



CITY OF
ST. CHARLES
ILLINOIS • 1834

AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item number: 5.C

Title:

Recommendation to Approve a Resolution Authorizing a Consultant Contract for Phase I and Phase II Engineering for the Indiana Street Pedestrian Bridge

Presenter:

Chris Gottlieb, Public Works Manager – Engineering

Meeting: Government Services Committee

Date: August 26, 2024

Proposed Cost: \$ *391,881*

Budgeted Amount: \$330,000

Not Budgeted:

TIF District: None

Executive Summary (if not budgeted, please explain):

The Indiana Street Pedestrian Bridge was constructed in 1904 to provide a route across the Fox River for employees at the Cable Piano Factory. The factory was demolished in 2000 and the bridge is now used as a bike and pedestrian path connection. The most recent annual inspections have found the bridge to be in overall poor condition due to the deterioration of the substructure and superstructure. In its current condition, the bridge does not meet modern load rating requirements. As a result, per consultant recommendations, the bridge is closed during all major events. Additionally, the seven-foot width of the bridge does not meet modern standards for a mixed-use path.

In order to determine how to best manage this popular river crossing, the City publicly posted a Request for Proposals for a Phase I Engineering study. The purpose of this study will be to analyze four potential options for the bridge

1. Do nothing – used as a comparative baseline
2. Repair and restore the superstructure
3. Partial restoration incorporating original structural elements along with new elements
4. Replace the bridge in kind

The chosen Consultant will do an in-depth evaluation of the structure, looking into each of the four options, and then present alternatives for consideration. These alternatives will be reviewed by Engineering staff, historic preservation groups, and by interested citizens at public meetings. The Consultant will begin all necessary coordination with regulatory agencies. They will also assist in applying for any available grant funding for construction.

The City received four proposals from qualified consultants for this work. An evaluation committee reviewed the proposals and found TranSystems to be the best qualified consultant based on their proposed team and previous experience.

TranSystems has a proven track record working with the City, most recently on the design of the Kautz Road Reconstruction Project. TranSystems was able to obtain grants for that project covering 78% of the construction costs.

The RFP was for a Phase I study with option to extend to Phase II and Phase III engineering. TranSystems has suggested that, due to duplicate/overlapping tasks, considerable time and cost could be saved by combing Phase I and Phase II. Ideally this will result in a two-year design timeline with potential for implementation in 2027. We agree with this course of action and recommend awarding Phase I and Phase II to TranSystems.

The FY 24/25 budget has \$330,000 for this project. TranSystems Phase I estimate is for \$391,881 total, with approximately \$152k to be spent in FY 24/25 and \$239k in FY 25/26. We recommend approving the full contract value at this time. The value in excess of current budget will be included in the 25/26 budget along with the negotiated cost of Phase II Engineering.

Attachments (please list):

*TranSystems Proposal

Recommendation/Suggested Action (briefly explain):

Recommendation to award a Phase I and Phase II engineering contract to TranSystems Corporation with a value not to exceed \$391,881.



DESIGN ENGINEERING SERVICES: INDIANA AVENUE PEDESTRIAN BRIDGE

August 1, 2024 | **TRANS**SYSTEMS



Cover Page

Design Engineering Services: Indiana Avenue Pedestrian Bridge
(Piano Factory Bridge)
ENG2024-35

Based on Addendum # 1

Proposal Prepared By:			
Firm Name	Transsystems Corporation	Sales: Price, Quality and Service	
DBA	N/A	Contact Name	Matt Baldwin
Signature	<i>Matt Baldwin</i>	Phone #	708-567-0691
Print Name	Matt Baldwin	E-Mail	mnbaldwin@transsystems.com
Position	Assistant Vice President	Customer Service: Purchase Order, Invoicing, Payment	
Phone #	708-567-0691	Contact Name	Matt Baldwin
E-mail Address	mnbaldwin@transsystems.com	Phone #	708-567-0691
Operations: Scheduling and Managing the Work		E-Mail	mnbaldwin@transsystems.com
Contact Name	Matt Baldwin	Mailing Address for Payment via Check:	
Phone #	708-567-0691	1475 E. Woodfield Road Suite 600 Schaumburg, IL 60173	
E-Mail	mnbaldwin@transsystems.com		

This business Firm is (check one) An Individual A Partnership A Corporation An LLC

Exceptions: (check one)

This proposal meets and accepts all Requirements, Specifications, Terms and Conditions and Contract Language.

We hereby take the following Exceptions to the Requirements, Specifications, Terms and Conditions and Contract Language (*reference section name and identifying reference*):

SIGNATURE PAGE



Signature Page

Design Engineering Services: Indiana Avenue Pedestrian Bridge
(Piano Factory Bridge)
ENG2024-35

The undersigned proposes and agrees, after having examined the requirements and specifications, to irrevocably offer to furnish the services in compliance to all terms, conditions, specifications and applicable addenda. I (we) hereby certify and affirm that being first duly sworn an oath, deposes and states that all statements made herein are made on behalf of the Offeror, that this despondent is authorized to make them and the statements contained herein are true and correct.

In Witness Whereof, the parties have entered into this Contract upon the latter of the date accepted and signed by the City and the date accepted and signed by the Professional Service Provider.

For: City of St. Charles

By: _____
Project Manager – Chris Gottlieb

ATTEST _____

DATE _____

For: Professional Service Provider

If an Individual

By: _____
Signature

Title

If a Partnership

By: _____
Signature

Title

By: _____
Partner

If a Corporation

By: Matt Baldwin _____
Signature of person authorized to sign

Matt Baldwin, PE, PTOE

Title

ATTEST Jill Oregon, CPA _____

If a Joint Venture

By: _____
Signature

Title

By: _____
Signature

Title

DATE _____



Attach seal here

FIRM PROFILE

COMPANY BACKGROUND

Founded in 1966, TranSystems is a multi-faceted, national transportation focused firm that provides **58 years of consulting, engineering, architectural, and construction expertise to enhance the overall transportation experience.** Complementing our five local offices in the Chicagoland region, we have 1800+ professionals in more than 70 offices throughout the U.S. performing a broad range of services to all sectors of the transportation marketplace.

TranSystems realizes that municipalities, counties, and other local entities can have special and unique requirements and funding challenges. We specialize in tailoring our expertise to provide personalized service offerings to suit your specific needs while exceeding your expectations. No other transportation company masters the smallest details, and envisions the big picture, better than TranSystems. Our ability to identify and execute solutions across strategic, design, technical, and operational issues is unmatched. When it comes to moving people and products from here to there, safely and securely, we do it best.

TRANSYSTEMS BY THE NUMBERS

TranSystems is nationally recognized by several top industry organizations for our innovative consulting, engineering, and architectural solutions. As an indicator of our success and dedication to the transportation industry, TranSystems is ranked by Engineering News Record (ENR) as:

#5 *Top Design Firm in the Midwest*

#8 *Top Bridge Design Firm in the US*

#15 *Transportation Firm in the US*

SPANNING THE INDUSTRY WITH A LOCAL FOCUS

TranSystems provides innovative infrastructure solutions, and our local, technical depth is matched by our consulting expertise. We have a vested interest in municipalities, counties, and other local entities because we live here, too. With past projects ranging from major river bridges to trails in our own neighborhoods and communities, we have the experience and personnel to deliver solutions that solve your challenges. Our experience crosses the entire spectrum of transportation related systems and gives us the ability to tailor our proven approach to your individual project. The

LOCAL OFFICES

TranSystems currently has five local offices including an office in neighboring Geneva. All key staff, with the exception of Mike Cuddy, proposed for the Indiana Avenue Pedestrian Bridge (ENG2024-35) project work out of these five offices.

Geneva

121 South Third St
Suite 150
Geneva, IL 60173

Schaumburg

1475 East Woodfield Rd
Suite 600
Schaumburg, IL 60173

Chicago

222 South Riverside Pl
Suite 610
Chicago, IL 60606

Lisle

3333 Warrenville Rd
Suite 130
Lisle, IL 60532

Oak Brook

903 Commerce Dr
Suite 100
Oak Brook, IL 60523

FIRM AT A GLANCE

58+ YEARS DELIVERING QUALITY PROJECTS

VALUE OF WORK

\$500+M - Completed in Past 12 Months
\$382M - Under Contract

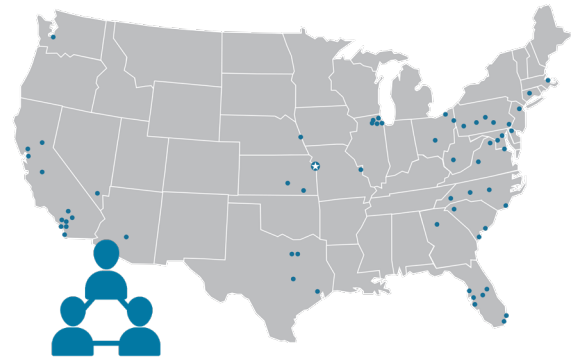
OF CLIENTS

800+ - Past 12 Months
625 - Under Contract



THE STATS

232 LOCAL STAFF



1,800+

PROFESSIONALS IN OVER 70 OFFICES NATIONWIDE

PROJECT OVERVIEW

Known as “The Pride of the Fox,” the city of St. Charles is a travel destination for its trendy downtown area and beautiful public plazas. Visitors from all over come to enjoy the city’s charm and culture. Having a historic structure in the center of it all is a major advantage for the city. However, not being able to use that historic structure or closing it off during public events is a hinderance to the economic growth and mobility in the area.

TranSystems is an industry leader in rehabilitating historic structures and understand the challenges of rehabilitating 100+ year-old structures. Our team has completed similar local projects including truss rehabilitation and strengthening for CCDOTH and the historic **92nd Street Bascule Bridge for CDOT** which included identifying and researching the historic significance and repair of the architectural components to acquire Illinois State Historic Preservation Office (SHPO) approval. In addition, our nationally recognized historic bridge experts are a distinguishing factor and support our local structural group for similar projects. They were the principal author for **PennDOT’s Historic Truss Management Plan**, which included preservation assessments for over 110 historic truss bridges in the state of Pennsylvania and are a go-to for similar projects throughout the Country.



Piano Factory Bridge



Our project goal is to identify a solution that is cost-effective, aesthetic, meets the historic requirements, and aligns with the community’s needs while minimizing impacts to the public and environmental resources.

We will deliver on this objective by:

- » Providing the necessary specialized expertise to navigate the process of rehabilitating/replacing a 100+ year old truss structure;
- » Implementing innovative bridge inspection practices to increase safety and reduce impacts to the public;
- » Developing practical solutions that will extend the life and increase the usefulness of the structure;
- » Engaging the community and project stakeholders to garner important feedback;
- » Working with CMAP and KKCOM to secure state/federal funds to minimize the local burden;
- » Using our similar experience and project management tools to deliver the project on schedule.



Fox River Trail

SPECIALIZED EXPERTISE

TranSystems is a recognized industry leader in the rehabilitation of historic metal trusses as well as the identification, evaluation, preservation, and sympathetic rehabilitation of historic structures. Our experience with similar structures will help right-size a solution that meets your needs. We understand all aspects of the historical coordination process and will develop a rehabilitation/replacement plan that meets SHPO requirements, leading to a more efficient project delivery.

We offer the following expertise for this important project:

- » Inspection, analysis, and rehabilitation of over 110 truss bridges historic in nature – no other combination of firms can claim as many truss assessments and rehabilitations
- » Historic bridge rehabilitation projects recognized by state and local historic preservation groups/advocates for our sympathetic treatment of historic materials, elements and design features
- » TranSystems historic bridge expert, Michael Cuddy, is widely recognized for his technical understanding of historic bridges, and also has the trust and respect of historic bridge advocacy groups
- » Environmental clearance and Section 106 expertise on dozens of very similar bridges

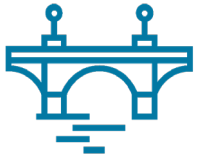
OUR HISTORIC BRIDGE EXPERT: Michael Cuddy, PE



Mike has over 30 years of extensive experience in highway, bridge, and railroad inspection and rehabilitation projects, specializing in historic structures. He is nationally known for his practical approach to historic structure rehabilitation, and his well-balanced solutions have earned him the respect of clients, SHPO offices, and advocacy groups. He has presented extensively on innovative rehabilitation techniques for historic structures, aesthetic bridge design, and cost estimating for rehabilitation projects. His projects include a multitude of historic bridge and structure projects such as rehabilitation of seven of the ten oldest highway bridges in America as listed by AASHTO.

PROJECT APPROACH

OUR PROVEN EXPERIENCE



Bridging the gap between past and present is our mission when it comes to bridge rehabilitation and restoration. With a multi-disciplined team of structural engineers, architectural historians, and construction support specialists, TranSystems is poised to preserve the history and elegance of your esteemed structure while updating its functionality.

TranSystems has comprehensive resources and capabilities to rehabilitate and restore your aging structural landmark. From analysis to testing, alternatives development to public involvement, historic preservation to design, we will rehabilitate your bridge while maintaining the historic character of the structure. We look forward to utilizing our experience on the Indiana Avenue Pedestrian Bridge.



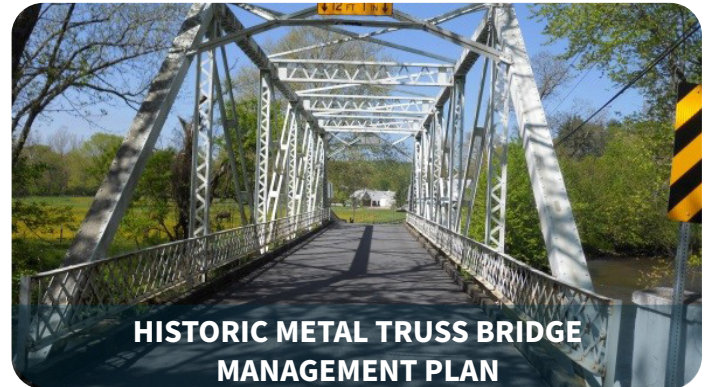
**92ND STREET BASCULE BRIDGE,
CHICAGO, IL**



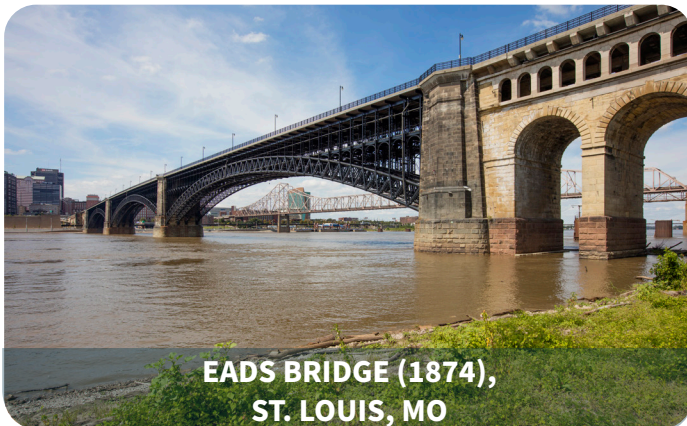
**WALNUT LINE BRIDGE (1908),
PHILADELPHIA, PA**



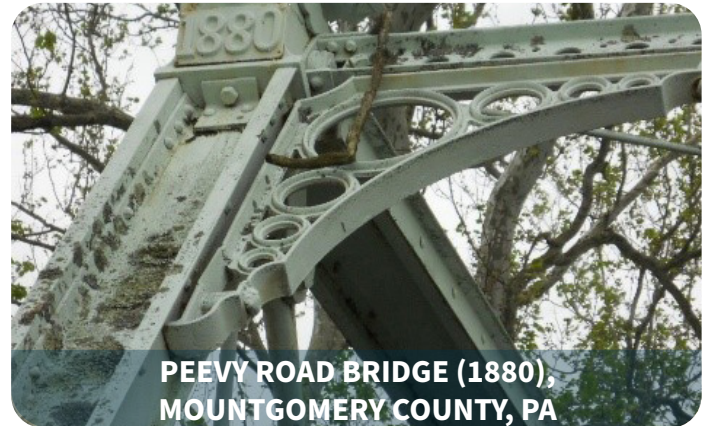
**FRANKFORD AVE BRIDGE (1699),
PHILADELPHIA, PA**



**HISTORIC METAL TRUSS BRIDGE
MANAGEMENT PLAN**



**EADS BRIDGE (1874),
ST. LOUIS, MO**



**PEEVY ROAD BRIDGE (1880),
MOUNTGOMERY COUNTY, PA**

PROJECT APPROACH

INNOVATIVE INSPECTION PRACTICES

TranSystems implements several innovative inspection techniques that result in improved safety, accuracy, and efficiency, while reducing impacts to the public. All bridge inspections are conducted using a tablet with mobile cellular connection to be able to collaborate in the field and ensure that all notes are completed thoroughly and saved on the server. This ensures that all documentation is complete before the team demobilizes from the bridge site, reducing the need to additional inspection time.

For truss inspections over waterways, technical rope access inspection saves time and allows for our inspectors to access areas within arm's reach to properly document the deterioration. TranSystems has more than 20 SPRAT trained rope access inspectors including two in the Chicago area. For the Piano Factory Bridge, rope access will allow our inspectors to access the underside of the bridge to document the deterioration of the floor beams, stringers and bottom chords. This information will be the key element in evaluating the condition of the bridge and coordinating the rehabilitation or replacement with IDOT and SHPO.

Our experience in utilizing Unmanned Aircraft Systems (UAS/drones) for inspection of difficult access parts of structures will help minimize impacts to pedestrian use of the structure and reduce risks and safety concerns associated with unknown potential deficiencies due to access limitations.

PRACTICAL STRUCTURAL SOLUTIONS

We understand that the main goal of the Phase I study is to identify constraints, determine scope of work, evaluate alternatives, and provide a recommendation. Our team will look to find the right-size solution for the city. Our first step would be to perform an in-depth inspection and prepare a Bridge Condition Report. The Piano Factory Bridge was built in the early 1900s and carries bicycle and pedestrian traffic across the Fox River. This structure consists of three simple span through-trusses. The deck is in good condition, but the bridge superstructure is in poor condition and is not structurally adequate to support the 90 psf pedestrian loading required by the current AASHTO LRFD code. As a result, the bridge is closed to pedestrians during all major events. In addition, steel railings were added to the bridge in the early 2000s which caused damage to the vertical and diagonal members of the truss, only adding to the overall poor rating of the structure. Once the condition of the structure is fully understood, our team will investigate the following structural alternatives:

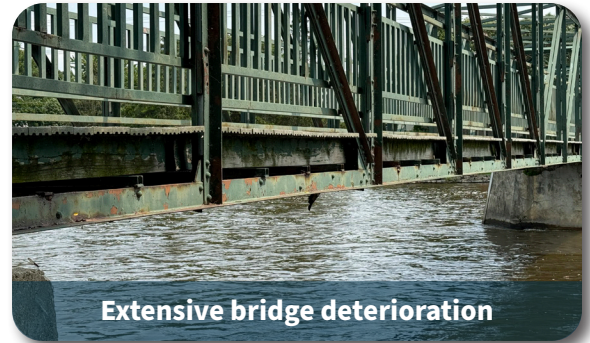


- » **Do Nothing:** As mentioned above, TranSystems understands the vital importance of this structure to the community and feels that a “do nothing” option is not in the best interest for the project, the city or local residents.
- » **Repair and Restore Superstructure:** Rehabilitation and strengthening of the existing structure to ensure the 90 psf pedestrian loading is handled. A possible solution would be to remove the existing trusses and take them to a fabrication shop to be fully restored and strengthened, which has successfully been implemented on similar local bridges. While the trusses are in the shop, the substructure could be evaluated for re-use and repair or complete replacement. The abutments and piers are listed as having no reinforcement and show signs of deterioration including large spalls. Given the age of the structure, replacement of the substructure may be the best option.
- » **Partial Restoration:** One possible solution would be to design a new multi-steel beam superstructure and mount the original trusses on the fascia beams to provided adequate strength while still maintaining the historic look of the structure. TranSystems has used this approach on structures in Pennsylvania with successful results.

PROJECT APPROACH

» **Replace-in-Kind:** Complete replacement of the structure is a viable option. Since the existing structure is only 7 feet wide, a wider path across the Fox River would be required to meet the minimum 10-foot width based on current standards for a pedestrian bridge. A completely new structure can be designed that matches the look of the historic bridge and provides a wider path. Possible realignment or relocation could also be considered if desired by the city.

With the project constraints in mind, TranSystems will evaluate each of the above alternatives to determine appropriate rehabilitation strategies and will weigh cost of repair, funding, public opinion, impacts to the public, and service life of the bridge. Our team will relate the needs of the community to the benefit of rehabilitating, improving, or replacing the critical components of the structure. Of equal importance, any component requiring replacement will be replaced in a manner that maintains the structure's historic character. **We will work directly with the city to determine a cost-effective solution that fits the goals of the project.**



Our team will consist of dedicated and qualified staff within the Chicagoland area, with a local office in neighboring Geneva. We have 21 local bridge staff that includes 9 SEs, 5 Local Structural Engineers with FHWA/NHI Bridge Inspection Training, and 14 number of IDOT NBIS Team Leaders and Program Managers. With over 21 local bridge staff members, including 9 SEs our Team is ready to deliver this exciting project for the city. Two key local bridge members are:

Eric Ozimok, PE, SE, out of our Schaumburg office has worked on two of the most complex historic structures for the City of Chicago (**Wells Street Bascule Bridge Rehabilitation** and the **Lake Street Bascule Bridge**). He will bring his expertise and insight of rehabilitating historic truss bridges to the project team.



Anna Dukes, PE, SE, out of our Chicago office has worked on numerous truss bridge rehabilitations including the **Chicago Avenue and 92nd Street Bridges** in the city of Chicago, the **McDonough Street Bridge** in Joliet and the **Frankline Street over Trail Creek** structure in Michigan City, Indiana. She will bring her technical guidance and oversight to the project.

ENGAGING THE COMMUNITY AND STAKEHOLDERS



The extent of stakeholder involvement and buy-in often determines the level of support the project will receive. We know this from our experience with numerous historic local agency improvements. Ultimately, balancing project goals with stakeholders' independent interests and historic requirements is a key to success. We have been effective implementing a variety of public outreach techniques and will develop a public involvement strategy based on feedback from the City of St. Charles.

It is our experience that federally funded structure rehabilitation/replacement projects, which is under consideration here, involve a public information meeting to present stakeholder input early in the process, and often a second meeting with for the preferred alternative. We are currently using this approach for Elgin's Chicago Street Bridge, which is listed as 'historically eligible.' We can supplement the public information meetings with additional methods of engaging residents including letters to neighboring properties, in-person or virtual meetings, planning charrettes, a project website, or surveys to identify any stakeholder concerns which we have implemented on several local agency projects.

PROJECT APPROACH

Mandi Jennings will lead the public involvement process and has 19 years of experience in communication and outreach for transportation and bridge improvements. She has successfully advised and implemented communications and public affairs strategies for various local agency projects that resulted in positive stakeholder engagement.

MAXIMIZING FUNDING OPPORTUNITIES

TranSystems understands that obtaining outside funding is critical to local communities when implementing significant infrastructure improvements such as this. Our team will leverage state and federal sources to maximize the impact of the City's dollars. **Over the past 20 years, we have been successful in obtaining over \$300M in transportation funding for local agencies**, with much of that awarded to bike and pedestrian improvements. Our funding experience was evident on the Kautz Road project where TranSystems submitted multiple funding applications and was able to help the cities of Geneva and St. Charles acquire \$4M+ via STP-L, the STP redistribution fund, ITEP, and TARP to implement a much-needed improvement.



Piano Factory Bridge (Looking North)

We discussed the best funding strategy for this project during our recent regular check-ins with both KKCOM and CMAP. The first step is to become eligible, which will require the proposed improvements follow IDOT's design guidelines. Once eligible, both agencies recommend applying for CMAP's STP-SF, CMAQ, and TAP, all of which occur every two years. The next call for projects is scheduled to open in October 2024 and closes sometime in December. This round will fill FFYs 2026-2030 which means most of the funding will be available in 2029 and 2030. TranSystems will work with both liaisons to determine the balance of the other FFYs in the coming months to see where the project could potentially fit. While the programmed years are currently beyond the City's schedule, project readiness will be critical to improving funding application scoring and

potentially expediting the implementation. With a surplus of funding available in upcoming years due to projects missing their deadlines, KKCOM indicated that 2027 or 2028 are possible for construction if we can secure Design Approval and complete the design plans by then.

ITEP (annual program) is another viable source that can be pursued for the pedestrian structure. Cycle 16 is currently open with a September 30th deadline which will be too early to submit based on the project schedule. However, advancing the Phase I engineering and pursuing ITEP in the Fall of 2025 would align with the project schedule. ITEP funds must be obligated within four years from the award notification letter date and up to \$3 million can be awarded to a project, which aligns with the city's programmed estimated replacement cost.

PROJECT & SCHEDULE MANAGEMENT

Our team has served as a trusted advisor for the City and several adjacent communities along the Fox River for bridge projects. We understand the area. **Grace Dysico, PE** will serve as project manager due to her experience leading the **Z-100 Bridge** project and environmental task for the **Chicago Street Bridge**, both over the Fox River. Grace has over 39 years of experience in management of projects and preparation of Environmental Impact Statements, Environmental Assessments, Categorical Exclusions, and Project Development Reports within Illinois and several other states. She offers extensive knowledge and experience coordinating with historical agencies, is well versed in the NEPA process, and is certified as our Environmental Lead for EIS. Supporting Grace, **John Fortmann, PE** is a former District 1 Engineer for IDOT and will lead the agency coordination efforts. John has a strong working relationship with District 1 staff and understands the process to help streamline approvals.

TranSystems will follow established procedures for coordination with outside agencies, especially with IDOT and FHWA, to help maintain state and federal funding eligibility, if desired. This adds an additional dimension to the project, as managing the IDOT/FHWA process becomes a critical element in developing and successfully completing the project in a timely fashion. Our experience working with Marilyn Solomon, IDOT's District 1 Coordinator for Kane County, will benefit the project as, we understand her expectations for deliverables and how to effectively coordinate with her staff through frequent check-ins to reduce the overall project schedule.

PROJECT APPROACH



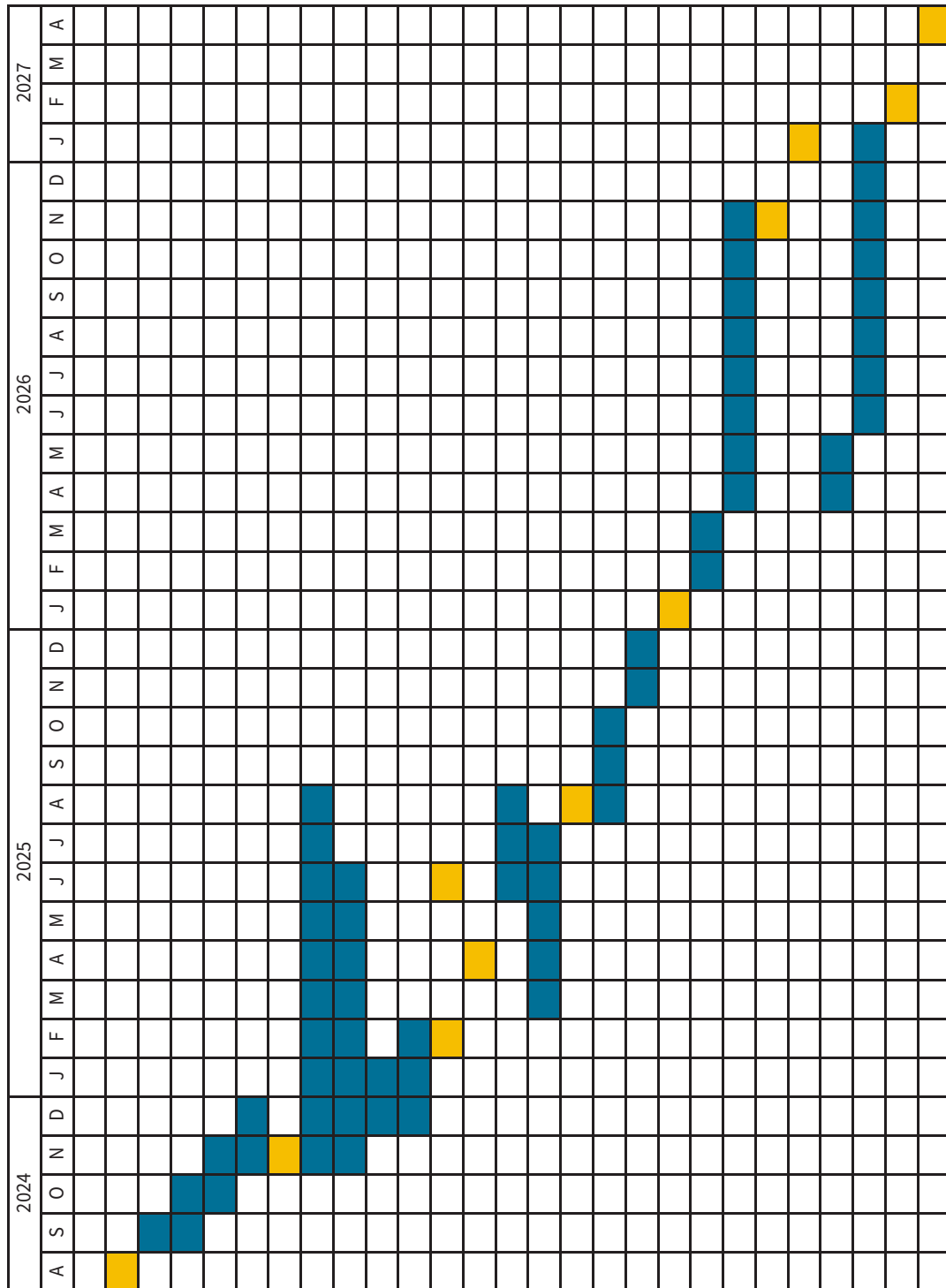
We anticipate an 18-24 month schedule to acquire design approval for this project. Two key tasks that will impact the duration of the Phase I are the alternative analysis, which will involve City and stakeholder feedback to identify a preferred alternative, and historical agency coordination. Regardless of the funding source, coordination with cultural agencies will be necessary during Phase I due to the age of the structure. Consequently, identifying the preferred alternative will be the launching point for coordination with IDOT's Cultural Unit and SHPO, who determine whether the project will have adverse effect on a historically eligible structure. Rehabilitation will not be perceived as an 'adverse effect,' while a superstructure or full replacement will be. An adverse effect requires additional coordination with SHPO, including a 4(f) report as part of the Section 106 process and will extend the overall project schedule. If an adverse effect is determined, our team will prioritize development of the 4(f) report and identify a solution that is acceptable for SHPO.

Another schedule consideration is how the project funding will affect project duration. As noted in the previous section, there are several opportunities to pursue outside funding. While obtaining monies will reduce the city's financial burden for the proposed improvements, it could extend the overall project schedule. Depending on the city's urgency, there are several strategies to reduce the project timeline. Several strategies are listed below and can be discussed with the City during the initial scoping meeting.

Opportunities to reduce the project schedule include:

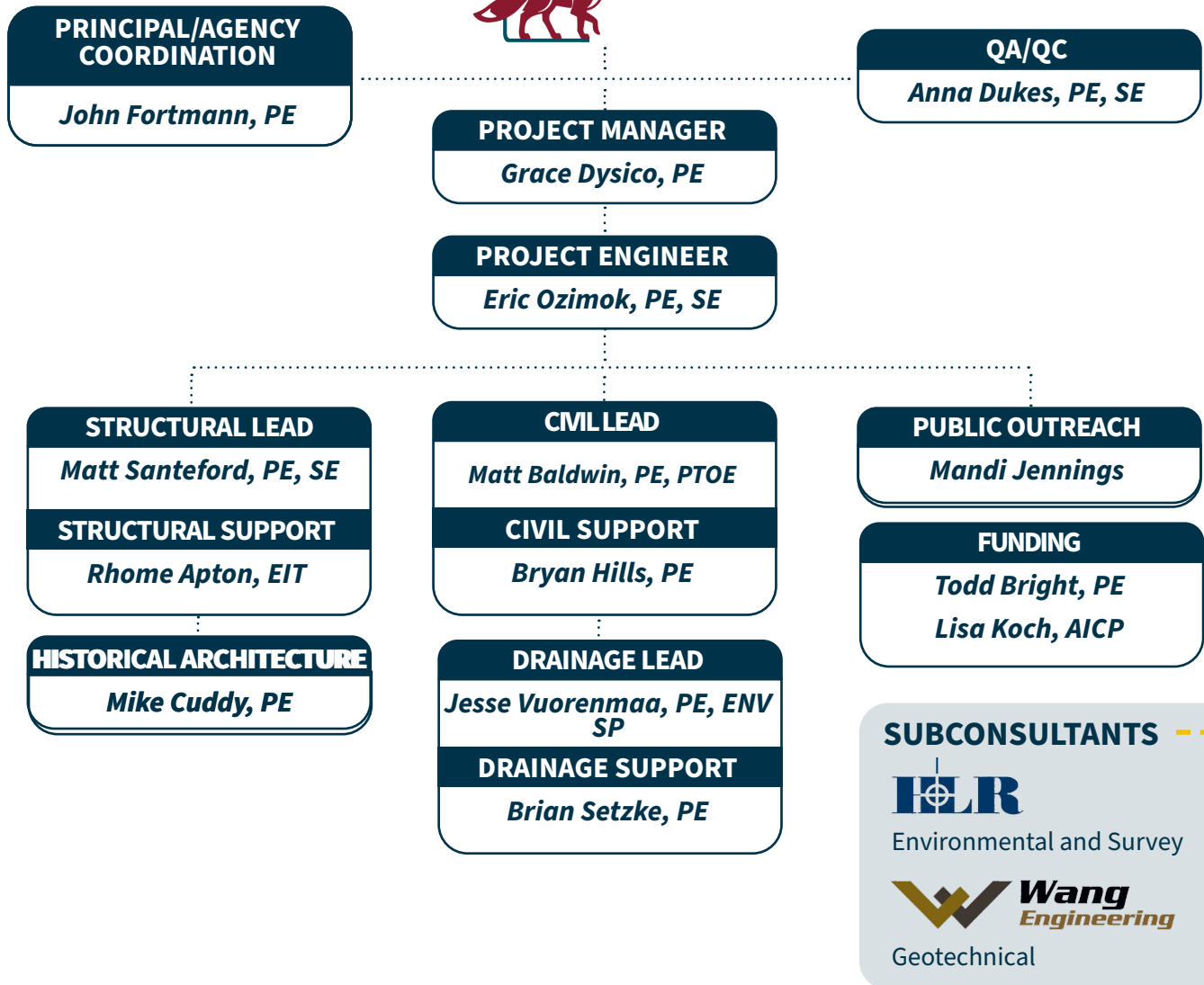
- » The City can locally fund Phase I and II engineering to allow for the two phases to move forward concurrently. This approach would save approximately 8-12 months.
- » IDOT allows for the use of a Section 1440 agreement on federally funded engineering contracts to expedite project startup. We have been implementing the Section 1440 agreement for most local agency Phase II engineering contracts (currently shown in the schedule), which allows the project to start with preliminary approval of the contract from IDOT while it is under review. Section 1440 approval is taking 6-8 weeks, while Phase II engineering agreements range from 6-12+ months to obtain approval.
- » If the city's preferred scope is rehabilitation, state/federal funds likely won't be pursued due to eligibility. The preliminary analysis can be conducted to outline initial costs and identify if the rehabilitation option is desirable. If so, the project would be streamlined and no coordination with IDOT Local Roads will be necessary. If rehabilitation is not preferred, then we can engage IDOT at this point and move forward with the pursuit of state/federal funds.

PROJECT SCHEDULE



Milestones

ORGANIZATION CHART



PROJECT MANAGEMENT APPROACH

We are committed to delivering this project and have additional capacity to increase production and meet project milestones. One of TranSystems’ greatest strengths is that we have excellent depth of staff with 21 structural engineers and 9 SEs. Our team has unmatched expertise with similar truss structures and the review agencies, which will be critical in the successful delivery of the project. Our subconsultants also have this same commitment and have the available capacity needed to serve the City of St. Charles on this important improvement.

We have tailored our team to address the specific needs of this project, assigning John Fortmann as Project Principal and Agency Coordinator, Grace Dysico (Project Manager), Eric Ozimok (Project Engineer), and Mike Cuddy (Historic Architecture Lead) due to their successful history with similar projects. Our team has worked with local agencies throughout northeastern Illinois to deliver similar structure rehabilitation/replacements, and another 100+ nationwide. Grace Dysico, PE has over 39 years of experience in management of projects and preparation of Environmental Impact Statements, Environmental Assessments, Categorical Exclusions, and Project Development Reports within Illinois and several other states. Responsiveness and accountability are cornerstones of her approach to project management, and she offers extensive knowledge and experience of the NEPA process. For a more in-depth description of our staff and pertinent project challenges, please refer to the remainder of our Statement of Qualifications.



EDUCATION

B.S., Civil Engineering
University of Illinois,
1985

REGISTRATIONS

Professional Engineer: IL 1991

YEARS OF EXPERIENCE

39 (28 with firm)

Grace has 39 years of experience in management of projects and preparation of Environmental Impact Statements, Environmental Assessments, Categorical Exclusions, and Project Development Reports within Illinois and several other states. She offers extensive knowledge and experience in transportation projects including major interchanges, roadway, railroad, high-speed rail, transit, bikeway and pedestrian improvements. Grace is well versed in the NEPA process and is certified as our Environmental Lead for EIS. She is also well versed in Context Sensitive Solutions (CSS) and has led public involvement and outreach activities as a meeting facilitator and consensus builder.

92nd Street Bascule Bridge, Chicago, IL

Environmental Lead for the rehabilitation of the 92nd Street/Ewing Avenue bridge over the Calumet River. Work includes managing a design team that included structural, electrical, and mechanical engineers for the replacement of the moveable truss spans, electrical systems, mechanical upgrades, and installation of bridge house staff support facilities. As a historic bridge, a detailed Section 106 analysis identified bridge and bridge house features which need to be maintained and restored through the rehab.

Metra District West Bridge Z-100 over the Fox River, Elgin, IL

Project Manager/Environmental Lead for the final engineering design for the replacement of the Milwaukee District - West bridge (MD-W Z-100) over the Fox River. The new 555' long double track bridge replaces the existing single track structure. Grace was the Environmental Lead for the Environmental Assessment (EA) document and Finding of No Significant Impact (FONSI) in compliance with FTA guidelines. A unique environmental task was processing an Incidental Take Authorization Permit with the Illinois Department of Natural Resources. TranSystems coordinated with Metra and FTA to facilitate reviews and final approval. A public hearing was conducted to meet the FTA public availability requirements for the EA document. Outreach was provided with the City of Elgin and local residents and business owners adjacent to the project.

County Line Road Bridge, McHenry County, IL

Environmental Lead for Phase 1 engineering services for the replacement of a two-span 97-foot-long concrete through girder bridge built in 1921 crossing the Kishwaukee River in unincorporated Marengo Township, McHenry County, Illinois. The structure has Illinois State Historic Status based on the methods used to construct the bridge. The Phase 1 study included evaluation of bridge alternatives, Section 106 coordination, environmental review, hydraulic modeling, and agency coordination.

Ohio Street Bridge Replacement, Aurora, IL

Project Director/Environmental Lead for the reconstruction of the Ohio Street Bridge over Indian Creek and the BNSF Railroad in Aurora. Ohio Street is a north-south major connector. The Ohio Street Bridge crosses four tracks of the Burlington Northern Santa Fe Railroad, which accommodate freight and commuter trains, and Indian Creek. The existing bridge is a five span steel girder structure built in 1928 and was replaced by a three span continuous steel plate girder bridge on pile supported abutments with MSE walls, and multi-column concrete piers. This project used Highway Bridge Program funds for the full replacement of the bridge.



EDUCATION

M.B.A.,
University of
Pittsburgh Katz
Graduate School of
Business, 2005
B.S., Civil Engineering
Pennsylvania State
University, 2000

REGISTRATIONS

Professional
Engineer: IL, 2009
Structural Engineer:
IL 2017

YEARS OF EXPERIENCE

23 (1 with firm)

Eric has over 23 years of experience in designing bridges and structures for the Illinois Tollway, IDOT, CDOT, and local counties. Eric's expertise in highway bridges, movable bridges, and Accelerated Bridge Construction (ABC) gives our team added strength for serving clients with their structural engineering needs. Eric is experienced in LRFD and LFD design and analysis of concrete and steel bridges and other transportation-related structures including new structures, replacement structures, and rehabilitation of existing structures. He has developed structure geometry; type, size, and location studies; foundation submissions; preliminary and final design calculations; construction cost estimates; special provisions; plan preparation; man-hour estimates; and cost and scope proposals; and has coordinated work between various offices throughout the country. In addition, Eric has performed bridge inspections including BMS coding, structural analysis, ratings, and report writing, and has suggested recommendations during routine bridge inspections.

92nd Street Bascule Bridge, Chicago, IL

QA/QC for the rehabilitation of the 92nd Street/Ewing Avenue bridge over the Calumet River. Work includes managing a design team that included structural, electrical, and mechanical engineers for the replacement of the moveable truss spans, electrical systems, mechanical upgrades, and installation of bridge house staff support facilities. As a historic bridge, a detailed Section 106 analysis identified bridge and bridge house features which need to be maintained and restored through the rehab.

Wells Street Bascule Bridge Rehabilitation, Chicago, IL

Deputy Project Manager responsible for overseeing the design for Phase II engineering services for the Wells Street Bascule Bridge over the Chicago River and coordination with the client. This historic bascule bridge, built in 1922 and listed on the Illinois Historic Bridge Survey, is a double-deck, double-leaf structure that carries the Chicago Transit Authority (CTA) elevated railway on the upper level, and vehicle, bicycle, and pedestrian traffic on its lower level. The main span is 345 feet long and 72 feet wide. Phase II services consist of a major rehabilitation of the main trusses and the entire replacement of the steel framing for the lower-level roadway and upper-level railway structures. Phase II also includes major rehabilitation of the mechanical and electrical components including bridge houses, architectural elements, and river walls. This bridge rehabilitation will be performed with minimal disruption to transit service and the traveling public.

Lake Street Bascule Bridge Rehabilitation, Chicago, IL

Deputy Project Manager responsible for overseeing the design for Phase I and Phase II engineering services for the Lake Street Bascule Bridge over the Chicago River and coordination with the client. This bascule bridge is a double-deck, double-leaf structure that carries the Chicago Transit Authority (CTA) elevated railway on the upper level, and vehicle, bicycle, and pedestrian traffic on its lower level. Phase I services include inspection, Bridge Condition Report, and Type Size and Location plans. Phase II services consist of a major rehabilitation of the main trusses and the entire replacement of the steel framing for the lower-level roadway and upper-level railway structures. Phase II also includes major rehabilitation of the mechanical and electrical components including bridge houses, architectural elements, and river walls. This bridge rehabilitation will be performed with minimal disruption to transit service and the traveling public.



EDUCATION

M.S., Civil Engineering
University of Miami,
1993
B.S., Civil Engineering
University of Miami,
1991

REGISTRATIONS

Professional Engineer: IL, 1998
Structural Engineer: IL, 1999

YEARS OF EXPERIENCE

31 (5 with firm)

Anna has 31 years of experience in bridge and structural design. She has worked on various Phase I and Phase II transportation projects as a Lead Structural Engineer, Project Manager, and QA/QC Reviewer. Her wide range of projects include highway bridge design and rehabilitation, transit structures, cut and cover tunnels and railroad bridges. Work includes preparation of Bridge Condition Reports, Project Design Reports, contract plans, specifications and cost estimates, and Phase III support including shop drawing review. As a Project Manager, Anna plans and coordinates work with other disciplines and performs project administration.

92nd Street Bascule Bridge, Chicago, IL

Project Manager for the rehabilitation of the 92nd Street/Ewing Avenue bridge over the Calumet River. Work includes managing a design team that included structural, electrical, and mechanical engineers for the replacement of the moveable truss spans, electrical systems, mechanical upgrades, and installation of bridge house staff support facilities. As a historic bridge, a detailed Section 106 analysis identified bridge and bridge house features which need to be maintained and restored through the rehab.

Chicago Avenue Bridge over the North Branch of the Chicago River, Chicago, IL

Project Manager for the Phase I engineering services for the replacement of the Chicago Avenue Bridge over the North Branch of the Chicago River. Located less than two miles from downtown Chicago, the Chicago Avenue Bridge is a two-leaf bascule bridge that was constructed in 1914. Almost 100 years old, the bridge is functionally obsolete and in poor condition. The Phase I services included the necessary investigations and evaluations to determine the most appropriate rehabilitation effort for the structure. These services included data collection; surveys; geotechnical investigations; inspection of existing conditions, including

structural, mechanical, electrical, and architectural; and preparation of a Bridge Condition Report and a Project Development Report, that included a Section 106 Statement to address the impacts associated with a historic bridge. The proposed structure needed to accommodate vertical navigational clearances per U.S. Coast Guard requirements. A tied-arch bridge was selected that could be lifted in place using jacking and cribbing. Anna was responsible for overseeing the development of the Project Report, coordination with the Subconsultants, oversight of the Bridge Condition Report and TS&L design, and project administration including progress reports and invoicing.

Bridge Rehabilitation of US6/52 (McDonough Street) over the Des Plaines River, Joliet, IL

Senior Structural Engineer for Phase III services for the rehabilitation of the movable bridge that carries US 6/52 over the Des Plaines River. The river crossing is comprised of 227 linear feet of fixed-approach structure and a double-leaf rolling truss lift structure having a total span length of 174 linear feet. Engineering services included construction inspection, contract administration, on-site materials testing, and material quality assurance testing. Anna's responsibilities included structural engineering support for shoring and bridge balancing review and design modifications based on changed field conditions.

MIKE CUDDY, PE // HISTORICAL ARCHITECTURE **TRANSYSTEMS**



EDUCATION

B.S., Civil Engineering
University of Pennsylvania, 1984

REGISTRATIONS

Professional Engineer: PA, 1990

YEARS OF EXPERIENCE

39 (39 with firm)

Mike has extensive experience inspecting, analyzing, and rehabilitating historic bridges. He is nationally known for his practical approach to historic structure rehabilitation, and his well-balanced solutions have earned him the respect of clients, SHPO offices, and advocacy groups. He has presented extensively on innovative rehabilitation techniques for historic trusses, concrete arches, masonry arches, suspension bridges, aesthetic bridge design, and cost estimating for rehabilitation projects. Mike has incorporated innovative rehabilitation techniques that minimize or eliminate adverse effects on historic resources.

West Newton Bridge, PennDOT District 12-0

Historic Bridge Specialist for the West Newton Bridge Project carrying SR 0136 over the Youghiogheny River. The bridge is a three-span pin-connected Parker through truss (currently only 1 of 8 in PA) constructed in 1907. The structure is eligible for the National Register of Historic Places and located in the West Newton Downtown Historic District. The Greater Allegheny Passage (GAP Trail) crosses at grade with SR 0136. TranSystems performed a bridge alternative analysis report that studied several bridge rehabilitation alternatives along with a long-term cost benefit analysis and determined that a full bridge rehabilitation was the preferred alternative. This includes closing the bridge for 2-years to perform intricate rehabilitation techniques and building a temporary bridge over the Youghiogheny River due to the current traffic and impact to local businesses.

Frankford Avenue Bridge Rehabilitation, PennDOT District 6-0, Philadelphia, PA

Project Manager for rehabilitating the three-span, stone masonry arch bridge which crosses over the Pennypack Creek and is the oldest bridge in America still carrying traffic. The scope of work included rebuilding in-kind the north spandrel wall, replacing the earth fill with lightweight concrete fill, reconstructing in-kind the sidewalk overhangs on either side of the bridge, salvaging and restoring the decorative pedestrian railing, updating the roadway safety features to crashworthy roadway barriers that are mounted to reinforced concrete moment slabs, cleaning and repointing stone masonry throughout and cleaning and resealing the existing concrete arch liners.

Main Street Bridge Rehabilitation, PennDOT District 6-0, Norristown, PA

Project Manager for rehabilitation of the masonry arch of the Main Street Bridge, which crosses Stony Creek in the City of Norristown and is a contributing element to the Norristown Historic District. The single-span masonry arch structure with a span of 40 feet and a rise of 13 feet was structurally deficient; however, due to the high volume of pedestrians and vehicular traffic, the bridge could not be closed for construction. Using an aluminum plate liner system allowed most of the rehabilitation/strengthening work to occur from underneath the structure while minimizing traffic interruptions.

Walnut Lane Bridge over Wissahickon Creek, Philadelphia, PA

Project Manager for the inspection and rehabilitation of the historic Walnut Lane Bridge. The hands-on inspection was performed on the bridge using an underbridge inspection crane and the areas of deterioration were documented. A structural analysis and rating, reflecting the existing dead loads, was performed on each major component of the structure. The analysis and ratings are based on the Load Factor Analysis Method in accordance with the AASHTO Manual for Condition Evaluation of Bridges, 2003, as modified by PennDOT. The results were then used to develop a rehabilitation program that fit the needs of the bridge and utilizes recognized historic structure rehabilitation techniques.

SUPPORT STAFF

MATT BALDWIN, PE, PTOE | CIVIL LEAD // Professional Engineer: IL, 2011



Matt has 18 years of experience in civil engineering and is a Project Manager at TranSystems. He has primarily focused on transportation engineering for local agency projects, which includes several river bridges. Matt has recently led several similar projects, including the Chicago Street Bridge over the Fox River in Elgin and the Riveredge Park Pedestrian Bridge in Aurora.

BRYAN HILLS, PE | CIVIL SUPPORT // Professional Engineer: IL, 2015



Bryan is an experienced civil engineer with a broad range of expertise from project management to design to construction. He started his career performing construction management and observation, and currently is working as a civil designer on transit streetscape, roadway design, and railroad projects in the City of Chicago. Bryan recently completed construction staging and utility relocation plans for the complex State/Lake Station. He also led civil work for Metra's MDN Grayland Station that provided ADA access to the station. Bryan is currently working on the 92nd Street Bascule Bridge and understands the complexities of rehabilitating a historic truss structure.

JESSE VUORENMAA, PE, ENV SP | DRAINAGE LEAD // Professional Engineer: IL, 2009



Jesse has 19 years of experience in highway design, traffic, safety, and drainage studies. He has been responsible for the development of highway and intersection geometry, crash studies, traffic control and staging plans. He has experience in preparation of Location Drainage Studies, Location Drainage Technical Memorandums, Hydraulic Reports and Phase II drainage plans. He is proficient in the following software programs: WSP-2, HEC-2, HEC-RAS, Hydraflow, HEC-HMS, HY-8, StormCad and PondPack.

BRIAN SETZKE, PE | DRAINAGE SUPPORT // Professional Engineer: IL, 2022



Brian has experience on multiple projects throughout his time at TranSystems. These range from Phase I and II projects for the Illinois Tollway, IDOT, Metra, and various local agencies. Brian has experience preparing Hydraulic Reports, Location Drainage Studies, and roadway plans and is well versed with the SRH-2D/SMS, HEC-RAS, and HEC-HMS software.

MATT SANTEFORD, PE, SE | STRUCTURAL SUPPORT // Professional Engineer: IL, 2008, Structural Engineer, IL 2012



Matt has 18 years of experience in the inspection, structural design, and project management of roadway and rail transportation projects, ranging from simple to complex, throughout the Chicago area and nationwide. His project experience includes bridge inspection, BCRs, TSLs, bridge design, retaining wall design, plan production, specifications, and estimates of cost. He also serves as the bridge inspection team leader for inspection, repair, and rehabilitation projects. As Structural Manager in Chicago, he oversees all aspects of design and preparation of contract documents.

RHOME APTON, EIT | STRUCTURAL SUPPORT // Engineer-in-Training: IL



Rhyme has 4 years of experience as a Structural Engineer. He has worked on projects throughout the City of Chicago as well as the state of Illinois. These include roadway and river bridges, both fixed and movable.

SUPPORT STAFF

MANDI JENNINGS | PUBLIC OUTREACH



Mandi has 19 years of experience and has a successful track record in transportation project management, municipal and community communication and outreach, tenant representation, transaction management, office administration, multi-location oversight, process improvement and development in fast-paced professional environments. Mandi is widely recognized by executives, administrators, and peers for her deep expertise in project management, executive presentations, business development, networking, process improvements and final project approval. Mandi has successfully advised and implemented communications and public affairs strategies in a design corridor manager's capacity on behalf of the Illinois Tollway for the 10-year, \$4 billion, I-294 Central Tri-State Corridor project.

TODD BRIGHT, PE | FUNDING // Professional Engineer: IL, 1989



Todd has extensive experience with planning reports, contract plan preparation, and coordination for municipal projects, including roadway and intersection geometrics, drainage and hydraulic studies, bridge design, rail design, storm sewer design, bikeway and pedestrian facilities, streetscape design, capacity analysis, traffic and accident studies, signal warrants, right-of-way requirements, environmental studies, funding analysis, and public coordination and involvement. Todd has also worked with our clients within the Chicago region in utilizing federal and state funding sources for transportation improvements. He specializes in securing and processing "outside dollars" for our clients.

LISA KOCH, AICP | FUNDING



Lisa Koch is TranSystems' Grants Practice lead and has over 20 years of experience writing and administering grants. She has written and administered grants in the nonprofit, municipal government, state government, university and private sectors during her career and has successfully written grants for USDOT, HUD, HHS, NSF, DOE, DOJ, FEMA, numerous state grant programs, and private/foundation programs. Lisa has a thorough understanding of the project lifecycle and its connection to federal aid requirements, which is one of the specific values Lisa brings to the development of every grant.

SUBCONSULTANTS

HLR HLR is an employee-owned corporation and a leading provider of professional consulting engineering, environmental, and surveying services for public agencies and private-sector clients in Illinois. HLR provides a full range of transportation engineering, environmental, and surveying services to help their clients meet the challenges of developing new facilities and/or maintaining existing infrastructure that enhances our communities. Their highly qualified and experienced staff utilizes the latest technology to develop innovative and cost-effective solutions to meet your project goals.

Environmental: HLR embraces the goal of protecting the environment while facilitating the design and construction of infrastructure projects and improving our communities with their environmental services. Their experienced biologists can investigate environmental solutions and sustainable alternatives to enhance your project and help you maneuver through the complex permitting process.

Survey: From route and stream surveys to full-service right-of-way acquisition, construction staking, and GIS surveys, HLR provides the base data used by engineers to develop projects and support their construction partners.



Established in 1982, Wang Engineering, Inc. (Wang) specializes in geotechnical engineering, construction inspection, and materials testing services. Over the past 30 years, Wang has provided these services to a wide range of state and federal governments, private, and public sector clients throughout the United States and in several countries overseas.

Wang is prequalified to provide Geotechnical Engineering services by the Illinois Department of Transportation (IDOT), and the Indiana Department of Transportation (IndOT). Wang is also prequalified to perform Construction Inspection and Quality Assurance Testing by the Illinois Department of Transportation.

Their materials testing laboratory is accredited by the American Association of State Highway Transportation Officials (AASHTO) Materials Reference Laboratory (AMRL) and the Concrete and Cement Reference Laboratory (CCRL).

Wang is a certified Disadvantaged Business Enterprise (DBE) in the states of Illinois and Indiana and is also certified as a Minority Business Enterprise (MBE) by the City of Chicago and numerous other public agencies.

PROJECT EXPERIENCE

CHICAGO STREET BRIDGE // ELGIN, IL



CLIENT: City of Elgin, IL

CLIENT CONTACT:

Mike Pubentz
Public Service Director
(847) 931-6081

CONSTRUCTION COST: \$15,000,000

COMPLETION DATE: On-Going

The scope consists of a Phase I/II Engineering for the Rehabilitation/Reconstruction of the Chicago Street Bridge over the Fox River. The initial Phase I scope includes the development, evaluation, coordination and selection of a preferred design along with the evaluation and clearance of environmental elements to meet the required Federal NEPA process and receive Design Approval from IDOT and FHWA. Chicago Street Bridge is registered as historically eligible, and coordination with IDOT's Cultural Unit as well as SHPO is required during the initial studies.

The City owns and maintains the Chicago Street Bridge over the Fox River (SN 045-0058). The bridge is a four-span continuous concrete T-beam bridge and was originally constructed in 1939 and is listed as a historically eligible structure. The deck and superstructure are in poor condition and has been rehabilitated several times including deck replacement and the addition of a latex modified concrete overlay. Untreated timber piles support the piers and abutments. At the time of advertisement, the structural sufficiency rating was 61.9, but has since decreased to 36.0, making it eligible for replacement.

Project specific similarities include:

- » Bridge that is 50+ years old, making it eligible for historic consideration
- » Structure over the Fox River
- » Evaluate both Rehabilitation and Reconstruction alternatives
- » Bicycle/Pedestrian accommodations
- » Connection to regional trail
- » Public Involvement with local stakeholders
- » Pursuit of federal funds
- » Coordination with IDOT Local Roads

PROJECT EXPERIENCE

92ND STREET BASCULE BRIDGE // CHICAGO, IL



CLIENT: City of Chicago, IL - Engineering (Highways)

CLIENT CONTACT:

Luis Benitez
Chief Bridge Engineer
(312) 744-5807

CONSTRUCTION COST: Varies

COMPLETION DATE: On-Going

The historic 92nd Street Bridge is located in Chicago's Stony Island neighborhood near the Chicago Skyway Bridge and the Illinois/Indiana border. The 92nd Street Bridge is a double-leaf, trunnion type bascule bridge and is the first active movable bridge west of Lake Michigan, meaning that all river traffic must pass under it to reach the many industrial properties located upstream.

The current structure, opened in 1914, replaced a manually operated swing-bridge and is the eighth oldest bascule bridge in Chicago. Although the 92nd Street Bascule Bridge is currently not listed on the National Register of Historic Places, the bridge was determined NRHP-Eligible by the Illinois State Historic Preservation Officer (SHPO).

TranSystems' scope of work includes both Preliminary or Phase I engineering services and Phase II Design Services for the rehabilitation of the existing bridge and the houses. The work included a historic evaluation of the bridge and the houses documenting character defining features; inspections of the structural, mechanical and electrical systems, and evaluation of the span drive machinery.

TranSystems worked closely with IDOT Cultural Resource Unit as the proposed rehabilitation would need to be performed in accordance with the Chicago Movable Bridges Preservation Plan and Programmatic Agreement and meet the documentation requirements in accordance with the National Historic Preservation Act Section 106 and U.S. DOT Act Section 4(f).

TranSystems is currently developing Phase II rehabilitation plans including structural, mechanical and electrical engineering design of the new bascule leaves; rehabilitation of the bascule piers, and rehabilitation of the bridge houses.

Several components of the mechanical system that operate the bridge warrant full replacement including the racks and pinions, trunnion, brakes, centerlock gearing and machinery, and the counterweight pit pumps. Full replacement is needed of the electrical power distribution system, operator house electrical and lighting, and bridge control system.

The original bridge houses are no longer extant. It is not known when the original bridge houses were replaced with the current bridge houses, but little evidence of the historic bridge houses remain. The assessment of the two bridge houses revealed both interior and exterior damage due to exposure and water infiltration, which require full reconstruction. In addition, operators are required to exit the upper floor and use an exterior stairwell to access the lower level. A full reconstruction of the house provides an opportunity to enclose the means of egress and provide a safer environment for the bridge operators.

The truss superstructure, which has been in service for over 100 years exhibited signs of widespread deterioration, resulting in a condition rating of Poor in accordance with the NBIS Rating System. Key defects observed include bottom chord vessel impact damage, rotated and translated live load shoes, and previously undocumented gusset plate and splice plate cracks. Emergency repairs were implemented to address the previously undocumented gusset plate and splice plates cracks; however, these measures are considered short term and did not address the root cause of the cracking. The condition of the superstructure relates to a current Inventory Rating of 0.810 and a sufficiency rating of 47.9 which favors replacement of major structural components.

PROJECT EXPERIENCE

CCDOTH DESIGN ENGINEERING ON-CALL CONTRACTS // CHICAGO, IL



WO #13: FC & Routine Bridge Inspections

CLIENT: Cook County Department of Transportation and Highways

CLIENT CONTACT:

Jack Bielak
Client Survey Contract
(312) 603-7336

COMPLETION DATE: 2019

COST: Varies

TranSystems was selected by the Cook County Department of Transportation and Highways (CCDOTH) for a Design Engineering On-Call contract. The contract had an original three-year schedule and CCDOTH exercised the options to renew the contract with two, 1-year extensions.

TranSystems is responsible for a variety of work orders ranging from the preparation of contract documents including plans, specifications and estimates; engineering analysis for various projects throughout Cook County; bridge inspections and rehabilitation plans; and utility coordination. The scope of services includes pavement preservation plans, ADA ramp improvements, intersection improvements, bridge rehabilitation plans, sewer and drainage designs, incorporation of traffic signal designs prepared by CCDOTH, updating County standard details and specifications, identification and preparation of grant applications for project funding, and various project permitting (IDOT, MWRD, ACOE, FPCC, IEPA, IDNR, FEMA, and USFW).

TranSystems, with the help of our subconsultants, has completed (or is in the process of completing) the following work orders under this contract:

WO #1: Touhy Avenue Utility Relocation
WO #2: Funding Application for Pulaski/Crawford Structure
WO #3: Cal-Sag Bridges Rehabilitation
WO #4: Crawford/Oakton Pavement Repairs
WO #5: IL 83 & 171 Intersection Improvements
WO #7: Crawford Avenue Bridge over Cal-Sag
WO #8: CM Database Management
WO #9: Touhy Avenue Sewer Design Part 2
WO #10: I-294 Bio-Swales
WO #11: Program Management

WO #12: PPRP North and South
WO #13: FC & Routine Bridge Inspections
WO #14: 87th Street Bridge over B&OCTRR
WO #15: Rehabilitation Projects
WO #17: PPRP North & South Supplemental Survey
WO #18: 175th Street Land Acquisition
WO #19: Prioritization of Bridge/Structure Work
WO #20: Routine & Special Bridge Inspections
WO #21: Central Avenue Bridge Vehicle Collision Inspection
WO #22: ADA Plans North & South

PROJECT EXPERIENCE

JACKSON STREET BRIDGE // TRENTON, NJ



CLIENT: City of Trenton, NJ

CLIENT CONTACT:

Randy Baum
(856) 964-6456

CONTRACT VALUE: \$117,000

COMPLETION DATE: 2020

The Jackson Street Bridge carries pedestrian traffic over Assupink Creek in Mill Hill Park, Trenton, NJ. The 124ft. long historic truss is supported on stone masonry abutments with a concrete-encased steel floor system. TranSystems was selected to perform an in-depth inspection, civil and structural design and the preparation of final construction documents. The truss rehabilitation includes stone masonry substructure and wall repair, improvement of drainage details, deck repair, resurfacing, pedestrian railing repair, truss repair, and cleaning and painting. TranSystems provided cost estimates for the painting and repair of the truss.

Project specific similarities include:

- » Local program (state/federal)
- » Quality reviews
- » Bridge design
- » Traffic Engineering
- » Environmental/permitting
- » Public Outreach
- » Multi-agency coordination

TRUSS MANAGEMENT PLAN // STATEWIDE, PA



CLIENT: Pennsylvania Department of Transportation Bureau of Project Delivery

CLIENT CONTACT:

Ira Beckerman, ph.D.
(717) 722-0830

CONTRACT VALUE: N/A

COMPLETION DATE: 2020

The purpose of the truss management plan is to advocate for an effective approach to manage the dwindling statewide population of metal truss bridges in Pennsylvania by balancing sound engineering with historic preservation considerations.

TranSystems was retained to implement a process for preparing bridge-specific management plans for metal truss bridges of high or exceptional historic significance. The principal of the plan was to be proactive about preserving the remaining metal truss bridges of the greatest historic significance. A Protocol for Defining Levels of Significance for Pennsylvania Truss Bridges was developed to establish the means to assign a level of historic significance by meeting thresholds for those with moderate, high, or exceptional based on their history, technology, and comparison with the remaining regional or statewide population of bridges.

Individual assessments of historic metal trusses throughout the state were then developed. The purpose of these assessments was to summarize the historical features, National Registry eligibility status, roadway/site information, structural conditions, and rehabilitation considerations. To date, as part of this work over 110 metal truss bridges have been evaluated.

PROJECT EXPERIENCE

SHEEDER'S BRIDGE REHABILITATION // CHESTER COUNTY, PA



CLIENT: Chester County

CLIENT CONTACT:

Janet Bowers, PG
(610) 344-6220

CONTRACT VALUE: \$1,300,000

COMPLETION DATE: 2011

Chester County Bridge No. 194, also known as Sheeder's Bridge, was constructed in 1887 and is comprised of a single span, pin-connected, wrought iron through-truss with built-up floorbeams, rolled steel stringers and nail laminated timber deck supported on stone masonry abutments and wingwalls. The span length, from center to center of bearing pins is approximately 87'-6". The clear roadway width is about 14' 10" and the center to center truss spacing is 17' 1".

TranSystems was responsible for preliminary and final designs for rehabilitation of the trusses and replacement of the abutments and for engineering services during construction. The truss was lifted off the existing substructure and placed in a staging area adjacent to the bridge. This permitted the new abutments to be built and the trusses rehabilitated, cleaned, and painted. New replicated truss members made of higher strength steel were added, as needed, to provide a 15-ton capacity. The existing stringers and timber deck were removed and a new lightweight FRP deck systems designed installed.

Project specific similarities include:

- » Local program
- » Bridge design
- » Environmental/permitting
- » Public outreach
- » Multi-Agency coordination
- » Historic Rehabilitation

The background features a complex network diagram on a dark blue field. It consists of numerous light blue circular nodes of varying sizes, connected by a web of thin, light blue lines. Some lines are solid, while others are dashed, creating a sense of depth and connectivity. The overall aesthetic is technical and modern.

TRANSYSTEMS

ATTACHMENTS

CERTIFICATION OF COMPLIANCE



Certification of Compliance

(A) The undersigned certifies that, pursuant to the **Equal Opportunity Employer** provisions of Section 2000(e) of Chapter 21, Title 42 of the United States Code and Federal Executive Order No. 11246 as amended by Executive Order No. 11375, the bidder is compliant with all Equal Employment Opportunity Commission ("EEOC") requirements.

(B) The undersigned certifies that, pursuant to the **Illinois Human Rights Act** provisions of Section 775 ILCS 5/2-105, the bidder complies with and certifies that it is in compliance with all equal employment practice requirements contained therein, and that it has adopted a written sexual harassment policy that meets the minimum requirements.

(C) The undersigned certifies that, pursuant to the Public Act 101-0221, Section 2-109, and the City of St. Charles Anti-Harassment Policy (adopted by ordinance on December 16, 2019), the bidder complies with and certifies that **Sexual Harassment Prevention Training** is provided at least once a year to all employees who work with City employees and/or on City property. The City may, at any time, request proof of the vendor's compliance, and the vendor will comply with evidence within two business days.

(D) The undersigned certifies that, pursuant to the **State of Illinois Law** provisions of Section 720 ILCS 5/33E prohibiting **Bid-rigging or Bid-rotating**, the bidder is not barred from bidding on this project, or entering into a contract for this project.

(E) The undersigned certifies that, pursuant to the **Federal Acquisition Regulation** (FAR 48 C.F.R. §52.203-2) the bidder agrees that:
a. Prices in the offer have been arrived at independently without consultation, communication, or agreement with any other competitor;
b. Prices in the offer have not been and will not be knowingly disclosed by the offeror, directly or indirectly, to any other competitor before bid opening or contract award unless otherwise required by law; and
c. No attempt has been made or will be made by the bidder for the purpose of restricting competition.

(F) The undersigned certifies that, pursuant to the **Illinois Department of Revenue Tax Laws** provisions of Section 65 ILCS 5/11-42.1-1, the bidder is not barred from doing business with any unit of local government in the State of Illinois as a result of a delinquency in payment of any taxes unless the bidder is contesting, in accordance with the procedures established by the appropriate statute, its liability for the tax or the amount of the tax.

(G) The undersigned certifies that, pursuant to the **Illinois Drug Free Workplace Act** provisions of Section 30 ILCS 580/3, the bidder deposes states and certifies that it will provide a drug free workplace, inclusive of all satellite locations as well as the City of St. Charles sites.

(H) The undersigned certifies that, pursuant to the **Illinois Prevailing Wage Act** provisions of Section 820 ILCS 130/0.01 et seq, the bidder, when required, is in compliance with all requirements of, including provisions as to wages, medical and hospitalization insurance and retirement benefits for those trades covered in the Act. Pursuant to **Illinois Public Act** provisions of Section 94-0515 and all provisions of the **Employee Classification Act**, provisions of Section 820 ILCS 185/1 et seq., said bidder agrees to submit certified payroll records as required.

(I) The undersigned certifies that, pursuant to the **Employment of Illinois Workers on Public Works Act** provisions of Section 30 ILCS 570/0.01, et seq., the bidder is in compliance with all requirements. Furthermore, the bidder certifies that it will demonstrate a good faith effort toward providing equal employment opportunities for City of St. Charles residents to work as crafts persons, consistent with the racial, ethnic, and gender demographics of the City's labor force.

(J) The undersigned certifies that, pursuant to the **National Security/USA Patriot Act** as defined in Presidential Executive Order 13224, the bidder and all affiliated parties, are not working for or with, nor acting on behalf of, a Specially Designated National and Blocked Person.

(K) The undersigned certifies that they have not colluded with or participated in any **unethical practices** with any person, firm or employee of the City of St. Charles which would in any way be construed as an unethical business practice.

(L) The undersigned certifies that, pursuant to the Public Act 102-0265, which amends the Property Tax Code 35 ILCS 200/18-50.2, the bidder, when required, states and certifies that it will provide the City of St. Charles with a **Vendor Information Reporting Form** upon request.

Check One:

There are no conflicts of interest and in the event that a conflict of interest is identified anytime during the duration of this award, or reasonable time thereafter, you, your firm or your firm's ownership, management or staff will immediately notify the City of St. Charles in writing.

There is an affiliation or business relationship between you, your management or staff, your firm or your firm's ownership, and an employee, officer or elected official of the City of St. Charles who makes recommendations to the City of St. Charles with respect to expenditures of money, employment, and elected or appointed positions. Provide on a separate letter included with your response any and all affiliations or business relationships that might cause a conflict of interest or any potential conflict of interest. Include the name of each City of St. Charles affiliate with whom you, your firm or your firm's ownership, management or staff has an affiliation or a business relationship.

Company Name TranSystems Corporation

Signature

07/24/2024

Date _____

Certification of Compliance

REFERENCES



City of St. Charles REFERENCE FORM

Project: DE Services: Indiana Avenue Pedestrian Bridge

The following is a list of **FIVE** references that have performed projects similar in size & scope within the last five years.

1. Company Name and Address	Scope of Work:	Roadway & Bridge
City of Elgin, IL	Date(s):	2023-Ongoing
150 Dexter Court	Amount:	\$15M
Elgin, IL 60120	Project Manager:	Mike Pubentz
	Telephone No:	847-931-6100
	Email:	pubentz_m@cityofelgin.org
Comments:		
Reference Verified: Yes <input type="checkbox"/> No <input type="checkbox"/>		

2. Company Name and Address	Scope of Work:	Bridge Rehab
City of Chicago, IL - Engineering (Highways)	Date(s):	2019 (Ph I); 2024 (Ph II)
2 North LaSalle Street, Suite 820	Amount:	unknown
Chicago, IL 60602	Project Manager:	Luis Benitez
	Telephone No:	312-744-5807
	Email:	Luis.Benitez@cityofchicago.org
Comments:		
Reference Verified: Yes <input type="checkbox"/> No <input type="checkbox"/>		

3. Company Name and Address	Scope of Work:	Bridge Rehab
Cook County Department of Transportation	Date(s):	2019-2022
118 N. Clark Street, Room 1018	Amount:	Varies
Chicago, IL 60602-3007	Project Manager:	Noel Basquin
	Telephone No:	312-603-1600
	Email:	Noel.Basquin@cookcountyil.gov
Comments:		
Reference Verified: Yes <input type="checkbox"/> No <input type="checkbox"/>		

4. Company Name and Address	Scope of Work:	Bridge Rehab
City of Trenton, NJ	Date(s):	2020
319 East State Street	Amount:	\$117K (contract value)
Trenton, NJ 08608	Project Manager:	Randy Baum
	Telephone No:	856-964-6456
	Email:	rbaum@trentonnj.org
Comments:		
Reference Verified: Yes <input type="checkbox"/> No <input type="checkbox"/>		

5. Company Name and Address	Scope of Work:	Bridge Rehab
Chester County, PA	Date(s):	2020
14 E. Briddle Street	Amount:	\$
West Chester, PA 19380	Project Manager:	Ira Beckerman (retired)
	Telephone No:	717-772-0830
	Email:	ibeckerman@pa.gov
Comments:		
Reference Verified: Yes <input type="checkbox"/> No <input type="checkbox"/>		

Company Name: TranSystems Corporation

Failure to complete and return this form may be considered sufficient reason for rejection of the submittal.

Request for Taxpayer Identification Number and Certification

▶ Go to www.irs.gov/FormW9 for instructions and the latest information.

Give Form to the
requester. Do not
send to the IRS.

Print or type.
See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.
TranSystems Corporation

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only **one** of the following seven boxes.

Individual/sole proprietor or single-member LLC

C Corporation

S Corporation

Partnership

Trust/estate

Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____

Note: Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is **not** disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.

Other (see instructions) ▶ _____

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.
2400 Pershing Road, Suite 400

6 City, state, and ZIP code
Kansas City, MO 64108

7 List account number(s) here (optional)

Requester's name and address (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Note: If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number

			-				-				
--	--	--	---	--	--	--	---	--	--	--	--

OR

Employer identification number

4	3	-	0	8	3	9	7	2	5
---	---	---	---	---	---	---	---	---	---

Part II Certification

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here

Signature of U.S. person ▶

Julie Morgan

Date ▶ 1/3/2023

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid)

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

EVIDENCE OF FINANCIAL STABILITY

TranSystems understands St. Charles's desire to review the financials of the consultants who are submitting on this project. As TranSystems Corporation is a privately held company, our financials are confidential and proprietary information. To demonstrate our financial stability and fortify our credibility, we have enclosed a recent internal unaudited balance sheet and income statement. This information is proprietary and exempt from disclosure.

TranSystems Corporation

Balance Sheet

May 24, 2024

	May 24, 2024 Actual	December 31, 2023 Actual
Current Assets:		
Cash and cash equivalents	9,090,303	1,101,343
Net contracts receivable	75,057,021	83,219,224
Contract assets	68,305,377	56,686,987
Prepaid expenses	5,695,240	5,525,353
Other receivables	(1,426,874)	(782,198)
Total Current Assets	156,721,068	145,750,708
Long-lived Assets		
Property and equipment, net	5,654,015	5,948,949
Lease assets	41,683,153	38,063,086
Total long-lived assets	47,337,168	44,012,036
Other Assets:		
Goodwill, net	242,337,999	244,001,110
Other intangible assets, net	13,071,685	13,735,805
Deferred compensation investments	2,562,145	2,562,145
Deferred income taxes long term	-	-
Other	532,894	549,705
Total Other Assets	258,504,723	260,848,766
Total Assets	462,562,959	450,611,509
Current Liabilities:		
Revolver	-	2,000,000
Accounts payable	29,197,662	33,610,556
Accrued liabilities	33,155,950	24,484,405
Current portion of long term debt	1,885,465	1,847,965
Other debt	-	2,000,000
Short-term lease liabilities	15,336,615	13,201,897
Contract liabilities	17,726,156	15,728,422
Total Current Liabilities	97,301,848	92,873,244

CERTIFICATE OF LIABILITY INSURANCE

TranSystems has no history of bankruptcy, reorganization, judgement claims, or law suits against the firm. We pride ourselves in completing contracts in a timely manner and have never failed to complete a contract.



CERTIFICATE OF LIABILITY INSURANCE

10/1/2024

DATE (MMDD/YYYY)
10/2/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Lockton Companies 444 W. 47th Street, Suite 900 Kansas City MO 64112-1906 (816) 960-9000 kcasu@lockton.com	CONTACT NAME: _____ PHONE (A/C, No, Ext): _____ FAX (A/C, No): _____ E-MAIL ADDRESS: _____	
	INSURER(S) AFFORDING COVERAGE	
INSURED 1334747 TRANSSYSTEMS CORPORATION 1475 E. WOODFIELD ROAD, SUITE 600 SCHAUMBURG IL 60173	INSURER A: Zurich American Insurance Company NAIC # 16535	
	INSURER B: Travelers Property Casualty Company of America NAIC # 25674	
	INSURER C: _____	
	INSURER D: _____	
	INSURER E: _____	

COVERAGES **CERTIFICATE NUMBER:** 16366196 **REVISION NUMBER:** XXXXXXXX

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MMDD/YYYY)	POLICY EXP (MMDD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> SEVERABILITY <input checked="" type="checkbox"/> CLAUSE GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER: _____	Y	N	GLO3707153	10/1/2023	10/1/2024	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 25,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 4,000,000 PRODUCTS - COMPIOP AGG \$ 4,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	N	N	BAP3707150	10/1/2023	10/1/2024	COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000 BODILY INJURY (Per person) \$ XXXXXXXX BODILY INJURY (Per accident) \$ XXXXXXXX PROPERTY DAMAGE (Per accident) \$ XXXXXXXX \$ XXXXXXXX
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED _____ RETENTION \$ _____	N	N	CUP2X654076	10/1/2023	10/1/2024	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000 \$ XXXXXXXX
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> Y/N If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	NOT APPLICABLE			PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ XXXXXXXX E.L. DISEASE - EA EMPLOYEE \$ XXXXXXXX E.L. DISEASE - POLICY LIMIT \$ XXXXXXXX

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
 RE: P401190099. KAUTZ ROAD, COMMERCE DRIVE SOUTH TO MUNICIPAL BOUNDARY OF ST. CHARLES. THE CITY OF ST. CHARLES AND ANY OFFICIAL, TRUSTEE, DIRECTOR, OFFICER, OR EMPLOYEE OF THE CITY (PLUS ANY HOLDER OR MORTGAGE AS DESIGNATED BY THE CITY) ARE ADDITIONAL INSUREDS AS RESPECTS GENERAL LIABILITY AND THIS COVERAGE IS PRIMARY AND NON-CONTRIBUTORY, IF REQUIRED BY WRITTEN CONTRACT.

CERTIFICATE HOLDER 16366196 CITY OF ST. CHARLES ATTN: ISABEL SODERLIND 2 E. MAIN STREET ST. CHARLES IL 60174	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE:
----------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

ACORD 25 (2016/03)

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Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

October 6, 2023

Subject: PRELIMINARY ENGINEERING
Consultant Unit
Prequalification File

Charles Stenzel
TRANSYSTEMS CORPORATION
1475 East Woodfield Road
Suite 600
Schaumburg, IL 60173

Dear Charles Stenzel,

We have completed our review of your "Statement of Experience and Financial Condition" (SEFC) which you submitted for the fiscal year ending Dec 31, 2022. Your firm's total annual transportation fee capacity will be \$132,000,000.

Your firm's Home rate of 134.78% and Field rate of 118.18% are approved on a provisional basis. The rate used in agreement negotiations may be verified by our Bureau of Investigations and Compliance in a pre-award audit. Pursuant to 23 CFR 172.11(d), we are providing notification that we will post your company's indirect cost rate to the Federal Highway Administration's Audit Exchange where it may be viewed by auditors from other State Highway Agencies.

Your firm is required to submit an amended SEFC through the Engineering Prequalification & Agreement System (EPAS) to this office to show any additions or deletions of your licensed professional staff or any other key personnel that would affect your firm's prequalification in a particular category. Changes must be submitted within 15 calendar days of the change and be submitted through the Engineering Prequalification and Agreement System (EPAS).

Your firm is prequalified until December 31, 2023. You will be given an additional six months from this date to submit the applicable portions of the "Statement of Experience and Financial Condition" (SEFC) to remain prequalified.

Sincerely,
Jack Elston, P.E.
Bureau Chief
Bureau of Design and Environment

SEFC PREQUALIFICATIONS FOR TRANSYSTEMS CORPORATION

CATEGORY	STATUS
Hydraulic Reports - Waterways: Complex	X
Hydraulic Reports - Waterways: Typical	X
Special Studies- Location Drainage	X
Special Services - Construction Inspection	X
Transportation Studies - Railway Engineering	X
Special Plans - Traffic Signals	X
Special Studies - Traffic Studies	X
Special Studies - Signal Coordination & Timing (SCAT)	X
Special Services - Project Controls	X
Special Services - Surveying	X
Special Services - Public Involvement	X
Transportation Studies - Railway Planning	X
Structures - Highway: Typical	X
Structures - Moveable	X
Structures: Major River Bridges	X
Special Plans - Lighting: Typical	X
Environmental Reports - Environmental Impact Statement	X
Location Design Studies - New Construction/Major Reconstruction	X
Special Studies - Feasibility	X
Special Services - Landscape Architecture	X
Environmental Reports - Environmental Assessment	X
Structures - Railroad	X
Structures - Highway: Complex	X
Structures - Highway: Advanced Typical	X
Structures - Highway: Simple	X
Location Design Studies - Rehabilitation	X
Location Design Studies - Reconstruction/Major Rehabilitation	X
Special Studies - Safety	X

IDOT PREQUALIFICATION

Hydraulic Reports - Pump Stations	X
-----------------------------------	---

X	PREQUALIFIED
A	NOT PREQUALIFIED, REVIEW THE COMMENTS UNDER CATEGORY VIEW FOR DETAILS IN EPAS.
S	PREQUALIFIED, BUT WILL NOT ACCEPT STATEMENTS OF INTEREST

PRICE PROPOSAL



Price Proposal Page

Design Engineering Services: Indiana Avenue Pedestrian Bridge
(Piano Factory Bridge)
ENR2024-35

I (we) propose to furnish all services as specified in the attached solicitation documents at the below price. No additional charges over said pricing will be accepted by the City without an authorized change order and written approval by the Purchasing Division confirmed via purchase order amendment.

- Proposed project man-hours, including the following:
 1. Breakdown of scope of work and man-hours by task.
 2. Personnel assigned to each task (name, title and the number of hours assigned to each person per task)
 3. Detail information regarding the man-hours for any services provided by a sub-consultant.

We accept payment via City of St. Charles credit card, without additional fees. Yes No

We will allow a discount of _____% if payment is received within _____ days of invoice.

Price Proposal Page



**PHASE I ENGINEERING SERVICES FOR
REHABILITATION/RECONSTRUCTION OF
THE INDIANA STREET BRIDGE OVER THE FOX RIVER
PIANO FACTORY BRIDGE
CITY OF ST. CHARLES**

EXHIBIT A - SCOPE OF ENGINEERING SERVICES

The City of St. Charles (City) has initiated a project requiring professional engineering services by TranSystems Corporation (TSC) to perform Phase I Engineering for the rehabilitation/reconstruction of the Indiana Street Bridge over the Fox River.

UNDERSTANDING OF THE PROJECT

The scope of work will consist of a Phase I Engineering Study (preliminary engineering and environmental studies) for the Rehabilitation/Reconstruction of the Indiana Street Bridge over the Fox River. This scope will include the development, evaluation, coordination and selection of a preferred design. In order to be conservative, it is assumed Federal funds will be pursued and the proposed improvements will be cleared of environmental/historical concerns, meet the required Federal NEPA process, and receive Design Approval from IDOT and FHWA. *If the project is locally funded, several tasks will require less effort, which is noted within the scope of services.*

The work also includes scope of services by four subconsultants with the specialty expertise:

- Hampton, Lenzini, and Renwick (HLR) – Survey, environmental field work
- Wang Engineering (Wang) – Geotechnical investigations

The following is a summary of the items that are included in the proposed scope of services:

TASK 1 - DATA COLLECTION AND UTILITY COORDINATION

Available historical information from The City will be obtained and reviewed that will include existing right-of-way and property limit data, existing roadway and bridge plans, County-based GIS topographic and aerial photography and any existing maintenance and flooding records. This work will include completing a JULIE Design request and initial project introduction letters to obtain information on existing utilities within the project limits. Preliminary utility conflicts will be identified during Phase I.

TASK 2 - ROUTE AND HYDRAULIC SURVEY AND ROW VERIFICATION

Preliminary route and stream surveys will be required to properly document existing field conditions that will serve as the basis for the preliminary engineering, design, and plan preparation for this project. This task will be completed by HLR as a subconsultant to TSC and **additional detail may be found in HLR's attached scope of services.**

EXHIBIT A - SCOPE OF ENGINEERING SERVICES – PH I

Rehabilitation/Reconstruction of
Indiana Street Bridge over the Fox River

TASK 3 – GEOTECHNICAL INVESTIGATION AND REPORT

The task consists of performing roadway and structural geotechnical investigations conforming to the requirements of the IDOT Geotechnical Manual. The test results and recommendations will be summarized in a written Geotechnical Report. The work shall include site access and traffic control, permit(s) procurement, drilling and sampling, laboratory analysis and report. This task will be completed by Wang as a subconsultant to TSC and **additional detail may be found in Wangs’ attached scope of services.**

The current scope includes borings at the abutments and does not include in stream work. Additional borings may be necessary depending on the scope of the proposed alternative.

TASK 4 – BRIDGE INSPECTION / ABBREVIATED BRIDGE CONDITION REPORT

A bridge inspection will be performed to assess the current condition of the bridge and provide the data for the Bridge Condition Report. The bridge inspection and Bridge Condition Report will conform to the requirements of the IDOT “Bridge Condition Report Procedures & Practices,” the IDOT Bridge Manual, the IDOT BLRS Manual, and NBIS standards.

- The TSC inspection team will perform a routine NBIS inspection satisfying the requirements of the Illinois Department of Transportation.
- The Bridge Condition Report (BCR) will be written to document the current physical condition and functionality of the bridge and recommend a scope of work for approval. The scope of work selected will be the most cost effective for the structure given its condition and the structural/geometric/hydraulic deficiencies and exterior constraints that affect it.

**TASK 5 – STREAM HYDROLOGY / HYDRAULIC ANALYSIS AND REPORT
(IF NECESSARY, Only required for replacement alternative)**

TSC will prepare the stream hydrology/hydraulic analysis and hydraulic report demonstrating that the proposed structure meets the requirements of IDOT and IDNR-OWR, as required. The hydraulic report task is broken out into hydrologic analysis, and hydraulic analysis and report. Hydrologic analysis will include:

- Review existing FEMA and USGS records along with records of flooding.
- Conduct site visit.
- Obtain and utilize existing FEMA hydraulic study to complete the hydraulic analysis.
- Prepare hydrologic model to compute flows for Bulletin 70 (March 2019 Update) rainfall data based on the FEMA model.
- Prepare base maps for modeling.
- Convert survey notes for hydraulic sections and existing structure and plot cross sections and stream profile.
- Prepare existing condition model and corrective effective model, if necessary.
- Prepare proposed conditions model and Waterway Information Tables (WITs) for 2 bridge alternatives.
- Calculation of floodplain fill and compensatory storage for the bridge replacement, if necessary.

EXHIBIT A - SCOPE OF ENGINEERING SERVICES – PH I

Rehabilitation/Reconstruction of
Indiana Street Bridge over the Fox River

- Perform scour analysis and calculations, as necessary, for the preferred structure type.
- Prepare and submit hydraulic report and backup documentation prepared to DCHD/IDOT along with the Preliminary Bridge Design and Hydraulic Report (BLR Form 10210). Submittals will be made in pdf format. Comments will be addressed with a disposition of comments and an updated Hydraulic Report.

TASK 6 – ALTERNATIVE ANALYSIS AND CONCEPT DESIGN

The following preliminary analyses are anticipated to evaluate the proposed improvements:

- Develop project design criteria
- Evaluate the bridge and path typical sections
- Evaluate the profile based on the hydraulics and adjacent path connection
- Identify and remediate potentials impacts

TASK 7 – BRIDGE TYPE STUDY, TS&L & PBDHR

A bridge type study will be performed once the hydraulic information has been determined. TSC will study up to two (2) bridge options, considering their configuration, impacts to the profile, compensatory storage requirements, environmental resources, and right-of-way needs. Cost estimates will be prepared and evaluated in order to present the most efficient bridge option.

- Upon selection of the preferred bridge alternative, a TS&L plan will be prepared for review by the City. This drawing will show the size of principal members and general configuration of the proposed improvement. These documents will serve as the basis of the final design.
- Plan and profile sheets will be developed based on the low bridge elevation. The roadway geometry and plans will be prepared in accordance with the applicable requirements of BLRS Section IV – Project Design.
- TS will correspond via phone call or emails to work though questions and/or alternatives. TSC will respond to comments, prepare a Disposition of Comments, and revise the exhibits as necessary.
- TSC will assemble the PBDHR (also known as the BLR 10210 form), utilizing hydraulic analysis exhibits and information as attachments and submit to the IDOT Bridge Office for review and approval.

TASK 8 – ENVIRONMENTAL STUDIES

Environmental Survey Request. As part of IDOT’s environmental review process, an Environmental Survey Request (ESR) will be prepared as part of the early coordination of the project. The scope will include preparation of ESR project limits map and other supplemental exhibits. The ESR will be prepared and submitted in accordance with BLRS Manual Section 20-2. Additional environmental studies will be completed by HLR as a subconsultant to TSC and **additional detail may be found in HLR’s attached scope of services.**

EXHIBIT A - SCOPE OF ENGINEERING SERVICES – PH I

Rehabilitation/Reconstruction of
Indiana Street Bridge over the Fox River

TASK 9 - HISTORICAL COORDINATION AND EVALUATION

Historic Bridge Rehabilitation Feasibility Report. TranSystems will prepare the feasibility report through a combination of interviews of key City staff and file review, including previous inspection and structural rating reports. TranSystems will visit the Indiana Street Bridge to gather additional information, such as specific photographs, measurements and/or area reconnaissance. The end product will be the development of a Bridge Rehabilitation Feasibility Analysis Report prepared in accordance with AASHTO's 2008 Guidelines for Historic Bridge Rehabilitation and Replacement (authored by TranSystems). The report will provide a step-by-step approach to balanced decision making that uses historic significance and the effort needed to make a bridge adequate, along with other environmental considerations (historic districts, etc.), to support consistent and balanced findings regarding the alternatives evaluated.

Section 4(f) Evaluation (IF NECESSARY). Section 4(f) permits the use of publicly-owned parks, recreational areas, wildlife or waterfowl refuges, or any significant historic sites for transportation use only when it has been determined that there is no feasible and prudent alternative to such use, and the project includes all possible planning to minimize harm to the property resulting from such use. If there are no feasible and prudent alternatives to avoid the use of Section 4(f) resources, mitigation measures will be developed. The proper level of Section 4(f) documentation will be determined through coordination with IDOT Environmental Staff and is anticipated to be outlined in the approved scoping document.

The 4(f) report is only necessary if an adverse effect is determined based on the proposed improvements.

TASK 10 – FINALIZED GEOMETRIC AND DESIGN ACTIVITIES

Preliminary Design Activities. TSC will develop the following items as part of the preliminary design activities:

- Preliminary Plan and Profile Sheets
- Preliminary Typical Sections
- Prepare preliminary cost estimate
- Develop preliminary cross-sections at critical locations

TASK 11 – PROJECT DEVELOPMENT REPORT

A Project Development Report (PDR) – BLR Form 22210 – including exhibits and documentation will be developed and submitted to IDOT to obtain design approval for the project. The PDR and submittal will follow the guidelines outlined in the *IDOT BLRS Manual*.

- **Draft Project Development Report.** The draft PDR with exhibits and documentation will be prepared and submitted to the City and IDOT for comments.

EXHIBIT A - SCOPE OF ENGINEERING SERVICES – PH I

Rehabilitation/Reconstruction of
Indiana Street Bridge over the Fox River

- **Final Project Development Report.** TSC will prepare a disposition of comments received in regard to the Draft Project Development Report. The final PDR will be revised based on all review comments received as well as public comments and submitted to IDOT for design approval.

TASK 12 – PUBLIC INVOLVEMENT AND STAKEHOLDER COORDINATION

Given the historic nature of the Indiana Street Bridge, it's importance to local multi-modal traffic as a gateway to the downtown, and visibility of the proposed improvements developing consensus on a preferred alternative will be a critical step in achieving design approval from IDOT. The project will include a public involvement program and stakeholder coordination which are described in further detail below.

Public Involvement Program. The following tasks are proposed to gain concurrence on the proposed bridge design from the community and local stakeholders.

- **Public Involvement Meetings.** 2 meetings anticipated.
- **Individual Stakeholder Meetings.** 2 meetings anticipated. TSC will coordinate with the City and contact local groups.
- **Project Website.** It is anticipated that TSC will support the City and provide documents to be posted on the City's website.

Stakeholder Coordination. Coordination with the project stakeholders will be a key element to the development of a preferred alternative. It is anticipated that FHWA and IDOT will require additional coordination beyond the proposed public involvement program to gain project approvals. The following meetings are anticipated:

- **IDOT Kickoff Meeting.** 1 meeting. TSC will prepare and distribute meeting agendas, minutes, and exhibits for the IDOT Project Kickoff Meeting.
- **FHWA Coordination Meetings.** 1 meetings anticipated. TSC will prepare and distribute meeting agendas, minutes, and attend the FHWA Coordination Meeting.
- **Preparation of agendas, exhibits and minutes for all meetings.**

TASK 13 – FUNDING APPLICATIONS (IF NECESSARY)

It is TSC's understanding that the City may pursue state/federal funding sources to reduce the local cost share. Based on preliminary discussions with local funding agencies, we anticipate the following programs are applicable to the Indiana Street Bridge:

- ITEP
- CMAQ/TAP

TSC will submit applications on behalf of the City, if necessary, pending the preliminary analysis.

EXHIBIT A - SCOPE OF ENGINEERING SERVICES – PH I

Rehabilitation/Reconstruction of
Indiana Street Bridge over the Fox River

TASK 14 – PROJECT MEETINGS AND CLIENT COORDINATION

This task will include meetings, coordination and updates with the City, subconsultants, and other stakeholders to implement the work progress provided in this scope of services. Preparation and distribution of correspondence, meeting minutes, records of conversation and other project documentation to track and document the project decisions is included. The major tasks are listed below.

Progress Meetings. 2 meetings anticipated. Progress and coordination meetings with the City to discuss project progress and challenges.

Project Administration and Coordination. TranSystems will conduct routine project and stakeholder coordination, including but not limited to the following: emails, phone calls, letters, etc. on an as-needed basis.

This task will also include preparing and submitting monthly progress reports (by the 1st of every month), preparing and monitoring the project schedule and updating the schedule periodically as tasks or project scheduling change, as well as perform scope of work reviews, resource planning, contract administration, and invoicing. The task assumes effort based on a eighteen (18) month contract duration.

EXHIBIT A - SCOPE OF ENGINEERING SERVICES – PH I

Rehabilitation/Reconstruction of
Indiana Street Bridge over the Fox River

EXCLUSIONS TO THE SCOPE OF SERVICES

The foregoing outlines TSC's understanding of the Scope of Services required for the successful completion of Phase I engineering services for this project. The following tasks or items were deemed unnecessary for this project, were excluded from the Scope, and would be considered as additional services if required by any other agency for the successful completion of the project.

- PSI
- An IDNR/OWR individual permit (Regional Permit anticipated)
- CLOMR or LOMR
- Plats and Legals or Land Acquisition negotiation services (To be completed in PH II, if necessary).
- Preliminary concepts, Wall Type Studies, final design or Geotech investigation required for retaining walls.
- It is anticipated that the location for the Public Involvement Meeting and Public Hearing will be provided by the City
- Permit Fees (Anticipated in Phase II engineering)



Local Public Agency St. Charles	County Kane	Section Number
Prime Consultant (Firm) Name TranSystems Corporation	Prepared By Matt Baldwin	Date 8/1/2024
Consultant / Subconsultant Name TranSystem	Job Number 	

Note: This is name of the consultant the CECS is being completed for. This name appears at the top of each tab.

Remarks

PAYROLL ESCALATION TABLE

CONTRACT TERM	18	MONTHS	OVERHEAD RATE	134.78%
START DATE	9/1/2024		COMPLEXITY FACTOR	0
RAISE DATE	4/12/2025		% OF RAISE	2.00%
END DATE	2/28/2026			

ESCALATION PER YEAR

Year	First Date	Last Date	Months	% of Contract
0	9/1/2024	4/12/2025	7	38.89%
1	4/13/2025	3/12/2026	11	62.33%

The total escalation = 1.22%

Local Public Agency	County	Section Number
St. Charles	Kane	
Consultant / Subconsultant Name		Job Number
TranSystems Corporation		

PAYROLL RATES

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET FIXED RAISE

MAXIMUM PAYROLL RATE	86.00
ESCALATION FACTOR	1.22%

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Engineer 5 (E5)	\$86.00	\$86.00
Engineer 4 (E4)	\$86.00	\$86.00
Engineer 3 (E3)	\$77.17	\$78.11
Engineer 2 (E2)	\$64.51	\$65.30
Engineer 1 (E1)	\$48.62	\$49.21
Planner 5 (P5)	\$86.00	\$86.00
Planner 4 (P4)	\$75.23	\$76.15
Planner 3 (P3)	\$51.74	\$52.37
Planner 2 (P2)	\$70.48	\$71.34
Planner 1 (P1)	\$30.29	\$30.66
Architect 4 (AR4)	\$73.94	\$74.84
Architect 3 (AR3)	\$60.12	\$60.85
Architect 2 (AR2)	\$48.16	\$48.75
Architect 1 (AR1)	\$36.41	\$36.86
Analyst 2 (AN2)	\$38.60	\$39.07
Environmental Scientist 4 (SC4)	\$80.00	\$80.98
Industry Specialist 4 (IS4)	\$86.00	\$86.00
Industry Specialist 3 (IS3)	\$69.88	\$70.73
Surveyor 4	\$86.00	\$86.00
Construction Services 4 (CS4)	\$69.90	\$70.75
Construction Services 3 (CS3)	\$53.03	\$53.68
Construction Services 2 (CS2)	\$36.81	\$37.26
Construction Services 1 (CS1)	\$36.92	\$37.37
Technician 3 (T3)	\$46.12	\$46.68
Technician 1 (T1)	\$23.03	\$23.31
Administrative 3 (A3)	\$57.29	\$57.99
Administrative 2 (A2)	\$34.78	\$35.21

Local Public Agency	County	Section Number
St. Charles	Kane	
Consultant / Subconsultant Name		Job Number
TranSystems Corporator		

SUBCONSULTANTS

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

NAME	Direct Labor Total	Contribution to Prime Consultant
N/A		
Total	0.00	0.00

NOTE: Only subconsultants who fill out a cost estimate that splits out direct labor may be listed on this sheet.

Local Public Agency

St. Charles

County

Kane

Section Number

Consultant / Subconsultant Name

TranSystems Corporation

Job Number

DIRECT COSTS WORKSHEET

List ALL direct costs required for this project. Those not listed on the form will not be eligible for reimbursement by the LPA on this project.
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

ITEM	ALLOWABLE	QUANTITY	CONTRACT RATE	TOTAL
Lodging (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost (Up to state rate maximum)			\$0.00
Lodging Taxes and Fees (per GOVERNOR'S TRAVEL CONTROL BOARD)	Actual Cost			\$0.00
Air Fare	Coach rate, actual cost, requires minimum two weeks' notice, with prior IDOT approval			\$0.00
Vehicle Mileage (per GOVERNOR'S TRAVEL CONTROL BOARD)	Up to state rate maximum	200	\$0.67	\$134.00
Vehicle Owned or Leased	\$32.50/half day (4 hours or less) or \$65/full day			\$0.00
Vehicle Rental	Actual Cost (Up to \$55/day)			\$0.00
Tolls	Actual Cost			\$0.00
Parking	Actual Cost			\$0.00
Overtime	Premium portion (Submit supporting documentation)			\$0.00
Shift Differential	Actual Cost (Based on firm's policy)			\$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost (Submit supporting documentation)	1	\$100.00	\$100.00
Copies of Deliverables/Mylars (In-house)	Actual Cost (Submit supporting documentation)			\$0.00
Copies of Deliverables/Mylars (Outside)	Actual Cost (Submit supporting documentation)			\$0.00
CADD	Actual Cost (Max \$15/hour)			\$0.00
Web Site	Actual Cost (Submit supporting documentation)			\$0.00
Advertisements	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Facility Rental	Actual Cost (Submit supporting documentation)			\$0.00
Public Meeting Exhibits/Renderings & Equipment	Actual Cost (Submit supporting documentation)	1	\$1,000.00	\$1,000.00
Recording Fees	Actual Cost			\$0.00
Transcriptions (specific to project)	Actual Cost			\$0.00
Courthouse Fees	Actual Cost			\$0.00
Storm Sewer Cleaning and Televising	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Traffic Control and Protection	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Aerial Photography and Mapping	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Utlility Exploratory Trenching	Actual Cost (Requires 2-3 quotes with IDOT approval)			\$0.00
Testing of Soil Samples	Actual Cost			\$0.00
Lab Services	Actual Cost (Provide breakdown of each cost)			\$0.00
Equipment and/or Specialized Equipment Rental	Actual Cost (Requires 2-3 quotes with IDOT approval)	1	\$500.00	\$500.00
Copies B/W 11x17	Actual Cost			\$0.00
Copies Color 8.5x11	Actual Cost			\$0.00
Traffic Counts/Geofencing	Actual Cost (See separate calculations)			\$0.00
				\$0.00
TOTAL DIRECT COSTS:				\$1,734.00

Local Public Agency

St. Charles

County

Kane

Section Number

Job Number

Consultant / Subconsultant Name

TranSystems Corporation

COST ESTIMATE WORKSHEET

EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

OVERHEAD RATE **134.78%**

COMPLEXITY FACTOR **0**

TASK	DIRECT COSTS (not included in row totals)	STAFF HOURS	PAYROLL	OVERHEAD & FRINGE BENEFITS	FIXED FEE	SERVICES BY OTHERS	TOTAL	% OF GRAND TOTAL
1 Data Collection and Utility Coordination		40	2,312	3,116	763		6,191	1.58%
2 Route and Hydraulic Survey, ROW Verify		8	458	617	151		1,226	0.31%
3 Geotechnical Investigation and Report		8	559	753	184		1,496	0.38%
4 Bridge Inspect/Bridge Condition Report	500	216	12,135	16,356	4,005		32,496	8.29%
5 Stream Hydrology / Hydraulic Analysis & Rep		256	14,991	20,205	4,947		40,143	10.24%
6 Alternative Analysis & Concept Design		68	3,668	4,944	1,211		9,823	2.51%
7 Bridge Type Study, TS&L, PBDHR		200	12,193	16,434	4,024		32,651	8.33%
8 Environmental Studies		36	2,347	3,164	775		6,286	1.60%
9 Hist Coord and Evaluation		568	35,530	47,887	11,725		95,142	24.28%
10 Finalized Geometric Design		88	5,224	7,041	1,724		13,989	3.57%
11 Project Development Report		120	7,265	9,792	2,397		19,454	4.96%
12 Public Involvement and Stakeholder Coord	1,000	242	15,039	20,269	4,963		40,271	10.28%
13 Funding Applications		48	2,959	3,988	976		7,923	2.02%
14 Project Meetings and Client Coord	234	74	5,299	7,142	1,749		14,190	3.62%
			-	-	-		-	
			-	-	-		-	
HLR			-	-	-	36,440	36,440	9.30%
Wang			-	-	-	32,426	32,426	8.27%
			-	-	-		-	
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			-	-	-		-	
			-	-	-		-	
			-	-	-		-	
Subconsultant DL							\$0.00	
Direct Costs Total ==>	\$1,734.00						\$1,734.00	0.44%
TOTALS		1972	119,979	161,708	39,594	68,866	391,881	100.00%

281,687

Local Public Agency

St. Charles

County

Kane

Section Number

Consultant / Subconsultant Name

TranSystems Corporation

Job Number

AVERAGE HOURLY PROJECT RATES
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 1 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			1 Data Collection and Utility Coordination			2 Route and Hydraulic Survey, ROW Verify			3 Geotechnical Investigation and Report			4 Bridge Inspect/Bridge Condition Report			5 Stream Hydrology / Hydraulic Analysis & Rep		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Engineer 5 (E5)	86.00	136.0	6.90%	5.93															
Engineer 4 (E4)	86.00	28.0	1.42%	1.22															
Engineer 3 (E3)	78.11	176.0	8.92%	6.97							2	25.00%	19.53	12	5.56%	4.34	16	6.25%	4.88
Engineer 2 (E2)	65.30	654.0	33.16%	21.66	16	40.00%	26.12	4	50.00%	32.65	4	50.00%	32.65	72	33.33%	21.77	120	46.88%	30.61
Engineer 1 (E1)	49.21	918.0	46.55%	22.91	20	50.00%	24.61	4	50.00%	24.61				132	61.11%	30.08	120	46.88%	23.07
Planner 5 (P5)	86.00	0.0																	
Planner 4 (P4)	76.15	0.0																	
Planner 3 (P3)	52.37	0.0																	
Planner 2 (P2)	71.34	0.0																	
Planner 1 (P1)	30.66	0.0																	
Architect 4 (AR4)	74.84	0.0																	
Architect 3 (AR3)	60.85	0.0																	
Architect 2 (AR2)	48.75	0.0																	
Architect 1 (AR1)	36.86	0.0																	
Analyst 2 (AN2)	39.07	0.0																	
Environmental Scientist 4 (E)	80.98	0.0																	
Industry Specialist 4 (IS4)	86.00	0.0																	
Industry Specialist 3 (IS3)	70.73	60.0	3.04%	2.15	4	10.00%	7.07				2	25.00%	17.68						
Surveyor 4	86.00	0.0																	
Construction Services 4 (C)	70.75	0.0																	
Construction Services 3 (C)	53.68	0.0																	
Construction Services 2 (C)	37.26	0.0																	
Construction Services 1 (C)	37.37	0.0																	
Technician 3 (T3)	46.68	0.0																	
Technician 1 (T1)	23.31	0.0																	
Administrative 3 (A3)	57.99	0.0																	
Administrative 2 (A2)	35.21	0.0																	
TOTALS		1972.0	100%	\$60.84	40.0	100.00%	\$57.80	8.0	100%	\$57.26	8.0	100%	\$69.86	216.0	100%	\$56.18	256.0	100%	\$58.56

Local Public Agency

St. Charles

County

Kane

Section Number

Consultant / Subconsultant Name

TranSystems Corporation

Job Number

AVERAGE HOURLY PROJECT RATES
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 2 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	6 Alternative Analysis & Concept Design			7 Bridge Type Study, TS&L, PBDHR			8 Environmental Studies			9 Hist Coord and Evaluation			10 Finalized Geometric Design			11 Project Development Report		
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg
Engineer 5 (E5)	86.00										136	23.94%	20.59						
Engineer 4 (E4)	86.00				12	6.00%	5.16							4	4.55%	3.91			
Engineer 3 (E3)	78.11				36	18.00%	14.06	8	22.22%	17.36				8	9.09%	7.10	8	6.67%	5.21
Engineer 2 (E2)	65.30	20	29.41%	19.21	54	27.00%	17.63				160	28.17%	18.39	32	36.36%	23.74	30	25.00%	16.32
Engineer 1 (E1)	49.21	48	70.59%	34.74	98	49.00%	24.11	12	33.33%	16.40	272	47.89%	23.57	44	50.00%	24.61	52	43.33%	21.33
Planner 5 (P5)	86.00																		
Planner 4 (P4)	76.15																		
Planner 3 (P3)	52.37																		
Planner 2 (P2)	71.34																		
Planner 1 (P1)	30.66																		
Architect 4 (AR4)	74.84																		
Architect 3 (AR3)	60.85																		
Architect 2 (AR2)	48.75																		
Architect 1 (AR1)	36.86																		
Analyst 2 (AN2)	39.07																		
Environmental Scientist 4 (SC4)	80.98																		
Industry Specialist 4 (IS4)	86.00																		
Industry Specialist 3 (IS3)	70.73							16	44.44%	31.44							30	25.00%	17.68
Surveyor 4	86.00																		
Construction Services 4 (CS4)	70.75																		
Construction Services 3 (CS3)	53.68																		
Construction Services 2 (CS2)	37.26																		
Construction Services 1 (CS1)	37.37																		
Technician 3 (T3)	46.68																		
Technician 1 (T1)	23.31																		
Administrative 3 (A3)	57.99																		
Administrative 2 (A2)	35.21																		
TOTALS		68.0	100%	\$53.94	200.0	100%	\$60.97	36.0	100%	\$65.20	568.0	100%	\$62.55	88.0	100%	\$59.36	120.0	100%	\$60.54

Local Public Agency

St. Charles

County

Kane

Section Number

Consultant / Subconsultant Name

TranSystems Corporation

Job Number

AVERAGE HOURLY PROJECT RATES
EXHIBIT D COST ESTIMATE OF CONSULTANT SERVICES (CECS) WORKSHEET

SHEET 3 OF 3

PAYROLL CLASSIFICATION	AVG HOURLY RATES	12 Public Involvement and Stakeholder Coord			13 Funding Applications			14 Project Meetings and Client Coord						HLR					
		Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg	Hours	% Part.	Wgt'd Avg			
Engineer 5 (E5)	86.00																		
Engineer 4 (E4)	86.00	8	3.31%	2.84				4	5.41%	4.65									
Engineer 3 (E3)	78.11	48	19.83%	15.49	8	16.67%	13.02	30	40.54%	31.67									
Engineer 2 (E2)	65.30	90	37.19%	24.28	12	25.00%	16.32	40	54.05%	35.30									
Engineer 1 (E1)	49.21	96	39.67%	19.52	20	41.67%	20.51												
Planner 5 (P5)	86.00																		
Planner 4 (P4)	76.15																		
Planner 3 (P3)	52.37																		
Planner 2 (P2)	71.34																		
Planner 1 (P1)	30.66																		
Architect 4 (AR4)	74.84																		
Architect 3 (AR3)	60.85																		
Architect 2 (AR2)	48.75																		
Architect 1 (AR1)	36.86																		
Analyst 2 (AN2)	39.07																		
Environmental Scientist 4 (SC4)	80.98																		
Industry Specialist 4 (IS4)	86.00																		
Industry Specialist 3 (IS3)	70.73				8	16.67%	11.79												
Surveyor 4	86.00																		
Construction Services 4 (CS4)	70.75																		
Construction Services 3 (CS3)	53.68																		
Construction Services 2 (CS2)	37.26																		
Construction Services 1 (CS1)	37.37																		
Technician 3 (T3)	46.68																		
Technician 1 (T1)	23.31																		
Administrative 3 (A3)	57.99																		
Administrative 2 (A2)	35.21																		
TOTALS		242.0	100%	\$62.14	48.0	100%	\$61.64	74.0	100%	\$71.61	0.0	0%	\$0.00	0.0	0%	\$0.00	0.0	0%	\$0.00



Hampton, Lenzini and Renwick, Inc.

Civil Engineers • Structural Engineers • Land Surveyors • Environmental Specialists
www.hltreengineering.com

Indiana Bridge - Scope

The environmental and survey scope is included below.

PHASE 1 TASKS

Task 1: Tree Survey and Memorandum

A Certified Arborist will conduct a tree survey of all trees 3 inches and greater adjacent to the bridge. We will identify all trees by type, diameter, health, and structure. During the tree survey we will evaluate potential bat habitat. The finding of the tree survey will be summarized in a tree memorandum.

Task 1: \$1,500

Task 2: Aquatic Resources Delineation Report

HLR will conduct a map review of the project. The following maps and documents will be reviewed prior to conducting the field investigation:

- U.S. Geological Survey Topographic Map
- National Wetlands Inventory Map
- Kane County ADID Map
- USDA Soil Survey
- Hydric Soils of the United States
- Regulatory Flood Map

It appears from a cursory map review that Indiana Bridge crosses over the Fox River. HLR will perform a formal wetland delineation of the proposed project area. The wetland delineation will be conducted to meet the requirements of Executive Order 11990, "Protection of Wetlands", Section 404 of the Federal Water Pollution Control Act as amended by the Clean Water Act (Corps of Engineers, Section 404 Permit), and Illinois Environmental Protection Agency (IEPA Section 401 Guidelines) regulations. These regulations pertain to the placement of fill or alterations of drainage within wetlands of any type and apply to private as well as publicly owned wetlands. The investigation will meet the requirements of these regulations by identifying the type, functions, and boundary of the WOUS/wetlands.

"Wetlands" are defined by the U.S. Army Corps of Engineers (USACE) for jurisdictional purposes as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 323.3(c)).

The field investigation will be conducted by our environmental personnel who are experienced in Federal methods for conducting wetland delineations. Our staff will classify and define hydric soils, hydrophytic vegetation, and evidence of hydrology to determine if wetlands are present. The wetland perimeter (s) will be staked and surveyed. Wetland boundary stake locations will be surveyed using a handheld Trimble R1 GNSS receiver

Wetlands found will be classified according to type using the "Classification of Wetlands and Deep Water Habitats of the United States" by Cowardin. Wetland boundaries will be defined in accordance with the Corps of Engineers Wetlands Delineation Manual: Midwest Region. This includes a soil investigation to determine the presence or absence of hydric soils and an analysis of the dominant plant species. Field observations will be made on any evidence indicating the hydrology of the area and on water sources that are supporting these wetlands. Functions of these wetlands will be evaluated from field observations.

An aquatic resources delineation letter report will be prepared summarizing the findings of the fieldwork. Included in the report will be the required wetland delineation data sheets that summarize the findings of the field investigation as well as figures that detail the maps reviewed and current WOUS/wetland boundaries of the site.

Task 2: \$3,800

Task 3A: Preliminary Environmental Site Assessment

This scope includes completing a Preliminary Environmental Site Assessment. The PESA will be prepared using historical and geological information. The specific methods used to conduct the assessment are contained in 1) ASTM Standards E1527-13, 2) A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Highway Projects (Erdmann et al., 2012), 3) Special Wastes Procedures for Local Highway Improvements (IDOT Local Roads Manual, July 22, 2004), and 4) "IDOT Bureau of Design and Environment Manual (BDE Manual), Section 27-3.03 (b), October 2015). The PESA will include a database search, review of historical records, an on-site evaluation, and review of other project conditions that may give us insight into the existing environmental conditions along the route.

Once the review has been completed, a written report will be completed and submitted as documentation for the on-site analysis. This report will accompany various site photographs, maps, and the above referenced documentation, which will be utilized to assist the project evaluation and any applicable recommendations.

Task 3A: \$12,420 Labor, \$400 Direct Cost = \$12,820

Task 3B: Preliminary Environmental Site Assessment Update (if needed)

The Preliminary Environmental Site Assessment (PESA) is valid for a period of 6 months; there we anticipate that we will need to update the initial PESA completed for this project. This will include ordering the environmental database record, conducting a site visit and completing a written PESA validation memo as an addendum to the original report.

Task 3B: \$4,410 Labor, \$100 Direct Cost = \$4,510

Task 4: Survey

Topographic Survey

- Control Points – Set ~ 4 control points. Control will be horizontally located with GPS on NAD 83 IL East State plane coordinates. A digital level loop will be completed through the control, elevations will be based on NAVD 88 datum holding one of the GPS control points

- Topographic Survey – Topo of the area will be completed with a ground-based scanner/LIDAR and features will be extracted on a 50' cross section interval perpendicular to the bridge/street the cross section is on. The following bridge features will be extracted from the point cloud data, centerline of piers, outer edge of piers, outer edge of bridge deck. Typical roadway features such as edge of pavement, centerline, curb will be extracted on the approach sections.
Limits are 100 ft west and east from the ends of the bridge, 50 ft each direction from centerline of the bridge.
- Hydraulic Survey – The hydraulic survey portion of this project will be completed with GPS with a single point sonar unit. The top of banks, toes, thalweg, and centerline will be defined.
- Utilities – All utilities within the topo limits will be collected. Utility location will consist of ASCE standard 38-02 Level QL-C Data. This utility survey will collect invert directions and elevations on storm sewer, water main, and sanitary sewer structures within the project area and 1 structure away allowing pipe elevations to be interpolated within the project location. If the 1 structure out is located on private property contact information and access will be coordinated and provided by the client. Manhole lids that are not able to be opened with a manhole pick and structures full of debris or clogged will be reported to the client and it will be the client's responsibility to coordinate with the utility provider for opening and or cleaning before returning for details. Individual homeowner notification is also not part of this scope.
- Data deliverables – Features extraction linework and a surface file will be delivered in a .dgn format utilizing IDOT layer and codes. Point cloud data will be delivered in a .las and .e57 file. Scan data will also be delivered in a free/shareable google type street view program by thumb drive.

Task 4: \$13,810

July 26, 2024

TranSystems Corporation

1475 East Woodfield Road, Suite 600
Schaumburg, IL 60173

Attn: Matt Baldwin, P.E., PTOE
Senior Project Manager

Re: Proposal for Geotechnical Engineering Services
Indiana Avenue Pedestrian Bridge (Piano Factory Bridge)
St. Charles, Kane County, Illinois
Wang/Terracon # PKE245359

Dear Mr. Baldwin:

Wang Engineering, Inc., a Terracon Company (Wang) is pleased to submit this proposal for geotechnical engineering services and CCDD screening to support the proposed improvements for Indiana Avenue Pedestrian Bridge, aka Piano Factory Bridge. This project is part of Phase I Design Engineering Services and includes the Piano Factory Bridge substructures and approaches replacement.

The structures may be supported on piles, drilled shafts, or micropiles. The need for specialized foundation work will be determined by the engineer.

1.0 SCOPE OF WORK

From the available geological data, within the project area the top of bedrock surface ranges from 2 to 20 feet below ground surface (bgs). The bedrock is made up of Silurian-age dolostone throughout the project area. The overburden consists of alluvium and glacial deposits that include up to 20-foot thick, unconsolidated granular soil. Given the intended engineering works, the design criteria and agency requirements, and the anticipated lithological profile, Wang proposes the following geotechnical investigation program and subtasks:

Geotechnical Drilling and Coring Services - Wang will provide equipment, labor, and associated materials to drill, test, and sample an estimated 100 feet of soil and rock in 2 boreholes, one at each abutment. Traffic control including roadway flaggers will be required for carrying out the drilling operations from the street level. The boreholes will be advanced with hollow stem augers, and the soil

PKE245354 – Piano Factory Bridge

St. Charles, Kane County, Illinois

July 26, 2024



will be sampled at 2.5-foot intervals to bedrock and 30 to 40 feet rock core will be collected at each boring location. Soil samples will be collected with split-barrel samplers, "Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils." After drilling completion, the boreholes will be grouted. Sediment samples will be collected from the Fox River near the east pier and bedrock sounding will be performed near the east pier.

Field Supervision — Prior to drilling, Wang will layout the borings and clear utilities through JULIE. A field engineer will monitor drilling activities, maintain daily field notes, log the geotechnical borings, as well as receive, classify, and prepare soil, and rock samples for laboratory analysis. Soil samples will be classified in accordance with the Unified Soil Classification System. The field engineer will perform penetrometer and Rimac unconfined compressive strength tests on cohesive soil samples; he/she will also observe the groundwater level in boreholes. As-drilled boring locations will be surveyed by Wang with a mapping-grade GPS having an accuracy of +/-3 feet. Final top of boring elevations, stations and offsets will be provided by TranSystems.

Laboratory Testing - The soil testing program will include natural moisture content, Atterberg limits, particle size analysis, and peak uniaxial strength for rock core samples.

CCDD Sampling and Analytical Testing – The soil borings will have dual purpose, geotechnical and environmental/CCDD. For CCDD, soil samples will be collected in each borehole from top 10 feet in 5-foot intervals (0-5) and (5-10), a total of 4 samples. Each sample will be screened for volatiles compounds using photoionization detector (PID). The soil analytical testing program will include pH, volatile organic compounds (VOCs), Semi VOCs including polynuclear aromatic hydrocarbons (PNAs), polychlorinated biphenyls (PCBs), total RCRA metals, and toxicity characteristic leaching procedure (TCLP) on inorganic analytes exceeding accepted limits by an accredited IEPA laboratory.

Engineering Analysis and Recommendations - The following reports will be prepared by Wang:

- a bridge Structure Geotechnical Report (SGR)
- a PSI/CCDD letter report for soil waste management.

The reports will include a detailed description of the project, field, and laboratory testing procedures and a characterization of the soil and groundwater conditions and will include site location maps, boring location plans, boring logs, and summaries of laboratory test results. Foundation type analyses; axial and lateral capacity and settlement evaluations; foundation design and construction recommendations; seismic site classification; scour analyses; as well as criteria and procedures for temporary support, excavation, dewatering, backfilling, and compaction will be provided. The reports will be prepared as per the current IDOT guidelines and requirements. Draft reports will be submitted for review; final reports will address issues raised by reviewers.

2.0 SCHEDULING

Wang will start the project expediently upon prior authorization to proceed. We anticipate that after utility clearance and access agreements two to three working days will be necessary to complete the

PKE245354 – Piano Factory Bridge

St. Charles, Kane County, Illinois

July 26, 2024



drilling and sampling phase of the project using one drilling rig, and boat/barge as applies. The laboratory testing program will proceed concurrently with the drilling activities and will be concluded within four weeks after drilling completion. Draft reports will be submitted within two weeks after the Designer provides preliminary design drawings and completion of laboratory testing.

3.0 ESTIMATED COST AND ASSUMPTIONS

Wang proposes to provide the above tasks on time and expense basis according to the attached cost estimate. Wang would not exceed the estimated upper limit without the Client approval. In preparing the cost estimate we have assumed the following conditions:

- Right-of-Entry Permitting will not be required by Wang.
- City of St. Charles permitting will not be required and fees will be waved.
- Lane closures will be necessary for the roadways and have been included in our estimate.
- As drilled boring location survey elevations will be provided by TranSystems.

Wang Engineering, Inc. appreciates the opportunity to present this geotechnical and CCDD project approach, and we look forward to working with TranSystems on this project. Please call us if you have any questions or if you require additional information regarding this proposal.

Sincerely,

Wang Engineering, Inc., A Terracon Company

Cornelia L. Marin, P.G.
Sr. Engineering Geologist

Corina T. Farez, P.E., P.G.
Principal/Senior Engineering Consultant

Attachments: Cost estimate sheet

Project Name: Indiana Pedestrian Bridge
Location: St. Charles, Illinois

Date: 07/23/2024
Wang No.: PKE245359

Task Description	Units	Unit Price	Extended Cost
DRILLING, SAMPLING & INSITU TESTING			
Drilling Coordination, Utilities Clearance, Site Access, Permitting	2.0 Hours	\$150.00 /Hour	\$300.00
Mobilization (ATV mounted)	0	\$1,700.00 /Each	\$510.00
Stand-by Hourly Rate	0.0 Hours	\$485.00 /Hour	\$0.00
<u>Drilling & Sampling - Hourly (SPT, Penetrometer, Rimac, Visual Classification Included)</u>			
Two-man crew - normal working hrs.	20.0 Hours	\$558.00 /Hour	\$11,160.00
Two-man crew - overtime (2 hrs. per day)	0.0 Hours	\$615.00 /Hour	\$0.00
<u>Other Insitu Tests</u>			
Pressuremeter testing	0 Days	\$3,750.00 /Day	\$0.00
Vane shear	0 Tests	\$325.00 /Test	\$0.00
Dilatometer testing	At Cost		\$0.00
Cone penetration testing (CPT/CPTu)	At Cost		\$0.00
Photoionization detector (PID)	0 Days	\$125.00 /Day	\$0.00
Double ring infiltrometer test (ASTM D3385)	0 Tests	\$1,500.00 /Test	\$0.00
Single ring infiltrometer test (Chicago Stormwater Ordinance)	0 Tests	\$750.00 /Test	\$0.00
Sediment Sampling including boat/barge and equipment	Lump Sum		\$2,500.00
			\$14,470.00
LABORATORY TESTING			
T265 D2216 Water Content	12 Tests	\$14.50 /Test	\$174.00
<u>Particle Size Distribution</u>			
T88 D422 Sieve Analysis	0 Tests	\$99.00 /Test	\$0.00
T88 D422 Combined Sieve and Hydrometer	4 Tests	\$162.00 /Test	\$648.00
-- D1140 Percent Finer than No. 200 Sieve	0 Tests	\$66.00 /Test	\$0.00
<u>Atterberg Limits</u>			
T89, T90 D4318 Liquid and Plastic Limits	2 Tests	\$99.00 /Test	\$198.00
T92 D427 Shrinkage Factors	0 Tests	\$120.00 /Test	\$0.00
<u>Shear Strength</u>			
D7012 Peak Uniaxial Compressive Strength of Rock Core	4 Tests	\$245.00 /Test	\$980.00
<u>Analytical Laboratory Services - for CCDD (200% fee for 3-day turn-around rush orders)</u>			
pH Determination	4 No	\$18.00 /Each	\$72.00
Volatile Organic Components (VOCs)	1 No	\$127.00 /Each	\$127.00
SemiVOCs including PNA's	1 No	\$253.00 /Each	\$253.00
PCBs	1 No	\$104.00 /Each	\$104.00
RCRA Total Metals (8)	1 No	\$121.00 /Each	\$121.00
TCLP/SPLP Extraction	1 No	\$75.00 /Each	\$75.00
TCLP/SPLP per each metal	2 No	\$40.00 /Each	\$80.00
			\$2,832.00
TRAFFIC CONTROL			
<u>Roadway Flagmen (two-man crew)</u>			
Port-to-Port	8.0 Hours	\$250.00 /Hour	\$2,000.00
			\$2,000.00
Note: Prices are for weekday only (Monday through Friday). Weekend rates (Saturdays and Sundays) are higher and will be provided per project			
FIELD VEHICLES & MILEAGE			
<u>Field Vehicle</u>			
Field Vehicle Daily (<100 Miles per Day)	4 Days	\$65.00 /Day	\$260.00
			\$260.00
SUMMARY			
DRILLING, SAMPLING & INSITU TESTING			\$14,470.00
LABORATORY TESTING			\$2,832.00
TRAFFIC CONTROL			\$2,000.00
FIELD VEHICLES & MILEAGE			\$260.00
OUT-OF-TOWN EXPENSES			\$0.00
			\$19,562.00
ENGINEERING, REPORTING & MANAGEMENT			
Principal in Charge	0.0 Hours	\$276.14 /Hour	\$0.00
Project Manager	2.0 Hours	\$222.85 /Hour	\$445.70
Senior Engineer	18.0 Hours	\$222.85 /Hour	\$4,011.30
Project Engineer/Project Geologist	30.0 Hours	\$153.07 /Hour	\$4,592.10
Assistant Engineer/Assistant Geologist	29.0 Hours	\$109.31 /Hour	\$3,169.99
Laboratory Technician	0.0 Hours	\$124.47 /Hour	\$0.00
Administrative Assistant	1.0 Hours	\$109.40 /Hour	\$109.40
QC/QA Reviewer	2.0 Hours	\$267.48 /Hour	\$534.96
	82.0		\$12,863.45
			TOTAL \$32,425.45