a \$135,000 grant from the Illinois Clean Energy Community Foundation. The facility is LEED BD+C Gold Certified.

The new complex includes:

- Firearms Proficiency Range
- 41,000 S.F. Training & Support Facility with Evidence Storages and Forensic Laboratories.
- 154,000 S.F. Police Headquarters, Branch Court & 911 Communication Center
- 545-Space Secured 2-Level Parking Deck
- 218-space Public Parking Lot
- 2-acre Wetland / Detention Pond
- Photovoltaic Technology and Vegetated Roof
- On-site Renewable Energy

CLIENT

City of Aurora Richard Irving, Mayor 44 East Downers Place Aurora, Illinois 60506 T: 630.844.3612 mayorsoffice@aurora-il.org

PROJECT SIZE

360,000 SF

COST

\$64,347,825

DATE CONSTRUCTED

Completed 2011





Keystone was commissioned by the City of Naperville to provide Design, Engineering and Construction Management Services for a new Satellite Station #9.

Located on the Water Department campus between the Operations Building and the Electrical Sub-station, the new 7,000 S.F. facility includes 2 drive-through apparatus bays; sleeping quarters; bathroom and shower facilities; kitchen/eating area and living area for five personnel; two offices; one workout room; one laundry room; one shop; lockers for eighteen (18) personnel; and storage space for Station supplies and tools.

Due to site limitations, the building foot print was rotated to provide better access for the emergency vehicles into and out of the apparatus bays. The building orientation was also determined by the need to fit between existing under-ground utility lines that run north/south on the property. The building itself, is brick and block masonry construction, similar to that of the Water Department buildings. The roofs are hip framed wood trusses with asphalt shingles.

The building replaces an existing parking lot, eliminating an access drive onto Ogden Avenue. To compensate for the displaced parking, additional spaces have been added near the Ogden Avenue entrance and added to the south of the building, as part of the yard area for the Water Department. Curb work and a signalized traffic light were added specifically for the access of emergency vehicles onto Ogden Avenue.

CLIENT

City of Naperville Michael Zywanski Former Deputy Fire Chief 1144 Ogden Avenue Naperville, IL 60563 T: 630.420.6600

PROJECT SIZE

7,000 SF

COST

\$1,600,000 DATE CONSTRUCTED

Constructed 2006





SUGAR GROVE, ILLINOIS

The Sugar Grove Fire Protection District commissioned Keystone Architecture to provide site analysis, design and engineering for the development of several satellite fire stations for the Village to meet services demands. The Village of Sugar Grove is experiencing exponential growth. The current population of 10,000 is expected to swell to over 50,000.

The design of the first facility includes 2 apparatus bays with mezzanine above for storage and a hose and training tower. The facility has living quarters to accommodate full time fire fighters with ancillary support spaces including, kitchen, dining and dayroom, workout room, laundry, storage etc.

CLIENT

Sugar Grove Fire Protection District Sean Michels, Village President 601 Heartland Drive Sugar Grove, IL 60554 T: 630.466.4507

PROJECT SIZE

9,500 SF

COST

\$3,060,000 DATE CONSTRUCTED

On Hold



ELKHART CITY FIRE STATION NO. 3 ELKHART CITY, INDIANA

Site design for new City of Elkhart Fire Station on 1.5-acre lot on Mishawaka Road in Elkhart. Project included extension of City of Elkhart Sanitary Sewer Main approximately 300 feet to serve new Fire Station.

The project also included close coordination with Project Architect to coordinate building utilities. The Fire Station project included site grading, drainage, and stormwater retention. Permits were required for the new access driveway and right turn lane on Mishawaka Road.

ELKHART CITY, INDIANA

Design of large multiple-tenant retail center, including Martins Supermarket, Fazoli's Restaurant, Lake City Bank, and Jiffy Lube Service Center, in Elkhart, Indiana, completed for Equity Investment Group, Fort Wayne, Indiana.

This project included the design of a 220,000 square foot parking area, 1500 feet of sanitary sewer, 2500 feet of storm sewer, and a fourlane access point to an existing three-way intersection along a state highway. Other services included the design of a detailed drainage plan for the entire eleven-acre development, the preparation and submittal of a driveway permit application to the Indiana Department of Transportation, and representation before the City of Elkhart Plan Commission.



Helman Architecture Jeff Helman 129 N 2nd Street Elkhart, IN 46514 T: 574.294.6674

CLIENT

Equity Investment Group, Inc. 127 West Berry Street Suite 300 Fort Wayne, IN 46802 P: 260.426.4704 F: 260.424.3615

NORTHFIELD MARKET COMMERCIAL DEVELOPMENT ELKHART CITY, INDIANA

Design and layout of infrastructure for large commercial development including a Wal-Mart Supercenter store, in Elkhart, Indiana, completed for Wald-Land Corporation, Peoria, Illinois.

This project including the design of Emerson Parkway, a 1000-foot roadway from State Highway 19 to County Road 6. The project also included the design of water supply, sanitary sewer, storm sewer, and storm water retention areas for the entire development. Furthermore, a one million gallon per day public lift station was designed to serve this development and redirect existing sanitary sewer flow from the extreme north side of the City of Elkhart. As part of this lift station, a design was completed for a 1500-foot sanitary sewer force main, including a crossing of Christiana Creek. The project included all submittals and approvals from the City of Elkhart, Elkhart County, the Indiana Department of Transportation, the Indiana Department of Environmental Management, and the Indiana Department of Natural Resources.

CLIENT

Wald/Land Corporation Russ Waldschmidt 121 NE Jefferson Suite 200 Peoria, IL 61602 T: 309.676.7600







October 12, 2020

Ms. Becky Hutsell Redevelopment Project Manager City of Goshen Redevelopment Commission 204 E. Jefferson Street, Suite 6 Goshen, IN 46528

RE: REQUEST FOR PROPOSALS NEW SOUTH FIRE STATION STUDY

Dear Ms. Hutsell & Review Committee:

Keystone Architecture, Eye4Design Architects, and Marbach, Brady & Weaver, Inc. appreciates your consideration to provide services for the New South Fire Station Study in accordance with the RFP issuance.

Our Project Team proposes to complete the Study for a fee of \$49,250, plus an allowance of \$3,000 for Reimbursables. This fee includes the site evaluation of the one identified site. If additional site evaluations are required, a fee of \$4,000 per additional site will be required. We have only factored the Council and Commission presentations in Task 5. Our Team will partner with National Alliance for Public Safety GIS (NAPSG) Foundation and the Goshen Fire Department to develop the response time GIS data. Should the GIS study data by NAPSG be free of charge to the City, our fee will be reduced by \$3,000, thus the fee would be \$46,250. If additional presentations to the commission are desired, this cost can be factored into our fee at a cost of \$1,000 per presentation.

Per the request for proposal, please see below for a proposed cost for the scope of services with cost breakdowns by scope element.

Task 1: Site Location Analysis:

Our Project Team will assist with the following tasks (per the outlined project scope):

- Geocoding and analyzing historic dispatch data to calibrate the coverage model based on actual response times.
- Analyzing the current coverage area and response times of existing station locations.
- Determine predicted coverage areas and response times for the proposed site identified by the City.
- Prepare a written report including a summary of the analysis, methodology and all associated maps.

The data collected should establish the baseline of current coverage and identify potential gaps, along with service overlaps based on current station locations that lead to inefficient dispatch loads. Some data will be available to the selected Consultant based on previous investigations in fire coverage. evaluate the location identified by the City to determine if it provides improved coverage and lessens overlap areas through response time scenarios. Site should also be evaluated for suitability based on function and building orientations defined during the Initial Building and Site Layout Study. Our Team will partner with National Alliance for Public Safety GIS (NAPSG)

Foundation and the Goshen Fire Department to develop this GIS data. Should the GIS study data by NAPSG be free of charge to the City, our fee will be reduced by \$3,000.

DELIVERABLES:

- Written report detailing selection methodology, analysis and recommendations.
- A prioritized outline of recommendations for fire station location(s).
- Run time scenario maps for the identified site and others that may be considered.

It is anticipated that the City will issue a press release to the community following the completion of

Task 1 to provide initial notice about the future fire station relocation project.

Our Team proposes to provide services for this scope of work for \$3,000 or \$0 if this work is performed for free by NAPSG.

Task 2: Program of Requirements:

Our Project Team will assist with the following tasks:

- Conduct interviews with Fire Department staff and other key City staff to identify current and future needs intended to be served by a new fire station.
- Perform on-site observations at the three (3) existing City-operated fire stations.
- Prepare a Program of Requirements (POR) for the proposed new station.
- This POR will include interior and exterior space requirements, site requirements and possible expansion options for the new facility.
- NFPA standards related to fire station design and the appropriate elements shall be incorporated into the developed POR.

DELIVERABLES:

• Written Program of Requirements (POR)

Our Team proposes to provide services for this scope of work for \$5,000.

Task 3: Schematic Building & Site Design:

A. Initial Building and Site Study

Once the POR has been developed and approved by the City and the preferred site is identified, the building and site studies shall proceed. This will include the development of several options for building and site plans to determine efficient layouts for the proposed new fire station, utilizing the preferred site identified during Task 1.

Initially, only basic building and site plan diagrams will be developed to determine options for accommodating current and projected future needs. This phase shall be limited to only those things necessary to provide the City with accurate information to allow for an informed decision regarding the direction of future planning efforts. The goal is to determine the basic size, shape and site layout of a new facility for City approval before moving on to more detailed designs.

DELIVERABLES:

- Building Floor Plans to scale basic diagrams to define the basic plan size and layout
- Preliminary Site Plans to scale basic diagrams to define site layout and overall area requirements. Site plan shall be based on City provided information or available GIS data.

B. Final Schematic Design

Once the Initial Building and Site Study have been completed, and the design direction has been approved by the City, the initial design of the preferred option shall proceed.

This will include scaled floor plans, site plan and a basic 3D building and site model along with basic exterior color rendering and perspectives.

Based on the City's feedback, one round of revisions will be made to create the designs for final approval.

DELIVERABLES:

- Building Floor Plans to scale
- Primary Building Elevations to scale
- Preliminary Site Plans to scale based on owner provided information or available GIS data
- Basic systems descriptions for mechanical, electrical and plumbing based on typical fire station requirements. No detailed MEP design is included in Task 3.
- 2-3 3D exterior views showing basic design concepts

C. Final Building Renderings

Once the final design direction has been determined, and the exterior design approved, final computer-generated exterior building renderings shall be prepared. These renderings will be high quality and contain more detail than those provided in the Initial Building and Site Study making them more suitable for public presentation, fundraising efforts and future design development.

DELIVERABLES:

• Final Exterior Building Renderings – these renderings will be taken from the 3D model used to develop the Schematic Design

Our Team proposes to provide services for this scope of work for \$31,250.

Task 4: Opinion of Cost:

A. Opinion of Probable Construction Cost

Based on the approved Schematic Design (Task 3), a Preliminary Opinion of Probable Construction (OPC). This cost opinion will be based on current industry standard square foot cost for site development and new construction for typical fire stations being built in this area.

B. Opinion of Probable Project Cost

Based on the approved Opinion of Probably Construction Cost, an Opinion of Probable Project Cost which will include typical non-construction costs such as fees, and other project specific nonrecurring costs. This will allow the City to prepare a more complete overall project budget.

DELIVERABLES:

- Opinion of Probable Construction Cost
- Opinion of Probable Project Cost

Our Team proposes to provide services for this scope of work for \$4,000.

Task 5: Final New South Fire Station Report

Once all the planning tasks have been completed and the deliverables approved and received, a final report bound in 8 $\frac{1}{2}$ x 11 format shall be prepared. The final report will include the deliverables prepared during the development of the Study. The Final Report shall be presented to the Goshen

Redevelopment Commission and the Goshen Common Council in a public forum to discuss the study, development process and final conclusions. It is anticipated that both meetings would be held in the same evening.

DELIVERABLES:

- Five (5) copies of a bound final report and one (1) electronic copy
- Comprehensive presentation to the City of Goshen Common Council in a public forum

Our Team proposes to provide services for this scope of work for \$2,000.

Thank you again for considering the Keystone / Eye4Design / Marbach, Brady & Weaver Team for this exciting project. Should you have any questions, please do not hesitate to contact me at bkronewitter@cordoganclark.com or my cell 630.209.7525.

Respectfully submitted,

Keystone Architecture

Brian K. Kronewitter, AIA, DBIA Executive Vice President

Eye4Design Architects

acquelyn S. Hilderbrandt

Jacquelyn S. Hilderbrandt, AIA Founder & President

2020 Hourly Rate Schedule



For additional services, which would fall beyond the scope of the Standard Agreement between Owner Contract we would charge a flat hourly rate for any such services if deemed necessary. Hourly rates shall be adjusted annually. Hourly Rate Schedule for additional work if requested by the Owner is as follows:

Position	Rate
<u>Architectural</u>	
Principal	\$235.00
Executive Vice President	\$230.00
Vice President	\$210.00
Associate	\$205.00
Project Manager	\$160.00
Project Architect	\$155.00
Interior Designer	\$145.00
Architect I	\$145.00
Architect II	\$125.00
Architect III	\$95.00
Technician I	\$75.00
Administrative Assistant	\$65.00
Engineering	
Electrical Engineer	\$165.00
Electrical Designer	\$135.00
Electrical Technician	\$100.00
Mechanical Engineer	\$165.00
Mechanical Designer	\$135.00
Mechanical Technician	\$100.00
Structural Engineering	
Principal Structural	\$175.00
Senior Structural	\$165.00
Structural Engineer I	\$135.00
Structural Technician	\$100.00
Administrative Assistant	\$65.00
Construction Management	
Principal	\$225.00
Project Executive	\$210.00
Vice President	\$190.00
Senior Project Manager	\$165.00
Senior Superintendent	\$175.00
Project Manager	\$135.00
Senior Estimator	\$135.00
Superintendent	\$125.00
MEP Superintendent	\$110.00
Assistant Superintendent	\$90.00
Project Engineer	\$85.00
Project Accountant	\$70.00
Administrative Assistant	\$65.00

G	oshen			City New South Proje Mo	of Goshe Fire Statio ect Schedul on 10/5/20	n on Study e Cordogan Clark Group
ID	Task Name	Duration	Start	Finish	Predecess	Sep '20 Oct '20 Nov '20 Dec '20 Jan '21 Feb '21 Mit 6 13 20 27 3 10 17 24 1 7 14 21 28 7
1	AE RFP Process	23 days	Thu 9/10/20	Mon 10/12/20)	AE RFP Process 0 10/12
2	RFP Evaluations	9 days	Tue 10/13/20	Fri 10/23/20	1	RFP Evaluations 10/13 10/23
3	Interviews	5 days	Mon 10/26/20) Fri 10/30/20	1,2	Interviews 10/26 📷 10/30
4	Fee & Contract Negotiations	2 days	Mon 11/2/20	Tue 11/3/20	1,3	Fee & Contract Negotiations 11/2 1/3
5	Award Contract	5 days	Wed 11/4/20	Tue 11/10/20	2,3,4	Award Contract 11/4 11/10
6	Notice to Proceed	1 day	Wed 11/11/20	Wed 11/11/20	5	Notice to Proceed
7	Project Kick-off & Goal Setting Meeting	1 day	Thu 11/12/20	Thu 11/12/20	6	Project Kick-off & Goal Setting Meeting
15	Task 1 - Site Analysis & GIS Analysis	10 days	Fri 11/13/20	Thu 11/26/20	7	Task 1 - Site Analysis & GIS Analysis 11/13 11/26
14	Task 2 - Program of Requirements	10 days	Fri 11/27/20	Thu 12/10/20	15	Task 2 - Program of Requirements 11/27 12/10
13	Review Operations at Existing Stations	2 days	Fri 12/11/20	Mon 12/14/20	14	Review Operations at Existing Stations 12/11 💼 12/14
12	Task 3 - Schematic Building & Site Design	11 days	Tue 12/15/20	Tue 12/29/20	14,13	Task 3 - Schematic Building & Site Design 12/15 12/29
9	Final Schematic Design	10 days	Wed 12/30/20	Tue 1/12/21	12	Final Schematic Design 12/30 1/12
11	Schematic Design Review	5 days	Wed 1/13/21	Tue 1/19/21	12,9	Schematic Design Review 1/13 1/19
10	Schematic Design Revisions	5 days	Wed 1/20/21	Tue 1/26/21	12,11	Schematic Design Revisions 1/20 1/26
8	Final Renderings	5 days	Wed 1/27/21	Tue 2/2/21	12,15,14,	Final Renderings
18	Task 4 - Opinion of Cost	10 days	Wed 2/3/21	Tue 2/16/21	12,8	Task 4 - Opinion of Cost 2/3 2/16
17	Task 5 - Final Report	8 days	Mon 2/15/21	Wed 2/24/21	18FS-2 days	Task 5 - Final Report 2/15 2/24
16	Council & Commission Presentations	5 days	Thu 2/25/21	Wed 3/3/21	17	Council & Commission Pr 2/25 👥 3/3
			<u> </u>		Page 1	





