

# TECHNICAL PROPOSAL VOLUME 2

■ COPY 1 OF 5



REQUEST FOR PROPOSAL  
Response to the Request for Proposal to

Sherman Minton Corridor Project  
through a Public-Private Agreement

Submitted to:  
INDIANA FINANCE AUTHORITY

November 13, 2020

## EXHIBIT E

### SUMMARY AND ORDER OF PROPOSAL CONTENTS

Technical Proposal – Volumes 1 and 2		
Technical Proposal Component	Form (if any)	Proposal Section Cross-Reference
<b>Volume 1</b>		
<b>A. Executive Summary</b>		
Executive Summary ( <b>Exclude price information</b> )	No forms are provided	<u>Volume 1</u> <u>Pages 1-6</u>
<b>B. Proposer Information, Certifications and Documents</b>		
Proposal Letter	<u>Form A</u>	<u>Volume 1</u> <u>Proposal Letter Form A</u> <u>Tab</u>
Identification of Proposer and Equity Members	<u>Form B-1</u>	<u>Volume 1</u> <u>Identification of</u> <u>Proposer and Equity</u> <u>Members Form B-1</u> <u>Tab</u>
Information About Proposer Organization	<u>Form B-2</u>	<u>Volume 1</u> <u>Information About</u> <u>Proposer Organization</u> <u>Form B-2 Tab</u>
Information About Major Participants and Identified Subcontractors	<u>Form B-3</u>	<u>Volume 1</u> <u>Information About</u> <u>Major Participants and</u> <u>Identified</u> <u>Subcontractors Form</u> <u>B-3 Tab</u>
Letter accepting joint and several liability, if applicable	<u>No forms are provided</u>	<u>Not Applicable</u>
Responsible Proposer and Major Participant Questionnaire	<u>Form C-1</u>	<u>Volume 1</u> <u>Responsible Proposer</u> <u>and Major Participant</u> <u>Questionnaire</u> <u>Form C-1 Tab</u>

Technical Proposal – Volumes 1 and 2		
Technical Proposal Component	Form (if any)	Proposal Section Cross-Reference
Industrial Safety Record for Proposer, Equity Members and Major Participants	<u>Form D</u> (as applicable)	<u>Volume 1</u> <u>Industrial Safety Record for Proposer, Equity Members and Major Participants</u> <u>Form D Tab</u>
Personnel Work Assignment Form and Commitment of Availability	<u>Form E</u>	<u>Volume 1</u> <u>Personnel Work Assignment Form and Commitment of Availability</u> <u>Form E Tab</u>
Letter(s) Regarding Pre-Proposal Submittals	No forms are provided	<u>Volume 1</u> <u>Letter(s) Regarding Pre-Proposal Submittals</u> <u>Tab</u>
Non-Collusion Affidavit	<u>Form F</u>	<u>Volume 1</u> <u>Non-Collusion Affidavit</u> <u>Form F Tab</u>
DBE Certification	<u>Form G</u>	<u>Volume 1</u> <u>DBE Certification</u> <u>Form G Tab</u>
Conflict of Interest Disclosure	<u>Form H</u>	<u>Volume 1</u> <u>Conflict of Interest Disclosure</u> <u>Form H Tab</u>
Certification regarding Buy America	<u>Form Q</u>	<u>Volume 1</u> <u>Certification Regarding Buy America</u> <u>Form Q Tab</u>
Certification regarding Equal Employment Opportunity	<u>Form R</u>	<u>Volume 1</u> <u>Certification Regarding Equal Employment Opportunity</u> <u>Form R Tab</u>
Use of Contract Funds for Lobbying Certification	<u>Form S</u>	<u>Volume 1</u> <u>Use of Contract Funds for Lobbying Certification</u> <u>Form S Tab</u>

Technical Proposal – Volumes 1 and 2		
Technical Proposal Component	Form (if any)	Proposal Section Cross-Reference
Debarment and Suspension Certification	<u>Form K</u>	<u>Volume 1</u> <u>Debarment and</u> <u>Suspension</u> <u>Certification</u> <u>Form K Tab</u>
Guarantor Commitment Letter	<u>Form P</u>	<u>Volume 1</u> <u>Guarantor</u> <u>Commitment Letter</u> <u>Form P Tab</u>
Insurance	No forms are provided	<u>Volume 1</u> <u>Insurance Tab</u>
Confidential Contents Index	No forms are provided	<u>Volume 1</u> <u>Confidential Contents</u> <u>Index Tab</u>
Preliminary DBE Performance Plan	No forms are provided	<u>Volume 1</u> <u>Preliminary DBE</u> <u>Performance Plan Tab</u>
Prequalification Information	<u>Form T</u>	<u>Volume 1</u> <u>Prequalification</u> <u>Information</u> <u>Form T Tab</u>
Responsible Proposer Recertification (to be delivered after the Proposal Due Date)	<u>Form C-2</u>	<u>Will be provided after</u> <u>proposal due date as</u> <u>requested</u>
<b>C. Stipend Agreement</b>		
Stipend Agreement	<u>Form N</u>	<u>Volume 1</u> <u>Stipend Agreement</u> <u>Form N Tab</u>
<b>Volume 2</b>		
<b>D. Preliminary Performance Plans</b>		
Preliminary Project Management Plan	No forms are provided	<u>Volume 2</u> <u>Pages 1-29</u>
Project Management Approach	No forms are provided	<u>Volume 2</u> <u>Page 1</u>
Preliminary Project Baseline Schedule Narrative	No forms are provided	<u>Volume 2</u> <u>Page 14</u>



Technical Proposal – Volumes 1 and 2		
Technical Proposal Component	Form (if any)	Proposal Section Cross-Reference
Preliminary Quality Management Plan	No forms are provided	<u>Volume 2</u> <u>Page 19</u>
Safety Management	No forms are provided	<u>Volume 2</u> <u>Page 23</u>
Environmental Management	No forms are provided	<u>Volume 2</u> <u>Page 25</u>
Public Information Plan	No forms are provided	<u>Volume 2</u> <u>Page 27</u>
Preliminary Design-Build Plan	No forms are provided	<u>Volume 2</u> <u>Pages 29-50</u>
Preliminary Transportation Management Plan	No forms are provided	<u>Volume 2</u> <u>Page 29</u>
Bridge Structural Repairs	No forms are provided	<u>Volume 2</u> <u>Page 39</u>
Bridge Deck Overlays and Deck Replacements	No forms are provided	<u>Volume 2</u> <u>Page 46</u>
Bridge Painting	No forms are provided	<u>Volume 2</u> <u>Page 49</u>
Total Project Duration	<u>Form L</u>	<u>Volume 2</u> <u>Total Project Duration</u> <u>Form L Tab</u>
<b>E. Volume 1 Appendices</b>		
Authorization Documents	No forms are provided	<u>Volume 1 Appendix:</u> <u>Authorization</u> <u>Documents Tab</u>
Copies of Organizational Documents	No forms are provided	<u>Volume 1 Appendix</u> <u>Organizational</u> <u>Documents Tab</u>
Proposer Teaming Agreement or Key Terms	No forms are provided	<u>Volume 1 Appendix</u> <u>Proposer Teaming</u> <u>Agreement or Key</u> <u>Terms Tab</u>
Executed Contracts or Term Sheets/Heads of Terms	No forms are provided	<u>Volume 1 Appendix</u> <u>Executed Contracts or</u> <u>Term Sheets/Heads of</u> <u>Terms Tab</u>

Technical Proposal – Volumes 1 and 2		
Technical Proposal Component	Form (if any)	Proposal Section Cross-Reference
<b>F. Volume 2 Appendices</b>		
Key Personnel Resumes	No forms are provided	<u>Volume 2 Appendix Key Personnel Resumes Tab</u>
Technical/Design Drawings, Graphs and Data	No forms are provided	<u>Volume 2 Appendix Technical/Design Drawings Tab</u> <u>Sherman Minton Bridge Tab</u> <u>Kentucky Approach Bridges Tab</u> <u>Indiana Approach Bridges Tab</u> <u>Roll Plot Tubes</u>
Preliminary Project Baseline Schedule	No forms are provided	<u>Volume 2 Appendix Preliminary Project Baseline Schedule Tab</u>
<b>G. NTP + 180 Schedule</b>		
NTP + 180 Schedule (Narrative plus Schedule)	No forms are provided	<u>Separate Envelope as Requested</u>



# Preliminary Performance Plans



# Project Management Approach



VOLUME 2

# 4.1.1

## Project Management Approach

The Kokosing Design-Build Team (Kokosing DBT) approaches this project, as we do all design-build projects, as an integrated team focused on high-quality project delivery, safely, on-time and within budget. This approach began with our initial organization of the team, which includes Major Participant firms and individuals who have successfully worked together to deliver numerous past large projects. Our familiarity with each other affords us a partnership mentality, not simply individual firms providing their services.

### a) Management Structure and Personnel

Project Manager **Vince Martini** will oversee all aspects of the project including ultimate management of the design and construction. Vince is one of Kokosing's top project managers, currently finishing the construction of a \$1 billion expansion at the Cincinnati/Northern Kentucky International Airport, where he leads the site development team. He will actively manage the project, working closely with Design Manager **Daniel Morris** and Construction Manager **Brad Young**, while partnering with the IFA, INDOT, KYTC, and other stakeholders to confirm project success. He is a hands-on manager, actively leading and participating in management and task force meetings and coordinating with Owner representatives and third parties.

Vince will work closely with Project Scheduler **Gary Obert** and Design-Build Coordinator **Mark Maday** to make sure that both design and construction are progressing towards the ultimate goal of meeting or beating the project completion date.

### Construction

Construction Manager Brad Young verifies on-site construction efforts are operating efficiently, safely, and

to the satisfaction of all stakeholders. Brad will manage all work put in place and have multiple disciplines reporting to him. His experience on major interstate and bridge construction projects affords him critical experience maintaining high traffic volumes while performing complex operations in tight workzones. Brad will foster an on-site partnering relationship starting in the field with the tradespeople, foremen, Owner inspection staff, and other critical entities.

Key subcontractor North Star Painting will be managed on-site by Structural Steel Painting Manager **Ioannis Kalouris** with separate Paint QC by **Mike Mihas**. North Star Painting along with other subcontractors on-site will ultimately be managed by Brad Young but will also work closely with Kokosing project engineers. Kokosing's project engineers will coordinate discipline-specific work schedules, contracts, productivity tracking, and daily communication with Brad to provide updates and key progress reports.

Safety Manager **Ashley Hagan**, Environmental Compliance Manager **Samantha Wickizer**, and MOT DB Coordinator **Shane Santos** also will report to Brad Young providing specific status reports to verify project compliance and maintain overall project success.

### Design

In alignment with the Construction Management Approach, the Design Management Approach follows the organization of the project into discipline focus groups, structured by key disciplines and organized to facilitate the workflow from design through construction. This approach creates efficient control and monitoring of design, plan production, quality conformance, IFA review cycles, and construction.

Design Manager Daniel Morris leads the design team and is responsible for the overall management of design production and delivery, including staffing, implementing design criteria and procedures, and managing the design schedule and budget. Throughout his career, Daniel has been involved in some of the largest and most innovative projects that Jacobs has delivered. His technical and managerial background is inclusive, ranging from rural and urban transportation corridor design for traditional design-bid-build projects in multiple states, to final design for complex alternative delivery programs across the nation.

Daniel's leadership of multi-discipline design teams along with his ability to manage any kind of project makes him best suited to successfully lead the design team to deliver this project to IFA. Uniquely, from management and leadership roles on design-build projects such as I-69, Daviess and Greene Counties, The Ohio River Bridges Project – Downtown Crossing, California High Speed Rail, and Dallas Area Rapid Transit (DART) Cotton Belt Expansion, Daniel has the experience to deliver the successful implementation of design elements for the Sherman Minton Project.

Structural Design Lead Engineer **John Finke** brings more than 30 years of experience with complex structural bridge retrofits over rivers and is a Registered Professional Engineer in both Indiana and Kentucky. John has been involved in numerous, major steel bridge retrofits over major rivers in the Midwest.

The I-90 (Business Loop) over the Missouri River included retrofitting a series of truss bridges over the Missouri River at Chamberlain, SD. Similar to the scope of work for this project, the work included structural steel repairs on the truss, floor system, and evaluation and repair or replacement of the supporting river piers.

He completed similar work to replace the TH 61 Bridge over the Mississippi River in Hastings, MN. The Blanchette Bridge spanning I-70 over the Missouri River between St. Louis and St. Charles, MO is another example where a major retrofit was completed with plans. Finally, just a few miles upstream at Louisville, KY, John led the retrofit of the John F. Kennedy Bridge

over the Ohio River as part of the Ohio River Bridges Project, Downtown Crossing. Consultation during the construction process was critical to avoiding possible delays. John's experience in both design and construction proved valuable during the construction phase and no claims were put forth regarding the aforementioned projects. This experience will prove critical to providing well-thought-out details, construction for same, and ready consultation during construction to complete this project on time.

***Daniel has worked directly with John for decades on several highway/bridge projects for multiple state DOTs.***

Design Quality Manager **Debra Herrmann** initiates the project-specific Design Quality Plan (DQP) for the Sherman Minton Corridor Project, similar to DQPs she has developed for several other mega-projects including Ohio River Bridges Downtown Crossing and DART Cotton Belt projects. Debra has the experience and tenacity to align our design packages around a proven program that adheres to the high-quality standards that IFA expects.

***Debra, John, and Daniel have worked closely with each other on several design-build mega projects including the Ohio River Bridges Project – Downtown Crossing, and California High Speed Rail (Fresno, CA).***

Jacobs leads the engineering design effort, supported by subconsultants whose qualifications match the unique challenges of the Sherman Minton Corridor Project. Design subconsultants, **DLZ, Metric Environmental, and Modjeski & Masters** were strategically selected for their expertise and specialized knowledge of INDOT and KYTC procedures, structural rehabilitation specialties, local subsurface conditions, and utility coordination.

## Organization Chart

The organizational chart on the next page details the Kokosing DBT's overall structure for project management, communication with the IFA, and how all team members will report and communicate with one another.



# ORGANIZATION CHART

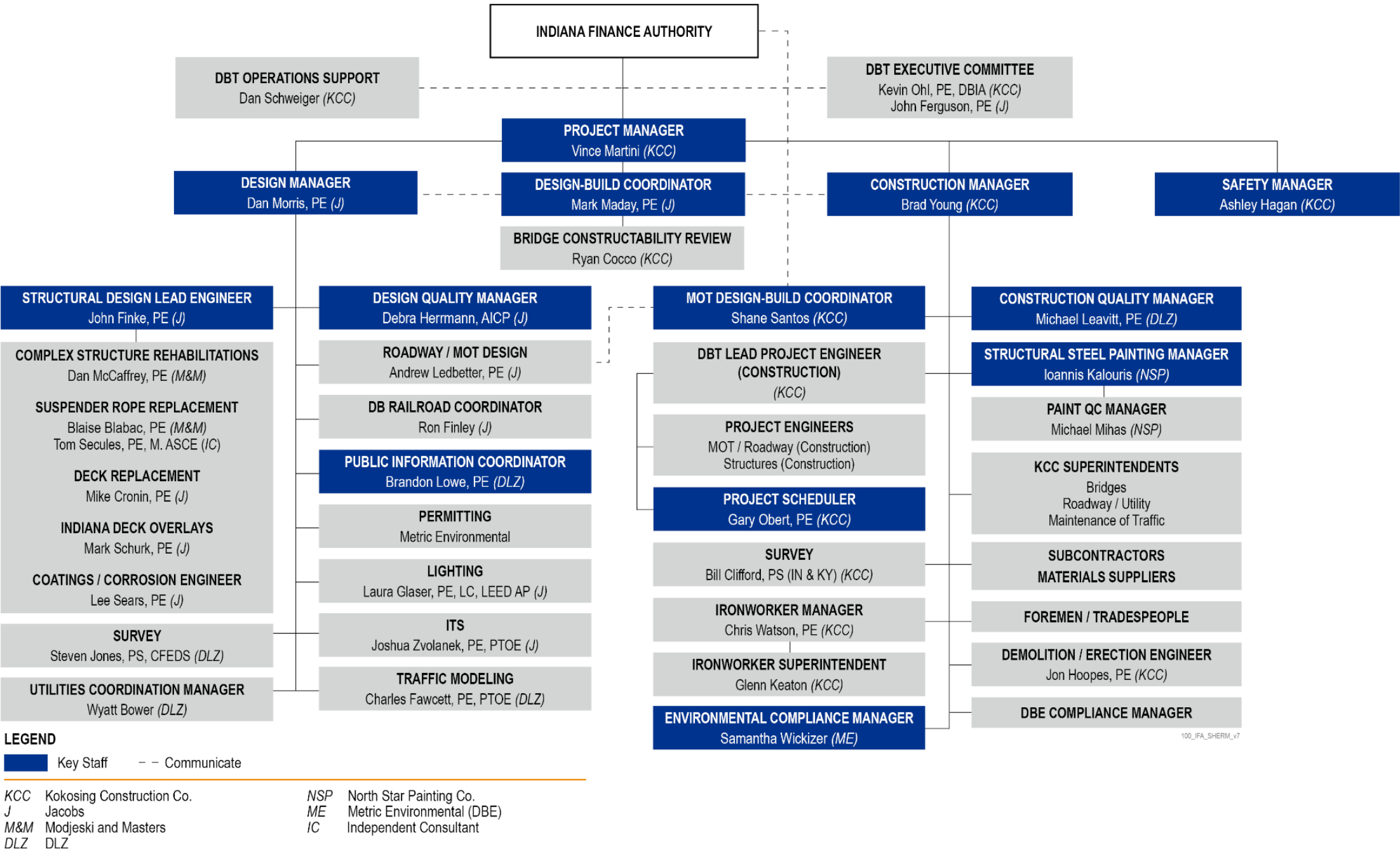
## Integrated Team with Client Focus, Local Knowledge, and Specialized Technical Expertise

The organizational chart shown here details the Kokosing DBT's overall structure for project management, communication with the IFA, breakdown of design and construction teams, and how all team members, including all key and value-added personnel, will report and communicate with one another

- Kokosing has ultimate responsibility for the project's overall design and construction
- Key subcontractor North Star Painting is the project's lead painter.
- Jacobs is responsible for delivering the overall design, while specifically self-performing the design of the deck replacement, miscellaneous steel repairs, maintenance of traffic, and all roadway and drainage needs.
- Modjeski & Masters is responsible for designing the suspender rope replacement and miscellaneous steel repairs. They also perform independent modeling of the bridge for global effects during construction and staging.
- Metric Environmental runs the important permit application process and tracks environmental commitments.
- DLZ supports the design team with traffic modeling, utility coordination, and design surveying.

We understand that this project requires an integrated team with client focus, local knowledge, and specialized technical expertise.

Our team incorporates national experience in delivering major infrastructure projects and specialized bridge rehabilitation techniques, coupled with a local focus to deliver this key project for IFA.





## Key Personnel: Functions and Responsibilities

The organization chart on the prior page shows how each individual fits into the design and construction organization. The table below describes each Key Person's function and responsibilities to successfully deliver this project as well as indicates the percent of time each will devote to the project.

	<b>VINCE MARTINI</b> <b>■ Kokosing Construction Co.</b> <b>Project Manager</b> <i>Years of Service: 26</i>
---	---

**Function and Responsibility:** Responsible for overall project delivery working closely with multiple stakeholders to build consensus and make sure that all parties are highly informed throughout the project. Provides expert contract management, subcontractor and supplier relations, CPM schedule development, quality and cost control.

### Experience:

- Project experience ranges from major bridge construction, heavy-grading and urban reconstruction through both the design-bid-build and construction management/DB delivery methods.

**Availability for this project:** 100% during Design and Construction

	<b>DANIEL MORRIS, PE</b> <b>■ Jacobs</b> <b>Design Manager</b> <i>Years of Service: 34</i>
---	---

**Function and Responsibility:** Implements detailed planning of design activities, executing an efficient, proactive, and cost-effective work plan that fosters inter-discipline coordination and minimizes rework. Responsible for the overall design of the project inclusive of all structures and structural elements and roadway/highway items.

### Experience:

Alternative (DB, P3) delivery of highway and bridge design projects, leading multidisciplinary design teams on large, complex transportation infrastructure projects.

- Broad background in transportation engineering, understanding potential inter-discipline conflicts, and identifying and resolving design coordination issues.

**Availability for this project:** 100% during Design and as-needed during Construction

	<b>JOHN FINKE, D.Engr., PE, SE, F.SEI</b> <b>■ Jacobs</b> <b>Structural Design Lead Engr</b> <i>Years of Service: 29</i>
--	---

**Function and Responsibility:** Responsible for making sure all structural components on the project are completed and all design requirements are met.

### Experience:

- Experienced in structures and bridges comprised of steel and reinforced concrete, pretensioned and posttensioned concrete designs.
- Bridge analysis and design scope includes seismic analysis and design, strengthening, widening, and rehabilitating, bridge condition inspections and evaluations, computer development for structural analysis and designs, and finite element analysis and structural dynamics.

**Availability for this project:** 100% during Design and as-needed during Construction

	<b>BRAD YOUNG</b> <b>■ Kokosing Construction Co.</b> <b>Construction Manager</b> <i>Years of Service: 41</i>
---	---

**Function and Responsibility:** As construction manager, he will manage and oversee all project construction and have the authority to leverage Kokosing's personnel and equipment resources, ensuring the project is built safely to plans and specifications and on schedule.

### Experience:

- Brings physical construction expertise in complex bridges, demolition, piling, structural concrete, and beam erection to this project, as well as experience in schedule management, substantial phasing, and structure replacement.

**Availability for this project:** 100% during Design and Construction

	<b>MARK MADAY, PE</b> <b>■ Jacobs</b> <b>Design-Build Coordinator</b> <i>Years of Service: 30</i>
--	--

**Function and Responsibility:** Responsible for providing overall coordination between design work and construction work. Provides oversight and supervision

over the design team's technical work and works to resolve issues, including reviewing plans and designer submittals to make sure project and constructability standards are met.

**Experience:**

- Design-build project delivery experience includes Design Manager (DM) on the I-480 Valley View Viaduct project in Cleveland, OH; the Virginia Route VA 288 bypass project in Richmond, VA; the I-670/71 Columbus Crossroads Interchange in Columbus, OH; and the I-5 HOV lane expansion project in Everett, Washington.

**Availability for this project:** 100% during Design and Construction



**DEBRA HERRMANN, AICP**  
■ **Jacobs**  
**Design Quality Manager**  
*Years of Service: 39*

**Function and Responsibility:** Responsible for Design QA/QC for all design work that is performed for the project, including any design changes during construction and As-Built Drawing production.

**Experience:**

Recently served as Design Quality Manager for the I-65 Louisville-Southern Indiana Ohio River Bridge (ORB) Downtown Crossing Design Build and Design Quality Manager for the I-4 Ultimate Project in Florida, and currently serves as the Design Quality Manager for Segment 1 of the California High Speed Rail project.

**Availability for this project:** 100% during Design and as-needed during Construction



**MICHAEL LEAVITT, PE**  
■ **DLZ**  
**Construction Quality Manager**  
*Years of Service: 30*

**Function and Responsibility:** Responsible for overall management and supervision of our construction quality programs and quality assurance. Has delegated authority to make needed improvements to the quality of work, including suspension of the work, if required.

**Experience:**

Former City Engineer and INDOT Project Engineer.

- Proficient in design, contract document preparation, bidding procedures, construction inspection, development of standard operating procedures,

fiscal and capital management, materials testing and construction documentation.

**Availability for this project:** 100% for Construction



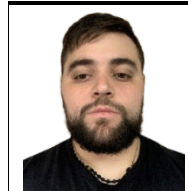
**SHANE SANTOS**  
■ **Kokosing Construction Co.**  
**MOT DB Coordinator**  
*Years of Service: 18*

**Function and Responsibility:** Works closely with the MOT Design Lead, the IFA, and other government entities to make sure that the Traffic Management Plan is properly implemented and provide supervision of the on-site MOT activities to verify safety, conformance, and compliance with all regulations.

**Experience:**

18 years of experience in the transportation industry specifically managing Maintenance of Traffic within work zones on some of the busiest urban interstates in the Midwest. Previous DB experience providing valuable constructability reviews and plan design refinements.

**Availability for this project:** 100% during Design and Construction



**IOANNIS KALOURIS**  
■ **North Star Painting Co.**  
**Structural Steel Painting Manager**  
*Years of Service: 14*

**Function and Responsibility:** Responsible for implementing the structural steel painting plan.

**Experience:**

- Worked on 14 major structures over various bodies of water including one over the Mississippi river and seven over the Ohio river that included building various types of containments and platforms to complete large cleaning & painting operations.
- With having been involved in industrial painting much of his life, Ioannis was able to complete his NACE CIP Peer review at the age of 25.

**Availability for this project:** 100% for Construction



**BRANDON LOWE, PE**  
■ **DLZ**  
**Public Information Coordinator**  
*Years of Service: 23*

**Function and Responsibility:** Responsible for overseeing the public interaction and convey

information in an accurate and understandable manner.

**Experience:**

- Served as Project Manager for numerous rural and urban highway projects for the Kentucky Transportation Cabinet over the past 23 years.
- His entire career has been spent in highway design with an emphasis on geometric layout, traffic analysis, plan development and public involvement.
- His role today includes overseeing the day to day management of highway projects for DLZ with a focus on design build pursuits.

**Availability for this project:** 100% during Design and Construction

	<p><b>SAMANTHA WICKIZER</b> ■ <b>Metric Environmental</b> <b>Environmental Compliance Mngr.</b> <i>Years of Service: 5</i></p>
---	--

**Function and Responsibility:**

- Responsible for implementation and oversight of the regulatory aspects of construction permitting (Rule 5), industrial storm water permitting (Rule 6), and municipal separate storm sewer permitting (Rule 13).
- Responsibilities in this role included inspections of regulated entities, review of regulatory documents including SWPPP, SWP3, and municipal ordinances, as well as audits of municipal programs to evaluate compliance with the applicable statutes. Transitioned to Metric Environmental from IDEM and has operated as the Stormwater Quality Manager for several Level 1 INDOT projects.

**Availability for this project:** 100% during Design and Construction

	<p><b>ASHLEY HAGAN</b> ■ <b>Kokosing Construction Co.</b> <b>Safety Manager</b> <i>Years of Service: 10</i></p>
---	---

**Function and Responsibility:**

- As Safety Manager, Ashley works with management to implement the company safety program on-site.
- Responsible for administering the daily workings of the safety program including Pre-Task Planning as it relates to safety, Job Hazard Analysis, worker safety training, new-hire orientations, daily Morning Action Plan (MAP) meetings, and ensuring that all workers

have the necessary training and certifications to perform their project roles.

**Experience:**

- Served as Kokosing's Safety Manager on many large-scale civil projects including interstate reconstructions and Design-Build projects.
- Kokosing's Safety Manager on the \$1B expansion at the Cincinnati/Northern Kentucky Airport.

**Availability for this project:** 100% for Construction

	<p><b>GARY OBERT, PE</b> ■ <b>Kokosing Construction Co.</b> <b>Project Scheduler</b> <i>Years of Service: 21</i></p>
---	--

**Function and Responsibility:** Responsible for CPM scheduling using Primavera Project Planner, estimating projects, cost control, material procurement, negotiating and pricing change orders, coordinating subcontractors, submittals, RFI's, and quantity tracking.

**Experience:**

- Kokosing's lead schedule developer, provides training for Kokosing Project Engineer's on schedule development and maintenance.
- Developed and managed schedules for multiple high-profile, highly-phased urban interstate and bridge construction projects.

**Availability for this project:** 75% during Design and Construction

## Required Experience for Task Managers

At the core of the design organization are the Task Managers, or Design Leads, responsible for the delivery of discipline design packages, including reports, calculations, and plans. The Task Managers are also responsible for technical approach, design methodology, and design quality. Functionally, the Task Managers report to the Design Manager and/or Key Personnel (e.g., Structural Design Lead Engineer), with support from engineers and technicians within their specific design discipline team. The Task Managers provide design consistency throughout the project resulting in improved efficiency, quality, and economy in design, while applying the appropriate discipline-specific design criteria and design methodology. This approach also provides IFA with clear lines of



communication for each discipline, providing an efficient collaboration conduit for technical issues.

Accordingly, Task Managers must possess qualification and experience of their discipline and the required background and expertise unique with alternative delivery projects to successfully deliver the Sherman Minton Corridor Project. Our Task Managers are selected based on their knowledge of INDOT and KYTC standards as well as their ability to adapt and offer creative solutions from their experience with other DOT and FHWA specifications. The environment associated with delivering a design build or P3 project requires individuals accustomed to aggressive schedules, strict adherence to project goals and design criteria, and dedication to a rigorous quality program to minimize the potential for rework. The Kokosing Team has positioned hardened design professionals and seasoned construction personnel that are eager to operate in this fast-paced high-pressure environment.

### Current and Projected Workload and Backlog

Kokosing, together with its team member firms has sufficient capacity to successfully deliver this project.

In the past five years, Kokosing has constructed contracts totaling more than \$2 billion. While we cannot provide specific revenue numbers for Sherman Minton, we expect this project will generate revenue each month that is well within our capacity and will not affect our ability to successfully complete this project in conjunction with our current and anticipated workload.

Jacobs has a demonstrated track record of assigning the appropriate manpower to execute the work at hand. Our Midwest team offers more than 780 people; including 185 engineers and designers focused on transportation and bridge design. Our more than 55,000 personnel worldwide are additional resources providing supplementary insights or alternative perspectives as needs arise. Our Midwest team executed 857,000 billable hours during the period of 10/1/19 through 9/30/20.

Other DBT Major Participants of Metric Environmental, DLZ, and North Star Painting employ required Key

Personnel. These Key Personnel who are dedicated full-time to the project will be 100% devoted to the job and its successful completion. Upon completion of their respective scopes of work for Sherman Minton the Major Participants will begin to fulfill other backlog commitments. All Major Participants are well suited in resources and finance and have additional firm capacity to successfully deliver the Sherman Minton project.

An example of Jacobs commitment and capacity to deliver this type of project is our performance on the Ohio River Bridges Project – Downtown Crossing. This same Midwest team led the execution of the design over a 16-month period; which included total design hours 241,500 with 137,000 of those hours executed by our Midwest team.

Our team and approach provide you with the experienced personnel, materials, equipment, and facilities required to successfully complete all aspects of the Project promptly and within any applicable time frames set forth in the PPA Documents.

### Management and Coordination of Utilities

**Wyatt Bower (DLZ)** will serve as the teams Utility Coordination Manager to make sure all items are identified and tracked according to the utility conflict matrix. Wyatt is certified through INDOT's Utility Coordinator Certification Training and has experience on the consultant and contractor side of utility coordination.

While the utility impacts on this project are fewer than some, they can still derail the schedule and start the project off on the wrong foot. Our approach is simple: early and often contact with the utility companies. This will provide open lines of communication to keep the Sherman Minton project on the forefront of their minds. Our staff is dedicated to this project and will focus on delivering the Design-Build Contractor Utility Conflict Matrix no later than 60 days after the NTP. Wyatt will attend DBT taskforce meetings to make sure any utility conflicts are recognized and he will setup kickoff meetings for appropriate utility owners to coordinate with the DB team should an issue arise.

Several utilities are identified in the technical provisions as being in the planned right of way but no adjustments are anticipated.

- AT&T
- Century Link/Level 3 Communications
- City of Albany (Sanitary and Stormwater)
- Crown Castle Network Operations
- Duke Energy
- Indiana American Water
- LG&E KU
- Louisville Water Company
- Metropolitan Sewer District
- Vectren Gas Distribution
- Windstream
- Zayo Bandwidth

### Management and Coordination of Railroads

Avoiding project delays or restrictions from working on railroad property is the result of receiving timely proper authorization and approvals from the railroad.

#### KEY RAILROAD COORDINATION FUNCTIONS:

- Make sure all designs that impact railroad operations and facilities are promptly submitted and approved.
- Verify our construction team submits all necessary documents to receive authorization to begin work without delay.
- Make sure our construction team submits all necessary construction submittals to the railroad to be promptly approved.
- Coordinate all required meetings between all parties with railroad personnel prior to beginning work and all major work activities as needed to limit construction delays and minimize impact on railroad operations

Upon award, we will have the necessary documentation (i.e. insurance, right of entry agreements) in place to be given authorization to begin work without delay. **Ron Finley**, our railroad coordinator, works closely with our construction team to be sure they have submitted any major work items (i.e. demolitions, erections, jacking) for review and approval. We also coordinate pre-work

meetings with personnel to coordinate any effort on the railroad side for flagging, track outages, etc.

We provide on-site observation to certify that all work being performed on railroad property is progressing as previously approved and having little to no impact on the railroad's operations and coordinate to correct any activities that do.

Ron has successfully performed this role on several projects, including the:

- Opportunity Corridor construction of a new underpass carrying NSRR in Cleveland, OH, working with Kokosing and ODOT
- I-75 bridge reconstruction over NSRR in Toledo, OH, also working with Kokosing and ODOT

### b) Internal Organization Systems

#### Decision-Making Process/Resolving Internal Disputes

Our team members, both corporately and individually have worked together on past projects and very familiar with each other's processes and personalities. Our corporate philosophies align in mutual trust and respect. Both Kokosing and Jacobs take a shirt-sleeve approach to decision-making and issue resolution, working as a committed partnership striving to make decisions at the lowest level possible.

We empower our employees to work with their counterparts in other firms to make decisions that keep the project moving. This starts with informal partnering among our team members during a post-bid kickoff meeting. The project staff will discuss the expectations and common goals for the project, along with reviewing the decision-making tree that helps align various communicating entities.

In addition to regular Task Force Meetings, Issue-specific meetings to discuss design development, utility adjustments, railroad coordination and others will be conducted promptly with appropriate personnel and representatives to proactively address potential issues.

We will form an Executive Committee comprised of **Kevin Ohl** from Kokosing and **John Ferguson** from

Jacobs. Each is a Vice President within their company with a specific focus on the design-build delivery method. Kevin and John have worked together for years and jointly developed Jacobs' design subcontract. They will stay informed about the project through regular meetings with the on-site staff, and if any issues need elevated above the project level Kevin and John are empowered to resolve them, allowing the dedicated project staff to focus on continuing their design and construction functions.

We understand that while internal disputes may occur, we have an obligation to diligently continue project delivery during ongoing resolution and will follow the dispute resolution chart below.

LEVEL	PERSONNEL
1	Project Engineers/Superintendents – Discipline Designers
2	Project Manager Vince Martini – Design Manager Daniel Morris
3	DBT Executive Committee – Kevin Ohl (KCC) – John Ferguson (Jacobs)

### Lines of Communication with the Team

Effective communication plays a significant role to the success of a project. This communication effort is not limited to contractor and designer, but also draws from a much greater pool that includes IFA, utility owners, traveling public, DBE firms, and other key stakeholders. We have established that by working collaboratively with owners and other stakeholders, we create a successful project management methodology that is focused on continual progress monitoring to verify cost-effective, timely project completion and holds all parties accountable.

The discipline design packages are prepared based on the resources, capabilities, and expertise of Jacobs and its subconsultants. We accomplish integration between design and construction through strong leadership, transparent communication, co-location, and Task Force Groups. Paramount to this integration is the coordination provided by the Design-Build Coordinator, who will be the liaison between Construction and Design. Our approach to this role is unique, in we are

providing Mark Maday from Jacobs. While the Design-Build Coordinator is more commonly served by a representative from the contractor, we have chosen Mark for his strong Design-Build experience including co-location during both design and construction of major DB projects such as the \$200M I-670/71 Columbus Crossroads and \$230M I-480 Valley View Bridges. Mark co-located with Kokosing on Columbus Crossroads and has great familiarity with our processes and expectations. His design background affords him the ability to intimately understand the design process, schedule, potential issues and resolution.

Multiple design disciplines and construction personnel have been integrated into the project to form a truly collaborative team during these pre-bid stages. These personnel will continue to carry the project forward making for a seamless transition into design and through construction which translates into zero learning curve, avoiding subsequent project delays.

Early coordination between design, construction and maintenance activities will minimize construction changes and keep the project on schedule. To this end, immediately after selection, Design-Build coordination meetings will begin on a weekly basis. These meetings will be led by the Design Leads, in conjunction with the Design-Build Coordinator, with key staff of the construction team attending. Construction personnel will review documents for issues to detect potential impacts to construction work early in the process and mitigate these risks before construction work begins.

The Kokosing DBT integrates design management, utility relocation, RR coordination and construction management into a cohesive team working towards common goals. Project Manager Vince Martini will actively manage all aspects of the project from Award through Final Completion. Jacobs and Modjeski & Masters has been integrally involved in the pre-bid phase including development of ATCs, participation in 1-on-1 meetings with IFA and other stakeholders.

The design will be managed by Design Manager Daniel Morris, who will have ultimate responsibility for all design-related activities. Daniel will coordinate directly with Kokosing, Modjeski & Masters, DLZ, and Metric

Environmental ensuring that the construction staff are continually informed and integrated into over-the-shoulder and constructability reviews. Construction activities will be managed by Brad Young, the project Construction Manager, one of Kokosing's most seasoned managers who has successfully delivered several DB projects. All field operations will report to Brad, with the exception of Public and Project Safety which reports directly to the Project Manager. Brad will also coordinate directly with dedicated subcontractor North Star Painting.

Neither design nor construction will be completed in a vacuum. Kokosing will participate in any design refinements to provide a thorough constructability review. Wyatt Bower will serve as the Utility Coordination Manager throughout all phases of the project and Ron Finley will be our DB Railroad Coordinator. Dan Morris and Brad Young, as well as others, will participate in all phases of the project, providing a vital link between Design and Construction.

#### INTEGRATED TEAM APPROACH

- Project progress meetings will be held and run by Project Manager Vince Martini. Meetings will include IFA staff, on-site construction personnel, NSRR representatives, and key design staff/subcontractors when required.
- Each subcontractor, including DBE firms, will be assigned to an on-site project engineer for direct coordination and schedule communication.
- Preconstruction meetings will be held with each subcontractor prior to the initiation of their work to discuss schedule, Quality Control (QC), and safety. These meetings will include the DBT's Project Manager, Safety Manager, Construction Quality Control Manager, and other design-build team (DBT) personnel directly involved.

#### Interface with Project Sponsors, Consultants, Third Parties, Federal, State and Local Agencies, and other Stakeholders

The interaction of the project stakeholders may be the largest component to the overall success of the

Sherman Minton Corridor project, not to mention how much fun we all have on a daily basis. What we mean is the overall drive by all parties to want a successful project and the understanding that any comments, criticism, etc. by any of these groups are in the best interest of the project.

Jacobs and DLZ experienced this first-hand on the Downtown Crossing of the Ohio River Bridges project. Working together for over two years, we had a great experience with the owner (KYTC), the consultant reviewers, FHWA, numerous stakeholders and many other agencies we had the privilege to work with. While we didn't always agree and many issues came up that needed to be worked out, it was done in a professional, expedient manner and focused on the success of the project

We will bring an integrated team approach to provide effective communication and coordination with the IFA public information team to provide clear, concise, and timely project information to be presented to the public. **Brandon Lowe**, our Public Information Coordinator, is ready to work with IFA to perpetuate the excellent job with maintaining the IFA website, Facebook, and Twitter to give and receive data about the Sherman Minton project. Brandon is very familiar with IFA public information processes from past experiences on the downtown ORB project. **We will actively work with the IFA public information team to provide details necessary for travel advisories, news releases, and any traffic changes.**

A Traffic Management Plan (TMP) will be developed, and once approved, used as a living document to communicate updates and changes in construction activities. The TMP will be managed and updated by Maintenance of Traffic DB Coordinator, **Shane Santos**. It will clearly show stages for the MOT, such as changes in traffic patterns and lane closures, including durations and any anticipated travel delays. The use of message boards in strategic locations along the project will help to announce these MOT stages and allow drivers ample time to adjust if needed. Also critical to successful communication will be engagement of local



agencies and safety services to get valuable input and keep the TMP current with key contact information and notification protocols. Shane will initiate this by establishing communication with emergency responders. We will build upon these efforts and demonstrate our DBT's capability to effectively communicate and coordinate with IFA, but most importantly will verify consistent presentation of information to the public and help the project to proceed smoothly through completion.

INDOT and KYTC will be encouraged to attend and actively participate in all Task Force Meetings and the weekly Design Coordination Meeting. Additionally, the Kokosing DBT will coordinate project items with IFA at progress meetings that will include key subcontractors and other project stakeholders.

IFA staff engages as part of the Task Force meetings, design review meetings, and over-the-shoulder design reviews, to allow for prompt owner feedback, resolve design or constructability issues, and to provide IFA with the opportunity to influence design decisions. This approach streamlines the formal milestone design review process and fosters shorter review time. Regular design and work development meetings are organized between Design Leads and IFA to provide a forum for discussion by all parties on development of design drawings and specifications. In a similar process, coordination meetings with third parties are utilized to discuss design issues and to allow input into the design process. Consistent and timely communication is a primary focus in order to develop third-party consensus and secure permits in advance of the design and construction critical paths and RFC documents. In addition to the Task Force meetings, coordination calls will be conducted as necessary to provide updates and to identify and address any immediate-action concerns.

***Jacobs has proven the value of these strategies and procedures on major infrastructure projects such as the Ohio River Bridges Project, both East End (IFA) and Downtown Crossings (KYTC).***

IFA will be kept well-informed throughout all stages of the project, and our communication structure and task

force organization encourage frequent, meaningful, two-way discussions between IFA and the DBT. Making an upfront effort to identify project issues with IFA leads to an integrated, fluid design process. Construction submittals and field documentation will be handled with a similar level of transparency. We anticipate interacting with IFA personnel at all levels of the project, from inspectors to senior management.

Additionally, we propose quarterly Executive Management Meetings among the senior levels of the Kokosing DBT and IFA. These meetings will review the status of the project, support partnering efforts and promote timely resolution of any issues.

### **Storing and Retaining Documents and Information**

As technology has advanced, the way we maintain documents and financial information has advanced too.

#### ***Medium and format of documents***

We use three different software applications to facilitate record- keeping, reporting and monitoring.



ViewPoint is our financial software. Reports, in a PDF format, are run each Wednesday for the previous week, providing a detailed analysis of the work completed. ViewPoint is also used to generate invoices and reports from ViewPoint serve as backup documentation. At the start of each project, we work with the owner's team to review our standard reports and determine if additional or different information is needed for financial reporting.



HeavyJob is our productivity software. Superintendents and foremen enter daily progress from the field using iPads. Instantly, on-site leadership has access to synthesized information on productivity. This enables near real-time adjustments or corrections to be made, such as changing crew make-up, adding equipment, changing supplies, adjusting schedules, etc.



SharePoint is our document management software. All team members access and store project documents on a project-specific site. Documents stored here include

owner-provided, such as the contract, specifications, drawings, schedules, and technical reports. Running the project generates many Kokosing-generated documents including schedules, Project Execution Plans, permits, and daily reports. Project progress photos are also stored here.

SharePoint was designed to share information across different people and locations. It is common for project owners and engineers to use our project SharePoint site. It has functioned as the landing place for RFIs and submittals, meeting agendas and notes, and project reports. At the end of a project, the content is burned to a thumb drive and delivered to the owner as a part of the project closeout.

#### ***Security and backup of project documentation***

Every server, program, and piece of technology is password protected. We utilize Microsoft's double authentication method to grant access to our data and require all personnel to use our VPN to verify data security and mitigate risk. The servers are backed up on a nightly basis.

### **c) Response and Mitigation Measures for a Pandemic**

The safety of our team members, clients, and subcontractors has always been our top priority. Kokosing encourages each team member to be a safety leader by stopping any unsafe operation and taking personal responsibility for their own safety and the safety of those around them. From the onset of the COVID-19 Pandemic, Kokosing has been a leader amongst our peers in terms of reacting to the daily changes presented by the CDC and local health departments. We proactively implemented procedures to continue our operations while social distancing when possible and taking necessary steps when not possible due to the physical work requirements. Many firms within the construction community reached out to Kokosing, understanding that we are typically on the forefront of safety procedures, to gauge our response and help steer the development of their own.



### **Methods to Ensure and Maximize Labor and Key Personnel Availability and Continuity**

Kokosing has been practicing social distancing requirements recommended by the CDC, the City of New Albany, the City of Louisville, the State of Indiana, and the State of Kentucky. We have isolated team members from Coronavirus sources through reduced seating in vehicles, installed physical barriers such as clear plastic sneeze guards, and minimized face-to-face contact as much as possible by utilizing virtual communications.

Team members are required to take their temperatures and respond to the 5 question Point of Entrance Survey before each shift related to their recent travel, health conditions, and potential exposures. Additionally, team members are required to wear a face covering when in-person work is necessary.

Additional jobsite safety measures include:

- Any team member/subcontractor/visitor showing symptoms of Coronavirus are required to leave the jobsite and return home. They must remain home until they have been symptom free for 72 hours without the use of medicine.
- Meetings will be virtual, if possible. If conducted in person, groups will consist of 10 people or less, and participants will remain six feet apart.
- Only necessary team members will enter the trailers while maintaining social distancing.
- Team members breaks and lunches will be staggered to reduce the size of any group to 10 or less people.
- Additional hand washing and hand sanitizing stations will be set up around the project. In lieu of project water coolers, team members will have access to individual water bottles.
- Team members will sanitize work areas upon arrival, throughout the workday, and before departure.

In the event that a team member has exposure to COVID-19 or is showing symptoms, the team member is to notify their supervisor immediately. The supervisor

then kicks off the Risk Assessment Conversation with the team member.

#### ***Team Member with Exposure Risk Assessment***

A series of four questions are posed to the individual concerning the amount of time spent in the same environment with someone testing positive COVID-19 and recent travel outside the US. Based on the responses a team member may be considered no/low risk and has no restrictions. If the team member is considered medium/high risk, HR is notified and a 14-day monitoring period will begin.

#### ***Team Member is Sick Risk Assessment***

If a team member is sick (non-confirmed COVID) or has a confirmed COVID-19 case they will be asked to assess their recent contact with other team members to determine others who may be at risk. Based on the personnel's prognosis they will fall into two categories.

- Team member is considered low risk. HR will be notified, team member will stay home until they are symptom free for 24 hours and at least 10 days have passed since symptoms first appeared, and a letter will be sent out notifying a suspected case.
- The team member is considered medium/high risk and requires HR notification, immediate isolation, and a letter will be sent out notifying close contact personnel.

On our current \$1B expansion project at the Cincinnati Airport, we developed a rotating schedule for the 60-person Construction Management staff that minimized days on site while still providing sufficient supervision to support of the workforce. This project remains on schedule despite the ongoing Pandemic. Project Manager Vince Martini was a critical part of the management team that implemented these procedures.

The complete flow chart of questions, responses and next steps can be found in the appendix.

## **Methods to Ensure Availability of Supplies, Materials and Equipment**

### ***Supply Sourcing***

#### **VOLUME 2**

KCC Supply is Kokosing's centralized purchasing department. They have developed an efficient and effective supply chain process with multiple local vendors to keep PPE, tools, materials, and small equipment stocked for all projects. Our team will take daily inventory and report levels to KCC Supply. KCC Supply uses internally forecasts supply usage, allowing core vendors to maintain moderate stock levels and re-order accordingly. Several connex locations are filled with supplies, including cleaning supplies, disinfecting chemicals, gloves, masks, face shields, and other PPE. The connex locations are monitored in the same manner as inventory and are replenished accordingly.

### ***Material and Equipment Access and Availability***

With one of the largest equipment fleets in the Midwest, Kokosing operates an equally large trucking department to provide each project with the right piece of equipment on time. Our dispatchers coordinate broker trucks required to supply our projects with raw materials such as aggregates. Our dispatchers have established contracts and relationships with owner-operator truck drivers and broker trucking companies.

Increased drop off locations will be established by our equipment group allowing for more space, which adheres to our no contact drop off and pick up policy. Truckers will be assigned mailboxes to drop off physical tickets to eliminate face-to-face interactions. Our timely forecasting and communication with suppliers and subcontractors will mitigate potential material challenges.

We have engaged independent consultant, **Tom Secules**, who will be the expert point of contact for the wire ropes logistics to the worksite. He will meticulously manage a proven hanger material method to get wire rope and wire rope sockets to the jobsite.

Over his 40 years of experience, Tom has been responsible for all engineering facets required for the fabrication of structural assemblies, including production; review and preparation of specifications; preparing detailed fabrication instructions; mitigating issues in the shop or at field installation; and advising handling and application of materials produced and assemblies fabricated.

Preliminary Project  
Baseline Schedule  
Narrative

Preliminary Project  
Baseline Schedule Narrative



VOLUME 2



## 4.1.2 | Schedule Submissions

### a) Preliminary Project Baseline Schedule

Our Preliminary Project Baseline Schedule to complete the project on time is included in Appendix: Preliminary Baseline Schedule. This schedule is a high-level critical path method representing our plan to construct this project on time from the Notice to Proceed date to the Substantial Completion date. The activities are grouped by Phase first and Location/Area second. Activities depicted with a red bar indicates critical items and the relationship lines are included to follow the critical path.

The Preliminary Project Baseline Schedule duration for this project meets the contract requirements with an assumed notice to proceed date of February 9, 2021 resulting in a substantial completion date of August 27, 2023 as shown in the figure below.

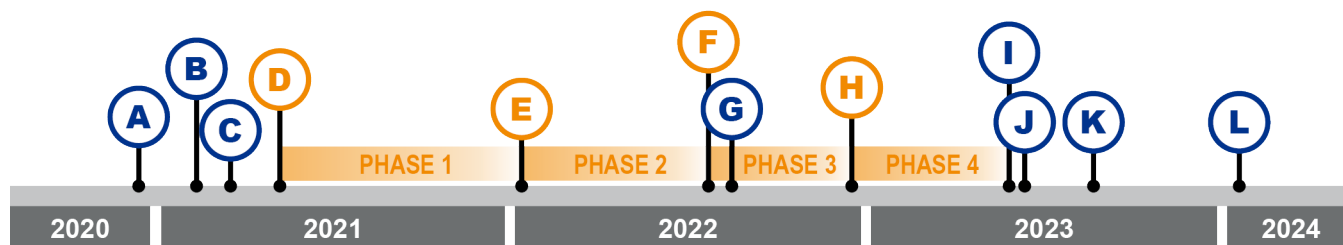
A narrative describing the details requested in 4.1.2 are included below to further clarify how the schedule and work will be carried out.

### Proposed Execution of the Work thru Substantial Completion

We created The Kokosing DBT Preliminary Project Baseline Schedule based on the input from all current members of our team. We will expand upon this plan as the design is further developed, subcontractors are added to the team, and input received from Project Sponsors in what will become the project baseline.

#### Pre-Construction

Once IFA provides the Notice to Proceed, several items of work will begin to take place. The design team will be set up so that multiple groups can proceed with their work simultaneously. They will begin to concentrate on the buildable units that are the most critical for the project including inspecting the bridge's steel members to incorporate their findings into the design of the Kentucky Approach Bridges and the Sherman Minton Bridge. The construction team will continue to refine a team mobilization plan that began during the procurement stage and will begin to create various



103\_IFA\_SHE\_RM\_v1

#### PROJECT MILESTONES

- |   |  |
|---|--|
| <b>A</b> Selection of Proposer 12/18/2020       | <b>G</b> New Albany Local Street Repaving 08/2022      |
| <b>B</b> Project Award 02/09/2021               | <b>H</b> Phase 4 Construction 12/2022 – 05/2023        |
| <b>C</b> Begin Design Development 02/2021       | <b>I</b> Complete Cable Hanger Replacement 05/2023     |
| <b>D</b> Phase 1 Construction 04/2021 – 01/2022 | <b>J</b> Switch Traffic to Final Configuration 05/2023 |
| <b>E</b> Phase 2 Construction 01/2022 – 07/2022 | <b>K</b> Substantial Completion 08/27/2023             |
| <b>F</b> Phase 3 Construction 07/2022 – 12/2022 | <b>L</b> Final Completion 01/24/2024                   |

construction submittals required by the project documents. As these items are developed, submitted, and reviewed, the construction team will use this information to continue planning the work so they can efficiently build this project.

#### **Phase 1 (Construct I-64 EB East Portion)**

Phase 1 begins in April of 2021 and completes in January of 2022. This phase will consist of beginning to paint the truss on the Sherman Minton bridge, upgrading the I-265 intersections at I-64 and I-65 for the expected additional traffic from our project, beginning work on the ITS, beginning work on refacing pier caps on the Kentucky Approach Bridge and reconstruction of Eastbound (EB) bridges (Kentucky Approach Structure #056800161N, Sherman Minton Structure #I64-123-04691 E, Indiana Approach Structure #I64-123-02294 JDEB, and Indiana Approach Structure #I64-123-02294 DEBL). One lane of EB traffic will crossover the median onto the WB side of I-64, which will allow for approximately half of the EB bridges to be reconstructed.

#### **Phase 2 (Construct I-64 EB West Portion)**

Phase 2 begins in January of 2022 and completes in July of 2022. This phase will involve completing painting on the Sherman Minton truss section, painting all the beams on the Sherman Minton lower deck and on the Kentucky Approach EB Structures, and reconstruction of the other half of the EB bridges detailed in Phase 1. Maintenance of traffic changes to this phase will involve shifting one lane of traffic onto the new EB bridge.

#### **Phase 3 (Construct I-64 WB East Portion)**

Phase 3 begins in July 2022 and completes in December of 2022. This phase will consist of reconstruction of Westbound bridges (Kentucky Approach Structure #056800161N, Sherman Minton Structure #I64-123-04691 E, Indiana Approach Structure #I64-123-02264 DWBL), reconstructing three roads in New Albany, and the cable replacement on the east side of the Sherman Minton Bridge. One lane of WB traffic will crossover the median onto the EB side of I-64, which will allow for approximately half of the WB bridges to be reconstructed.

#### **Phase 4 (Construct I-64 WB West Portion)**

Phase 4 begins in December of 2022 and completes in May 2023. This phase will involve painting all the beams on the Sherman Minton upper deck and on the Kentucky Approach WB Structures, reconstruction of the other half of the WB bridges detailed in Phase 3, and the cable replacement on the west side of the Sherman Minton Bridge. Maintenance of traffic changes to this phase will involve shifting one lane of traffic onto the new WB bridge.

#### **Phase 5 (Traffic in Final Configuration)**

Phase 5 begins in May of 2023 and completes in August of 2023. Traffic will be placed in their final configuration, ITS will be fully operational, all bridge painting will be completed with containment removed, median crossovers will be replaced, improvements to the I-265 intersections at I-64 and I-65 will be removed, and final pavement demarcations will be installed.

#### **Plan to Mobilize Key Personnel, Equipment, Materials, and Supplies**

Once the bid results are known, the Kokosing DBT team will continue refining mobilization so that the team can be ready to go as soon as the contract is executed. Planning will involve procuring the office site, determining a time for when the Key Personnel will arrive on the project, expediting preparation of submittals for early work items, and a high-level schedule for when equipment, materials, and supplies will begin arriving.

#### **Office Site**

Multiple sites within the City of New Albany limits have been scoped out through the Pre-Bid process so that once the bid results are known, the Kokosing DBT can begin to procure the best site. Technical provision 1.3.5.1 states that it needs to be operational within 60 days of NTP. Our plan is to have it operational within a couple of weeks to allow an earlier start to the design work and allow the construction team to have a dedicated place to plan and manage the project effectively.

### **Key Personnel**

There are 13 members listed as Key Personnel for the project. Our key personnel are immediately available for assignment to the project to start fulfilling their responsibilities. Project Manager Vince Martini and Construction Manager Brad Young will mobilize to the site as soon as the contract is awarded. The other Key Personnel mobilizations will occur as they are needed on the project. Construction Manager Brad Young will be responsible for filling out the rest of his construction staff of engineers, superintendents, and foreman once the contract is awarded so their mobilization can occur as quickly as possible.

### **Submittals**

We expedite preparation of submittals for work items that need to begin early in the construction phasing. One of the first work submittals completed will be for the painting containment system on the Sherman Minton Bridge Structure. Preparation for painting on this bridge will start in April of 2021. Other submittals such as the Project Management Plan and deck removal plans will be submitted shortly after the Notice to Proceed date.

### **Equipment**

Kokosing has one of the largest heavy equipment fleets in the Midwest. It has more than \$400 million in equipment assets and more than 1200 units of heavy equipment in its fleet. Kokosing is able to provide the right piece of equipment for the project.

Kokosing plans its equipment mobilizations through several avenues and planning will begin once project is awarded. Initially and once a year, the project will complete a yearly need of equipment schedule for our equipment and operations divisions. This establishes rough timelines of when equipment will be needed so they can begin to make equipment available within the company. Each quarter, we create three month lookahead schedules with more detail based on work progress to help narrow the timeline of when it will be needed. Once a week, the project team creates three week lookahead schedules to provide exact dates that equipment will be needed onsite.

### **Materials**

We assign each sub and vendor to one of our Project Engineers who will develop and manage a submittal log that will include shop drawings and other necessary vendor submittals. We create the submittal log using dates from the CPM schedule. Our Project Engineers will diligently pursue submittals well in advance of critical deadlines to make sure materials will be delivered on time. If necessary, our engineers will visit the fabricators' shops to check on the status of the materials.

One unique aspect of this project is the steel member repairs will require inspecting the entire steel sections on the bridges. We will need to assess the number and types of repairs after the project is awarded. This considers the potential that additional deterioration has occurred and requires expediting of the steel members needed for the repairs. Our design team will inspect the bridges quickly after a contract is awarded and our construction team will perform field measurements once the repairs are known. Then our fabricator can begin the process of creating shop drawings and procuring the materials for the new steel members so they can be delivered when needed.

### **Supplies**

Kokosing's supply department will supply a majority of the supplies needed for the project. They supply mostly consumable materials like nails, lumber, curing compound, safety equipment, etc. Located in our corporate office complex, these seven supply clerks take orders and get the supplies to the jobsite the next day. In addition, they will also contract with several supply companies in the Louisville metro area for needs that they cannot get covered in that time frame.

### **Description of System to be in Place to Prepare and Update the Project Baseline Schedule**

The Kokosing DBT has been creating a schedule for the project during the pre-bid process analyzing the best way to construct the project. Our designers and dedicated subs have been involved in the process providing realistic time frames for their pieces of work. This schedule is depicted in the Preliminary Project Baseline Schedule in Appendix: Preliminary Baseline



Schedule and in the NTP + 180 schedule included separately. Once the bid results are known and we are transitioning to building the project, the NTP+180 schedule will be developed into the baseline schedule.

**Project Scheduler Gary Obert has led the development of the pre-bid schedule so he is familiar with the project and the needs of the Project Sponsors. This results in absolutely zero learning curve to continue post-award and further refine and build-out of the project schedule.**

As the design is developed, subcontractors are brought onboard, and material fabrication times become known, the schedule will reflect the new information providing a more accurate schedule.

The Kokosing DBT views updating the CPM Schedule as a very valuable tool in finishing the project on time. Consistently updating the schedule allows the team to find schedule issues quickly and help determine what effect mitigation remedies will have on it. Updates to the schedule will occur internally no less than once a week with an official submittal to the IFA on the seventh of every month. The Kokosing DBT will be in constant contact with subcontractors and suppliers making sure the most up to date information is provided.

### **Description of Proposer's Plan to Integrate Design and Subcontractor Activities into Proposer's Scheduling and Reporting System**

The Kokosing DBT will work directly with the design team and subcontractors to make sure that their work items are included in the schedule and arranged in a way to deliver project success. The design team has been providing input on buildable units and submittals for the items in the Preliminary Project Baseline Schedule & NTP + 180 day schedule.

North Star Painting has been integral during the pursuit phase in the development of construction sequencing, providing access plans and durations for their work and reviewing the overall schedule for buy-in on their scope of work.

After successfully procuring the project, we will work with the other subcontractors as they come onboard to make sure and incorporate their activities and durations. Monthly updates to the project schedule will be provided to the design team and other contractors to show them project progress and assist them in planning their remaining work so it does not negatively affect the project schedule. In addition, Kokosing staff will provide four-week look ahead schedules for their work as they come onboard.

### **Interfaces with the Project Sponsors**

The most important interface with the Project Sponsors will be at the weekly progress meetings. At each progress meeting, we will provide four-week look ahead schedules with detail to provide what work will be performed during those four weeks, where the work will be performed, which crews/subcontractors will be assigned to each item, and what hours the work will take place. In addition to the four-week look ahead, there will be discussion from the project scheduler on how the four-week look ahead schedules relate to the project schedule, what is on the upcoming critical path, and what potential problem areas may be anticipated along with possible solutions.

Monthly, the project scheduler will provide information for the Progress Report documenting the design and construction progress. This information will include major milestone tracking and upcoming work activities.

Weekly, every Friday during construction work, we will provide the IFA with an updated Construction Work Activity schedule for the upcoming week. This will provide information as to what is planned for the following week, what crew will be performing the work and what shifts the activity will work, in addition to other important details.

The Kokosing DBT, through the Project Information Officer, will provide at least 28 days notice prior to starting construction or a new phase. This information will detail what changes will take place that will affect residents, businesses, and commuters.

The project scheduler will be available as needed to assist the Project Sponsors with what-if scenarios.

## Summary of Major Risks to the Schedule, with an Explanation of Planned Contingencies and Approach to Deal with these Risks should they Arise

The table below provides a summary of major risks to the project and our intended mitigation measures and contingencies.

SCHEDULE RISKS	MITIGATIONS
<b>Structure Repair Quantities</b>	The CPM schedule will allow time for an in-depth inspection to quantify the repairs needed. This allows the design team to consider them in their design and gives the construction team time to procure materials and have the right manpower. Each span of the KY Approach and Sherman Minton bridges will have activities for repairs to be made so they can be tracked.
<b>Decking Operations</b>	Kokosing has selected a Stay-In-Place decking system for the project as it affords us a maximized working window. The SIP forms also allow us to work multiple shifts if needed to stay on schedule.
<b>Painting</b>	North Star will get appropriate drawings and plans submitted for review so they may immediately mobilize to the site and setup containment systems and work platforms. As a contingency, platforms will be installed at three different levels to assist Kokosing forces in accessing work also.
<b>Material procurement</b>	Phase 1 work will include replacing bearings and miscellaneous structural steel pieces. These items need to be installed immediately after the demolition to stay on schedule. This causes a tight window to get the shop drawings submitted and approved, material fabricated, and then delivered to the project. The CPM accounts for all of these activities with appropriate durations. Kokosing will work with suppliers as information becomes available to expedite the material delivery.
<b>Cable Hanger Fabrication</b>	Wire rope industry expert Tom Secules was added to the Kokosing DBT to provide guidance throughout the wire fabrication process ensuring shop drawing review, fabrication QC, and testing oversight. Tom provides insurance to the team that the cable hangers will arrive on time.
<b>Weather Impacts</b>	The CPM schedule calendars will account for inclement weather days based on INDOT's Specification 101.02 – Above Normal Inclement Weather Days for the months of April thru November. In addition, we added inclement weather days for the months of December thru March based on ODOT's Specification 108.06.C since work will need to take place during these months.
<b>Review Periods</b>	Timely buildable unit and submittal reviews by all stakeholders will be critical to the project's success. The CPM schedule has built in review durations for these items and reviewers are noted in the schedule.

### b) NTP + 180 Schedule

The NTP + 180 Schedule is the detailed schedule and narrative from the Kokosing DBT for the first 180 days following NTP. This schedule is included in an envelope marked "NTP + 180 Schedule for the Sherman Minton Corridor Project" separate from the technical proposal submission as required. It is acknowledged that it is a pass/fail item, will not be considered during evaluation, but will be reviewed for consistency with the Preliminary Project Baseline Schedule.

# Preliminary Quality Management Plan



VOLUME 2

# 4.1.3 Preliminary Quality Management Plan

## a) Design Quality

### Design Quality Management Plan

Immediately upon project award, Jacobs will develop a project-specific Design Quality Management Plan (DQMP) which will detail the processes for successful quality design. The DQMP will be a subset of the Quality Management Plan. This plan applies to design work by lead designer Jacobs and their subconsultants.

The objective is to provide a DQMP that will address all aspects of design quality oversight. The design quality program consists of several steps, involving:

- Planning the work
- Preparing design documents
- Checking and reviewing the documents
- Assuring compliance with technical design criteria
- Making revisions
- Auditing and certifying
- Releasing documents for construction
- Design revisions during construction

The design team executes an effective system for the implementation, development, and control of design activities. Documented procedures are in place to address all phases of the design process. Design control will be carried out during the various stages of the Project as follows:

- Stage 1 Design
- An Interdisciplinary Review after receipt of Sponsor Stage 1 Comments (will include constructability review)
- Stage 3 Design
- Release-for-Construction (RFC) Design
- Design revisions during construction

Design QC will be performed by the design team and Design QA will be performed by the DQAM team.

**Design Quality Manager Debra Herrmann served in the same role on the Ohio River Bridges Downtown Crossing design-build project, conducting hundreds of quality audits, completing 7,882 work hours, and finishing \$3.4M under budget.**

Quality Control is the responsibility of the Discipline Leads. The quality assurance personnel are independent of those having the responsibility for the work being performed. Quality assurance personnel perform verification activities including verifying the adequacy and implementation of the quality control and quality assurance oversight processes/procedures as they relate to the design activities. Quality personnel performing quality control activities of design are independent of those performing the quality assurance activities. Design Quality Manager **Debra Herrmann** is responsible for QA/QC for all design work that is performed for the project, including any design changes during the construction work and the production of As-Built Drawings. The Design Quality Manager shall include a certification with each design submittal that all necessary design QC checks have been completed and that any design changes resulting from such checks are incorporated in the submittal. The Design Quality Manager shall report directly to Design-Build Contractor's executives or Authorized Representative.

Design development is planned around a series of oversight reviews, culminating with a certification that the design documents are final. The developmental process will be dependent upon the incremental level of design service being performed and coordinated. Generally, all design services will follow a process comprised of phased and sequential reviews, with exceptions to accommodate construction requirements typical of design-build projects. The following Design Quality Procedure Flow Chart provides a visual



representation of design development from initiation through submittal to the IFA.

### *Design Quality Procedure Flow Chart*



The design reviews in the DQMP will use Level 1 and 2 checks as described below.

#### **Level 1 100% Checks**

These are systematic and detailed inspections of a project document, regardless of its stage of completion, to verify that it meets specified requirements in terms of fit for purpose, accuracy, correctness, coordination, etc. It is to be performed by a technically qualified individual, other than the originator. Checking comments are recorded by either a paper or Bluebeam format. Level 1 checks involve the originator, checker, back-checker, updater and re-checker. All Level 1 Checks require use of check prints where comments are recorded and a check print participant stamp affixed or check print sign-off sheet attached. The stamp or sign-off sheet are completed by persons participating in the checking process.

#### **Level 2 Reviews**

The Level 2 Review verifies the work is conceptually correct, conforms with federal oversight requirements, complete, logical, has followed the required

procedures, and/or has used the correct requirements. The Level 2 Review is established as a second pair of eyes but does not require using formal coding to validate the information. A peer review is a Level 2 review and will only apply to selected submittals deemed appropriate by the Design Manager after the completion of Stage 1 design.

#### **Comment Disposition**

Stage 1, Stage 3 and RFC submittals will be submitted by the Jacobs design team to Kokosing for review and transmittal to IFA for comment. DB Coordinator **Mark Maday** will manage this process and provide a tracking log of comments and their resolutions. The comments for each submittal will be tracked with a unique spreadsheet. Columns in the spreadsheet will list the comment, the designer response to the IFA comments at each stage as the design progresses as accepted (A), accepted as noted (B), or needs resolution (C). Previous stage comments will be incorporated and checked as A and B will be fully checked. All comments will be either A or B or fully resolved at RFC.

The DQAM is responsible for establishing the requirements for the control and maintenance of the quality records generated for the project. Access to Design Quality Records is controlled through ProjectWise, a controlled web-based system, to maintain the integrity of the records while permitting access to those who need the records. The design team has a dedicated folder for the project and QC/QA records will reside in a folder by deliverable. QC will be documented by checkprints and QA by a submittal checklist and findings form. The DQAM will include a certification with each design submittal that all necessary design QC checks have been completed and that any design changes resulting from such checks are incorporated in the submittal. Design changes to correct deficiencies identified during Sponsor reviews, constructability, peer reviews or interdisciplinary reviews will be identified on a checkprint and will follow the QA/QC process.

#### **b) Construction Quality**

Kokosing has invested in our people, our projects, and our clients by moving beyond the Process Manual that

we used to use for project consistency to a Quality Management System (QMS) that aligns us with ISO-9001 standards for quality. Using QMS means the best of how we do things is now the way everybody does things. The system documents process so that work is performed consistently across all projects and all crews. This means that every Kokosing project takes advantage of advances, efficacies, and improvements to processes developed elsewhere in the company. QMS workflows, work plans, and work instructions provide the framework for the engineering, management, and administrative processes that control a job, verifying quality is stamped into every Kokosing project.

Having a culture that values safety and quality above all else empowers our employees at every level to pay attention to details, make the right decisions, and put the Owner first.

Kokosing is responsible for the overall construction quality of the project. Our project management plan will detail the quality control functions to be provided including verification, QC/QA specification requirements, document control, stop-work authority, and materials testing. This plan will be implemented by Construction QC Manager **Michael Leavitt** who has served in a similar capacity on previous large projects.

Construction, inspection, materials sampling, and acceptance responsibilities will be clearly outlined in the project Construction Quality Management (CQM) Plan. Each entity involved in one of these areas will be fully aware of their duties, and communication protocols will be established to verify that proper workflows are established.

The following integrated approaches will be used to monitor quality control:

- Daily monitoring and implementation of the CQM Plan. ***This plan empowers all employees with stop-work authority if they encounter a quality issue*** and initiates a thorough review by supervisory staff prior to work proceeding on the suspect work element.
- Activity planning meetings will outline which specifications will be followed. Meetings will include

construction and QC members to make sure that all parties understand upcoming work.

- All parties will be involved in scheduling meetings and provided with updated schedules, allowing for forecasting and proper staffing to meet QC needs.
- Use of Quality Checklists and to verify that work is properly constructed before proceeding
- Quality-specific training for supervision, craftspeople, and subcontractors

In his DB Coordinator role, Mark Maday will also coordinate with the design team to make sure that the plans clearly convey the construction specifications requirements for the various aspects of the project. Our superintendents and foreman will utilize tablet computers that are synced with the project SharePoint site for use in reviewing release for construction plans, engineering, working and shop drawings, specifications, and standard drawings. This real-time document sharing makes sure that our mobile workforce, regardless of their location, is supplied with the most up-to-date project information and eliminates nonconformance.

For all major work activities, we will execute a pre-activity meeting. We use these meetings as planning tools to identify aspects of work activities necessary to affirm success. This will include not only the quality components, but also safety, sequencing, staffing, access and staging, material deliveries, testing, and utilities. These preplanning meetings include all crew members involved in the operation.

The Department will be encouraged to attend and actively participate in all Task Force Meetings and the weekly Design Coordination Meeting. Additionally, the Kokosing DBT will coordinate project items with IFA at progress meetings that will include key subcontractors and other project stakeholders.

### **On-Site Project Leadership**

Kokosing operates under a principal of shirt-sleeve management. What does this mean? Simply, the people on our organizational chart have the authority and responsibility for your project. We believe the people who are in the best position to manage the

project are the ones who are working on it daily. Kokosing's corporate leadership is ready and available to support, but you will never hear a Kokosing project manager say "Let me go talk to the home office." On-site project leadership manages to the specifics of the project.

Overall responsibility for the scope, schedule, and budget of the project resides with the project manager, Vince Martini. Kokosing equips our teams with software that enables near real-time analysis of production rates, enabling project leadership to adjust methods, equipment, and/or resources. An in-depth analysis of system performance enables Construction Manager **Brad Young** to leverage opportunities and improve performance.

Our approach of putting responsibility for communication and coordination in the hands of the people directly executing the work enhances our ability to respond to situations, accommodate your needs, and take advantage of opportunities. On-site leadership also directly maintains responsibility and control over safety, work quality, and crew production rates. Centralizing the project within a respected and capable superintendent solves problems before they happen, resulting in a smoother, better project.

### Communication Protocols

Before communication can happen effectively, we all need to be speaking the same language. Emails, phone calls, meetings are a part of every project. Open and clear communication lines increase understanding between the different stakeholders i.e. owner, engineer, subcontractors, etc., and Kokosing. Another of our Core Values is to operate with honesty and integrity. Communication is critical to that principle and a key to building a level of trust that delivers quality projects. At the kick-off meeting, we mutually create the hierarchy of communication for email communication and protocols for communication methods that are not self-documenting (phone calls, "water cooler" conversations). Every member of the team clearly understands whose direction needs to come from to be considered final and documentation needs to accompany that direction.

### c) Painting Quality Component

North Star Painting will implement their painting quality control plan, procedures, and documentation of the project using a NACE certified Quality control specialist. Documentation of this painting quality control will be shared with the project sponsors. North Star Painting will document:

- Material received on job site
- Quantity of materials
- Field testing on site
- All paint production on job site
- Corrective actions
- Contract specification
- Inspection of all blasted and painted areas

The Quality Control Specialist reports directly to, and is supervised by, North Star's Painting Quality Control Manager Michael Mihas who is an SSPC trained Quality Control Supervisor. The Quality Control Specialist has full authority from the company to make decisions on the project.

### Communication, Documentation, and Correction

North Star Painting will submit a site-specific Quality Control program for the Sherman Minton Rehabilitation Project that will be implemented by our Painting Quality Control Manager Michael Mihas.

Our quality control program will have a series of hold points that will be followed and documented throughout the painting process. Each hold point is inspected by our Quality Control team and approved by the site Quality Assurance personnel.

These hold points will consist of:

- Pictures and video documentation of inspected areas
- Pre-painting surface inspection
- Post surface painting inspection
- Subsequent coatings inspection
- Wet Mill coating measurements.
- Dry Film Thickness measurements
- Hold point corrective actions



# Safety Management



VOLUME 2

## 4.1.4 | Safety Management

Safety First. Always. Everyday.

“

Kokosing Construction believes that no job or no task is more important than the health and safety of its employees. We acknowledge the importance of creating a positive safety culture through employee involvement and effective policies and procedures.”

BRIAN BURGETT, CHAIRMAN OF THE BOARD, 2<sup>ND</sup> GENERATION OWNER

### Safety Plan

At Kokosing, our number one core value is Safety First and, as such, it is fundamental to the way we manage our projects. The commitment from all levels of management is to provide a safe and healthy work environment for our employees and those who live and work around us. This focuses on the operators and maintenance staff for Indiana Finance Authority but also includes the general public, with whom we share the roadways. Whether on the site or on the road, we provide the proper tools, equipment, material, planning time, training and resources that deliver efficient, cost-effective projects within safety culture.

The safety process/procedures and the leadership of our supervision drive the operation to continuously improve our culture of safety and keep us focused on our journey to zero incidents. Based on this belief, our Executive Safety Team meets regularly to evaluate near misses, incidents, and other safety data to develop initiatives to heighten awareness of common hazards and new ideas to make our jobsites even more focused on safety.

Together, everyone goes home as safe and healthy as they came to work that day. That's the Kokosing pledge.



Safety Manager, **Ashley Hagan**, will be leading our safety efforts. Our approach to safety starts with a well-defined safety kick-off meeting before construction work begins. These safety expectations will be communicated to all parties involved in the project.

Ashley is committed to connecting with each individual on the project to drive zero at-risk behaviors through both coaching and observation. She will utilize our Operations Hazard Analysis (OHA) to mitigate safety hazards and control measures for specific tasks. To complete an OHA, the crew will list the safety hazards or concerns for each step of the operation, then determine which control measures need to be put in place to safely begin operation. When an OHA is complete, the most efficient and safest way to perform

any given task is readily available to anyone on the jobsite. The sample form is shown below.

<b>kokosing</b>		(Insert Title of Task)		Operations Hazard Analysis OHA #	
Project #:		Project Name:		Prepared By:	
Date:		Location:		Estimated Start Date:	
Description of Work:					

Item No.	Phase of Work	Safety Hazard(s)	Precautionary Action(s)
1)			
2)			

## Pandemic Preparedness Plan

Kokosing continues to monitor the spread of the coronavirus. We are focused on keeping people healthy and making sure we can continue providing services to our project owners.

Prevention protocols and processes include:



- Maintain our social distance
- Frequently wash our hands
- Clean and disinfect our workstations and cabs at the start and end of each shift
- Complete our daily point of entry survey
- Check our temperatures before coming to work
- Stay home if we are sick
- Limit any group gatherings
- Work remotely where available
- Using engineering controls to maintain distance
- Wear a face covering



## Additional Actions to Reduce Spread

Each project is required to assign a project leader that will oversee and make sure that each person on the job is following the required CDC

protocols and social distancing mandate. The project leader will, to the best of their ability, audit the project operations to validate social distance is being done, hand washing facilities and sanitizer is available and

being used, regular cleaning of high touch surfaces and fixtures is occurring, and point of entry surveys are being done by each crew.

All team members will be required to participate in a Point of Entrance Survey and take their temperature at the Morning Planning Meeting to verify that they meet the necessary requirements to perform essential job duties per the Health Authorities. Anyone that does not meet these requirements will be redirected to their Manager/Supervisor and Human Resources representative for additional evaluation before starting any work functions. We have established a coronavirus taskforce to manage this evolving coronavirus pandemic. We are directing custodial staff to focus on disinfecting common touchpoints including fixtures and surfaces as well as common areas. We are also working to verify they have access to cleaning and disinfecting supplies capable of killing the virus.

## HOW TO STAY SAFE DURING COVID-19



### IF YOU NEED TO ANSWER

# YES

### TO ANY OF THESE QUESTIONS...

**You are obligated to see your supervisor before you go to work.**

1. Have you been medically directed to self-quarantine due to possible exposure to Coronavirus (COVID-19)?
2. In the past 72 hours have you had a temperature at or above 100.4°F; or do you believe you have had a fever, but you cannot confirm it?
3. Are you feeling sick and / or experiencing any of these symptoms: fever, cough, or shortness of breath or difficulty breathing, chills, repeated shaking with chills, muscle pain, headache, sore throat, new loss of taste or smell?
4. To the best of your knowledge have you had contact (within 6-feet) with someone who has tested positive or is suspected to have the Coronavirus (COVID-19) within the last 14 days?
5. Have you, or anyone in your household traveled outside of the U.S. within the last two weeks?

Name: \_\_\_\_\_ Temp: \_\_\_\_\_ Date: \_\_\_\_\_

For more detailed protocols on our pandemic preparedness plan, please refer to section 4.1.1 Project Management Approach.

# Environmental Management



VOLUME 2



## 4.1.5 | Environmental Management

Environmental Management provides a process to ensure the Project's compliance with applicable state and national laws and regulations.

The Kokosing DBT will develop an Environmental Compliance and Mitigation Plan (ECMP) to address all IFA environmental commitments and PPA requirements. Our environmental management team will analyze all risks and regulatory requirements and will provide input and training for our design and construction teams to ensure our technical solutions comply. Impact mitigation measures will be specified for each sensitive area identified and close monitoring will be carried out at all phases of the Project.

### a) Qualifications and Experience of the Environmental Team

Metric Environmental's team provides a wide range of environmental services for INDOT and KYTC transportation projects. These services include Hazardous Materials Assessments, remedial actions, stormwater quality management, NEPA documentation, wetlands, cultural resources, permitting and regulatory compliance. Their personnel include licensed professional engineers, licensed professional geologists, certified hazardous materials managers, Certified Professionals in Erosion and Sediment Control (CPESC), Certified Erosion, Sediment and Stormwater Inspectors (CESSWI), Archeology Principal Investigators and endangered species specialists. They complete over 100 NEPA documentation, wetland delineations, water quality permitting and stormwater quality projects for INDOT year. Our team will be led by Samantha Wickizer, CESSWI who will be the ECM and SWQM on site to ensure all NEPA commitments are fulfilled. Samantha's resume and qualifications are included in Volume 2 Appendix: Key Personnel Resumes.

### b) Methods to Develop Environmental Compliance and Mitigation Plan

As part of the environmental management process for the Sherman-Minton Bridge, specific environmental mitigation commitments to avoid, minimize, and mitigate environmental impacts have been documented in the environmental document. It is important to ensure that commitments made during the environmental review process are implemented during the construction phase of the project. Effective implementation of environmental commitments requires establishing a procedure for communicating and tracking these commitments through the construction process. Our approach will involve the creation of an environmental commitments database. It will also involve the designation of an Environmental Compliance Manager (ECM) who has the responsibility to oversee compliance with the environmental commitments.

To properly track and ensure that environmental commitments are implemented, we will develop an Environmental Compliance and Mitigation Plan (ECMP) to be submitted to the IFA as part of the PMP. The ECMP shall include all environmental commitments and required mitigation as listed in the PPA Documents, Environmental Approvals and Government Approvals that shall include, but is not limited to the following:

- Creation of an environmental commitments tracking log (checklist) documenting all impacts and anticipated impacts.
- A plan of incorporation into the project
- Development of a system that will be used to track compliance with environmental commitments
- Development of procedures will for entering and tracking commitments from source documents
- Implementation of quality control measures for inputting and tracking commitments

- Updating the commitment tracking database
- Providing continuity for commitments from the environmental review process and design, to the construction phases
- Development of reporting format to track compliance with commitments and corrective action planning for instances of non-compliance
- Designation of responsibility of individual commitments
- Verification of completion of environmental commitments
- A response plan for unanticipated discoveries

### **c) Methods for Ensuring Adequate Installation, Maintenance and Repair of Erosion and Sediment Control Devices**

Prior to construction, an initial pre-disturbance meeting shall be conducted with the Level 2 Stormwater Quality Manager (SWQM) and appropriate entities from the Kokosing team, INDOT, and IFA to discuss initial implementation of the Stormwater Pollution Prevention Plan (SWPPP), waterway permit conditions and authorized impacts, delineation of environmentally sensitive areas, and all relevant environmental commitments and special provisions.

Throughout construction of the project, the SWQM shall oversee weekly and post-rain event inspections in accordance with all applicable stormwater standards. When feasible, the stormwater inspections will be conducted in conjunction with DBT project staff that are responsible for implementation of compliance and maintenance activities. When appropriate project staff are not available to attend the inspections in person, the corrective actions items will be properly communicated. All corrective action items shall be corrected within 48 hours of a noted deficiency, when feasible. If a deficiency cannot be corrected within 48 hours, it will be communicated to the INDOT project engineer and a schedule of compliance will be outlined.

Inspection reports shall be documented within the INDOT ITAP system, while written records will also be maintained and tracked through the environmental

commitments tracking log. When required, the SWPPP shall be updated and revised throughout construction to reflect project activities.

A level 1 SWQM/ECM shall be available on-site daily for project oversight, review of documents, evaluation of the physical condition of the project and take required pictures for compliance documentation. When non-compliance deficiencies are documented, the ECM will follow-up on post-correction outcomes for evaluation of efficiency. The ECM will submit commitments checklist within one week after the end of each quarter of the project.

### **d) Potential Environmental Risk and Approach to Mitigate, Eliminate, or Reduce those Environmental Risks**

Potential environmental risks will be associated with project construction activities. Prior to construction, an environmental risk register will be constructed that will identify and list the potential risk associated with each environmental commitment and other environmental project risk factors that could result in a non-compliance or affect project schedule and/or cost. The risk register is forward looking and will include presumptive engineering and/or work controls to mitigate, eliminate or reduce associated risks including avoidance. The risk register will serve as a proactive tool to assist the ECM in the monitoring and evaluation of physical conditions and will reduce the potential for corrective actions during project construction.

# Public Information Plan



VOLUME 2

## 4.1.6 | Public Information Plan

The public information plan identifies how the Kokosing team will support IFA in communicating items with the public such as weekly construction updates, traffic restrictions, lane closures, and other construction related activities. It will also outline how we plan to assist with preparing for and attending public forums along with meetings with specific groups such as schools, emergency agencies, businesses, and community groups. This task of providing public information will be a point of focus for Kokosing to maintain a high degree of public satisfaction with this project.

### a) Public Information Team

Kokosing has assembled an exceptional group of people to make sure all items required in the Technical Provisions are promptly communicated with IFA and our team is able to address the needs of the public. The main point we stress in this area is responsiveness. The information must be communicated in a quick but accurate manner to address any issues or concerns that may affect the public. A good working relationship between the IFA and the Kokosing team will be key in delivering a successful project for all parties.

#### Public Information Coordinator



**Brandon Lowe, PE** will serve as our public information coordinator. His roles over the past 23 years in the transportation field have allowed him to work on a variety of projects and interact with the public in areas such

as stakeholder meetings, citizen advisory groups, and public forums with large numbers of attendees. Most recently, work on two large design-build projects provided Brandon the experience to work with

contractors to develop an understanding of what it takes to complete a project with intense public interest. The Downtown Crossing of the Ohio River Bridges for KYTC and I-69 Section 5 for INDOT both involved public outreach and public notification for construction activities.

#### Deputy Public Information Coordinator



**Mike Draper, PE** will serve as the deputy public information coordinator and works with Brandon in the Lexington, Kentucky office of DLZ. Mike has 20 years of experience working with the public on transportation projects and will

be very effective and responsive in this role for IFA. He served a similar role on I-69, Section 5 where he was responsible for conveying traffic pattern changes, lane closures, and other construction items to INDOT for publication to the local residents and commuters.

**Mark Maday, PE** will also play a key role as the design build coordinator. He will make sure Brandon and Mike are up-to-date with all design and construction activities that need to be shared with the public through IFA. Mark has 30 years of experience working in transportation and will be an excellent resource for communicating critical items on this project.

We have experienced support staff in Lexington, Louisville, Indianapolis, and other nearby offices that will be available to assist with any tasks that require additional capacity. Items such as maintaining mailing lists, answering email questions, preparing exhibits, writing announcements, and attending public meetings could require additional manpower.



## b) System for Recording and Assisting IFA

Accurately documenting questions and complaints is a key task in the public outreach for this project. We will develop or help to maintain a log of all comments, questions, and complaints based on source such as call, email, or in-person discussion. This can be done with something as simple as Excel on SharePoint or a more complex database software. The response to these could be handled by one of the following methods;

- Website - Frequently asked Questions
- Newsletter update
- Phone call
- Text message
- Email
- Letter

## c) Tools and Techniques

Our team has experience with a variety of ways to communicate effectively with the public. The means have definitely changed over the years as newspaper ads have been replaced with text messages and Facebook posts. We have attended numerous public meetings on many different types of projects but with the Coronavirus limiting our ability to meet in person this may not be a viable option for public outreach. Allowing people to sign up for notifications through the project website, using Twitter and Facebook, online newsletters, and other means are excellent ways to reach the public. If in-person meetings are not an option, we will have to be creative in how we engage the community for this project, especially low-income individuals and families.

Variable message signs will play a major role in notifying drivers of what to expect in current conditions and when changes are coming. Traffic pattern changes can be a major cause of crashes so we want to alert the motorists by clearly identifying the change, when it will be occurring, and for how long. Messages should be short and clear to minimize driver distraction.

## d) Qualifications and Experience of Proposed Public Information and Community Outreach Staff

Keeping the public informed about what is going on with the project will help build trust and create positive project publicity. Our experienced team, led by Brandon Lowe and Mike Draper introduced on the previous page, will help IFA promptly provide accurate information to the residents of Louisville, New Albany, and the surrounding areas.

Brandon and his staff worked extensively on the Downtown Crossing of the Ohio River Bridges project in the preliminary and design-build phase, meeting with local neighborhoods to make sure they understood how the project was going to affect them.

**Our team served in a similar role on I-69, Section 5 working with INDOT to provide lane closure notices, traffic pattern changes, and other construction phasing related notices.**

Our staff has the experience and proven results in the design-build process to effectively communicate with the public. We want to deliver a project the community can be proud of and, when its complete, can say they were kept updated with what was going on during construction.

# Preliminary Design-Build Plan

Preliminary Design-Build Plan



VOLUME 2

# Preliminary Transportation Management Plan



VOLUME 2

## 4.2.1 Preliminary Transportation Management Plan

The top priority of our Transportation Management Plan (TMP) is implementation of an overall strategy for safely and efficiently accommodating traffic during construction. Providing a safe work zone for workers and the traveling public during construction are absolutes, not goals. Accommodating needs of all entities involved is the challenge; from construction workers to local businesses and area stakeholders to the traveling public. Everyone wants their need to be top priority. The optimal solution strikes a balance of impacts versus achieving project goals, is transparent and manages expectations of those involved.

### a) Construction Staging and Traffic Control and Sequencing Proposed to Accommodate Traffic During the Construction of the Project

#### Overall Traffic Management and Control and Sequencing approach

Our work zone design and management plan maintains safety and mobility, while minimizing construction phases to deliver the project in a cost-effective and timely manner. A team approach is proposed with Kokosing in the lead and support coming from IFA, INDOT, KYTC, FHWA, traffic management centers, adjacent local communities/agencies and emergency service entities. Success is achieved through constant open coordination amongst the contractor, owner and various user groups. This occurs by holding regularly scheduled MOT task force meetings focused on review of the proposed plan, evaluating feedback from the users and adjusting components as needed.

We implement Temporary Traffic Control plans that are easily understood by the traveling public which increases safety in the work zone for both the public and workers on the project. The foundation of our safety philosophy is that zero recordable incidents can

be accomplished with proper planning, resources and follow-through that conveys traffic safely through the high-volume, high-speed freight corridor.

As required by the RFP, we provide enhancements to promote regional diversion around the project site by strengthening existing shoulders and adding lanes to various ramps at the I-64/I-265 and I-265/I-65 interchanges. Other commitments include employing smart work zones, and staging construction to maintain two lanes of traffic in each direction on I-64 during peak hours. We understand the severity of traffic congestion in the region and have minimized impacts and queue length while balancing time of construction, and safety.

A summary of traffic management throughout construction consists of providing:

- Two EB lanes and two WB lanes of traffic on I-64 as defined in Section 12.3.11.1.1 of the Technical Provisions (TP's)
- Maintain usage of adjacent project interstate ramps
- Access to all businesses and residences
- A detailed Public Improvement Plan that is coordinated with the IFA, local agencies and emergency services
- An effective and continuously monitored Traffic Incident Management and Response plan
- Regularly scheduled MOT Task Force Group meetings to evaluate operation of the work zone

Kokosing's proposal consists of a four-phase construction sequencing approach and is shown on the MOT Roll Plots.

#### Phase 1

- Provide MOT interchange ramp shoulder strengthening and lane additions for the required I-265 to I-64 or I-65 ramps. Existing one-lane ramps will be restriped and converted to 2-lane ramps.



- Remove existing rumble strips along I-64 inside shoulders being used for traffic lanes prior to moving any traffic onto shoulders. Vehicles will not straddle rumble strips at any point of construction.
- Provide shoulder strengthening on the I-64 outside shoulder for areas being used for traffic lanes.
- Construct I-64 temporary crossovers as shown on the MOT Roll Plots:
  - Kentucky cross-over is 16-feet wide per INDOT standards and requires approximately 12-feet of fill to be placed in the median. The existing median inlet is converted to a manhole and temporary inlets added to facilitate drainage.
- Close the two easternmost lanes of EB I-64 (bottom deck) on the Kentucky Approach bridges, Sherman Minton Bridge and Indiana Approach Bridges.
  - Utilize installed crossovers and place one EB Express Lane on the westernmost side of the WB roadway (top deck); separation is achieved by temporary concrete barrier.
- Local street improvements to 5th Street, Spring Street and Elm Street consisting of mill/overlay, ADA enhancements and new traffic signal detector loops; work within this grouping can occur in Phase 1 or Phases 2 thru 4.

### Phase 2

- Close the westernmost two lanes of EB I-64 (bottom deck) on the Kentucky Approach bridges, Sherman Minton Bridge and Indiana Approach Bridges.
  - Utilize crossovers installed with Phase 1.
  - This phase has two WB lanes and one EB lane on the top deck and one EB lane on the lower deck (easternmost side).

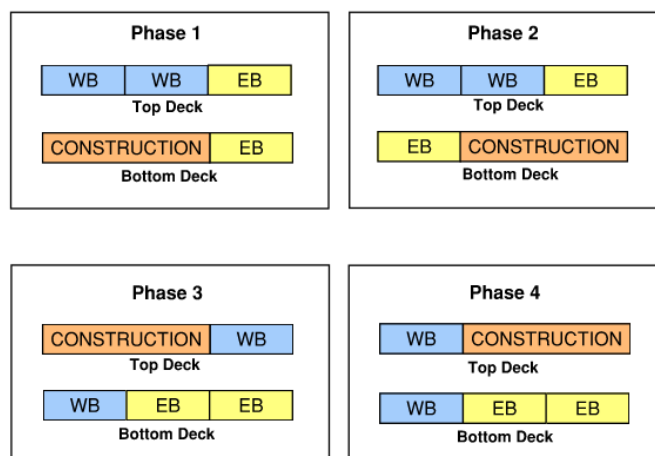
### Phase 3

- Remove temporary I-64 crossovers installed with Phase 1; construct new temporary I-64 crossovers as shown on the MOT Roll Plots.
- Close the two easternmost lanes of WB I-64 (top deck) on the Kentucky Approach bridges, Sherman Minton Bridge and Indiana Approach Bridges.
  - Utilize installed crossovers and place one WB Express Lane on the easternmost side of the

EB roadway (lower deck); separation is achieved by temporary concrete barrier.

### Phase 4

- Close the two westernmost lanes of WB I-64 (top deck) on the Kentucky Approach bridges, Sherman Minton Bridge and Indiana Approach Bridges.
  - Utilize crossovers installed with Phase 3.
  - This phase has two EB lanes and one WB lane on the bottom deck and one WB lane on the upper deck (easternmost side), thus meeting the project requirements.
- Remove additional lanes on interchange ramps at I-64/I-265 and I-265/I-65 previously installed.
- Replace all rumble strips previously removed.
- Install permanent pavement markings and guardrail.



Construction Staging Diagrams (Looking South)

LONG TERM LANE RESTRICTION SUMMARY TABLE			
Phase	Open	Schedule (Start)	Activity
1	EB – 2 Lanes WB – 2 Lanes	Late Spring 2021	Bridge Construction
2	EB – 2 Lanes WB – 2 Lanes	Early 2022	Bridge Construction
3	EB – 2 Lanes WB – 2 Lanes	Summer 2022	Bridge Construction
4	EB – 2 Lanes WB – 2 Lanes	Late 2022	Bridge Construction

### ***Traffic Management Plan Benefits***

- Minimizes the number of construction phases. This provides a safer alternative to both the traveling public and construction workers. Less traffic shifts during construction translates to increased driver familiarity and the four-phase approach provides more work zone space during each phase.
- Minimizes the number of construction joints on structures. With our plan, there will be one longitudinal construction joint in the center.
- Existing access to EB I-64 and SB I-264 is maintained throughout construction.
  - Our MOT plan includes temporary advance directional signs guiding vehicles into the correct lane assignment north of the temporary Indiana crossover. Vehicles wanting to go south on I-264 will need to use the lower deck in Phases 1 and 2. Vehicles traversing east on I-64 can use either EB lane.
  - Both EB lanes are located on the lower deck in Phases 3 and 4, thus allowing either lane onto SB I-264 or EB I-64.
  - The Spring Street entrance to EB I-64 (Ramp E) always remains open.
- Existing access to WB I-64 and Elm Street is maintained throughout construction.
  - Our MOT plan includes temporary advance directional signs on WB I-64 guiding vehicles into the correct lane assignment east of the I-64 temporary Kentucky crossover. Vehicles wanting to get off on Elm Street will need to use the right lane or upper deck in Phases 3 and 4.
  - Vehicles traversing NB on I-264 only have access to the WB I-64 Express Lane. To access New Albany, these vehicles bypass the Elm Street exit, go north on I-265 and get off on State Street. This is a 4.5-mile detour.

### ***Detour Routes***

Detailed plans for full closures of I-64, associated ramps and New Albany local roads are developed and coordinated with the IFA during final design. This includes but is not limited to detour routes, advanced signing, portable message boards, traffic control

devices and coordination with IFA, INDOT, KYTC, local agencies and emergency responders.

Included in the MOT Roll Plots is an exhibit showing several approved detour options that direct the traveling public around the short-term closure.

- We propose to leave I-64 EB/WB open between Spring/Elm Street and the I-265 interchange allowing New Albany local access to/from the north.

### ***Allowable Closures***

We will use Allowable Closure Periods defined in RFP Exhibit 10 of the Public-Private Agreement (PPA) and Section 12 of the Technical Provisions to efficiently construct project improvements, adjacent interchange ramp widenings and local street overlays.

### ***Alternative Technical Concepts***

The Kokosing DBT submitted the following two ATCs related to traffic control which were conditionally approved by the IFA:

- ATC 01 – Alternate Temporary Concrete Barrier
- ATC 08 – Alternate Temporary Steel Barrier

We intend to utilize both ATC's on the project and will meet the conditional approval requirements as detailed in the IFA response.

### ***Conceptual Construction Staging Diagrams***

#### ***Proposed Treatment of Bridges***

Conceptual construction staging diagrams including the proposed treatment of bridges are shown on the Bridge Rehabilitation Plans and MOT Roll Plots.

#### ***Proposed Treatment of Mainline and Ramps***

Proposed treatment of Mainline and Ramps is shown on the Roadway Roll Plot. Construction work generally follows the staging of bridges. While I-64 lanes are closed for bridge, new pavement will be constructed.

#### ***Proposed Temporary Ramp Widening***

Temporary ramp widening and required shoulder strengthening is shown on the Phase 1 MOT Roll Plots.

#### ***Staging of Structures***

Rehabilitation of the structures will be executed in a four-phase approach as depicted on the bridge typical sections in the MOT roll plots.

### ***Protection of Traffic for Bridge Painting Activities***

Traffic is protected from bridge painting activities through a variety of containment systems. A minimum vertical clearance of 14'-6" is provided on both decks per RFP requirements.

North Star utilizes tarpaulins to create a containment system for blasting and painting operations to ensure overspray does not impact traffic. Additionally, during the blasting operation, North Star uses their recycling systems to keep an efficient and clean work area.

### **Intended Schedule and Sequence of Construction that Minimizes Impacts**

Our construction approach minimizes impacts on the environment, communities, third parties and the traveling public by installing a safe, well-planned, clean and easily navigable work zone. We provide a high-quality paint containment system, dispose of demolition materials per local laws and regulations and utilize well maintained vehicles and equipment to protect the environment. Impacts on local communities and businesses is minimized by maintaining local access and providing clear signage throughout construction.

#### ***Pedestrian Access***

- Throughout construction, we maintain existing pedestrian and bicycle access on sidewalks, trails, transit facilities and intersections that are open to traffic. Protective barricades and fencing, necessary overhead shields together with warning and guidance devices protect pedestrians. This includes work in the vicinity of East Water Street, the pedestrian trail on top of the Indiana levee, Main Street, 5th Street, Spring Street, Elm Street and the Shawnee Golf Course. Regarding the Shawnee Golf Course under the Kentucky Approach Bridge, we maintain access for golf carts, paths, and pedestrian walkways year-round through our work zone.

### **Intended Laydown, Recycling, Staging, Disposal, and Maintenance Locations**

We intend to utilize state-owned ROW as laydown areas for materials being staged on the project. Our main laydown area is the loop ramp from Spring St. to

I-64 EB as this provides direct access to the bridge decks and has a large flat area with virtually no disturbance to existing wooded vegetation. Due to limited room on the bridge, material staged within the on-ramp will be transferred to the bridge deck utilizing allowable nightly lane closures.

Material is also staged underneath the KY Approach Bridges and within confines of the right-of-way to not impede on the Shawnee Golf Course. There are wetlands underneath the KY Approach Bridges within this area which will be avoided or mitigated.

The removal of existing bridge decks will be accomplished through both slab removal and labounty. Waste concrete material characterized as non-hazardous will be taken to Innovative Crushing and Aggregates for processing and recycling at their facilities.

After award we intend to coordinate with the City of New Albany about a piece of city owned property just west of the project site. The site is an old recycling facility and would be used for laydown, storage, and staging area along with potential site improvement after de-mobilization.

### **b) Accessing the ROW on the KY Side and Avoiding Impacts to the Shawnee Golf Course**

ROW access on the Kentucky side is achieved by utilizing Bank Street east of I-264 where it intersects Northwestern Parkway. At that location, we stabilize the top of the existing levee and travel east towards I-64. Within the existing I-64 KY right-of-way, a stable ramp constructed of non-erodible riprap/stone will allow access down to the work area. Additionally, we install stable material under the Kentucky approach bridges in order to provide access under the whole structure. This access route will be coordinated with the USACE and 408 permit as needed during final design.

Impacts are minimized to the Shawnee Golf Course as we only disturb areas under the existing structures for rehabilitation work and laydown areas. Construction schedule, access impacts and disturbance limits will be

coordinated with course management a minimum of 14 days prior to implementation as required by the RFP. Bi-weekly coordination meetings as preferred by them during our pre-bid phone call will be held.



### c) Roadway Elements for the Project

Roadway elements on a major bridge rehabilitation project tend to have a lower priority since the focus is generally bridge items. Our approach gives equal attention to non-bridge improvements and is centered on meeting IFA's goals for this much needed project in the Louisville Region.

During design development, roadway leadership is integral to our team providing direction for disciplines such as Geometrics, MOT, Drainage, Pavement Design, Signage, ITS and Lighting. The key component during scope development is that each decision needs to be evaluated from a holistic approach. All disciplines must have input into the process and collaborate for the best solution to be provided.

Outlined below is a description of our roadway improvements as shown on the Roadway Roll Plot. The summary is organized into three distinct focus areas; I-64 Mainline, Local Roads and Bridge Deck Drainage.

#### I-64 Mainline

##### *Bridge Approach Pavement*

All bridge ends are reconstructed with new Concrete Bridge Approach Pavement (INDOT E 609-RCBA) and an additional 40-feet of 12-inch thick jointed reinforced

concrete pavement (INDOT 503-R-692d) as required by the project Technical Provisions; Chapter 9. New bridge approach transitions, concrete barrier and MASH complaint guardrail are replaced adjacent to bridge approach pavement and in locations where there is existing barrier present

##### *Pavement*

Westbound – Existing I-64 mainline is milled and overlaid at the north approach of NB lanes of the I-64 Main St. bridge (Bridge I64-123-02294 DWBL), which is not replaced as part of new terminal joint construction. Existing asphalt will be milled to the top of existing concrete pavement, and overlaid with variable depth asphalt as shown on the Roadway Roll Plot.

Eastbound – Existing I-64 mainline full-depth pavement is replaced between Bridge I64-123-02294 JDEB and Bridge I64-123-02294 DEBL that is not being replaced as part of new terminal joint construction. The full-depth PCCP section is as shown on the Roadway Roll Plot.

##### *Drainage*

Kentucky EB – East of the Kentucky approach bridges, the WB existing KYTC Type B Curb Box Inlet located beyond the new approach slab will be cleaned and re-used. Based on criteria defined in the KYTC drainage manual, runoff over a bridge expansion joint should be minimized. Therefore, runoff to the inlet is minimal but it does protect the existing embankment from rainstorm events larger than the design storm. The existing storm sewer conveying runoff to the toe of embankment slope will be cleaned and reused.

Kentucky WB – Due to the short length of the existing EB approach slab, the existing KYTC Type B Curb Box inlet is removed and replaced. A new 10-foot long KYTC Type B Curb Box inlet is constructed and connected to the existing cleaned storm sewer.

Indiana Approach Bridges – North of the Sherman Minton bridge, existing scuppers and associated conveyance systems on all the Indiana approach structures are cleaned, repaired and reused.

Indiana Embankment Sections – Currently, existing EB and WB embankment sections between Main Street and Market Street have a combination of barrier and/or



roadway curbs that direct stormwater runoff to the existing shoulder inlets. Our proposal maintains that concept. Curbs integral with the jointed reinforced concrete pavement (503-R-692d) are constructed on the outside of both EB and WB. This maintains a continuous curb line that makes sure drainage is directed to the existing inlets.

## Local Street Improvements

### *Mill and Overlay*

Locations – As outlined in the RFP, portions of Elm Street, Spring Street and 5th Street are milled and overlaid to provide a new riding surface within New Albany. Limits meet requirements defined in the RFP and are shown on the Roadway Roll Plot.

Pavement Rehabilitation – Our proposed design meets requirements set forth in Chapter 9 of the Technical Provisions.

- During construction, areas identified as needing full-depth pavement repair are patched with a full-depth HMA patch as required by IFA.
- During construction, areas identified as needing partial depth patching where increased distress is observed but isolated to the HMA layers follow patching details included with the RFP.
- Mill and overlay (1.5-inches) is provided on mainline lanes, turn-lanes, and paved shoulders as shown on the Roadway Roll Plot.

### *ADA Curb Ramp Improvements*

Our proposal provides curb ramp replacements with detectable warning surface along West Elm Street, West Spring Street and West 5th Street as outlined in the RFP RID Chapter 8 Design Plans and listed below. Curb ramps meet INDOT standard drawings. An ADA Improvement Summary describing construction at each location is provided on the Roadway Roll Plot.

### *Push Button Accessible Pedestrian Signals*

Included with our proposal are new Push Button Accessible Pedestrian Signals (APS) and Countdown heads including signal modifications at intersections listed below. All existing pedestrian push buttons are replaced with Audible Pedestrian Signals (APSs) and

new poles in accordance with INDOT Standard Drawings Series E805-PBBA, Pedestrian Push Button Assembly Details. Existing pedestrian signals are replaced with countdown pedestrian signals.

- Intersection of Scribner Drive and West Spring Street, all quadrants for crossing in both the N/S and E/W directions.
- Intersection of Scribner Drive and West Elm Street, NE and SE quadrants for crossing the N/S direction

### *Traffic Signal Detector Loops*

As part of the mill and overlay operations, traffic signal detector loops will be reconstructed at intersections listed below. Where mill and overlay limits allow, new detector loops are installed per INDOT Standard Drawing E-805-SBLI. Otherwise, proposed detector loops will be replaced to match the existing layout.

- Scribner Drive and West Elm Street
- Scribner Drive and West Spring Street

## Bridge Deck Drainage Improvements

Bridge Deck drainage for the project includes the following improvements:

- Indiana Approach Structures (I64-123-02294 DWBL, I64-123-02294 DEBL, and I64-123-02294 JDEB) – Reuse the existing system and repair or replace defective, damaged or deteriorated drainage components for bridges.
- Sherman Minton Bridge (I64-123-04691 E) – Replace system following INDOT criteria.
- Kentucky Approach Bridges (056B00161N) – Replace system following KYTC criteria.

### *Sherman Minton Bridge*

- New scuppers and collection piping are provided.
- Spans 1 and 2 (Stations 95+70 and 100+23) free fall directly into the Ohio River as allowed by Section 10.3.3.2 of the RFP Technical Provisions.
  - Scuppers from the top deck located over scuppers on the bottom deck are piped together and free fall into the river. Otherwise, scuppers from the top deck freely discharge into the river.

- Downspout piping extends below the superstructure a minimum of 12-inches.
- Downspout piping is located no closer than 10-feet from the face of a substructure unit.
- Collection piping is provided for Spans A, B and C
  - New deck scuppers are collected using a 6-inch diameter pipe located under the deck and convey runoff to an existing pier location. At the pier, the pipe discharges onto a new riprap pad at existing grade to prevent erosion.
- On the bottom deck, new scuppers are located at approximately every fourth top deck scupper location to capture blowing precipitation and runoff from vehicles.
- On the top and bottom deck, bypass is minimized at each expansion joint to prevent long-term corrosion.
- Drain spacing is based on INDOT criteria for a 50-year design event with spread limited to the shoulder width, a 50% grate clogging factor and rainfall intensity of 8.74 in/hr.

#### ***Kentucky Approach Bridges***

- New drainage scuppers and collection piping are provided.
  - Drainage scuppers are collected using a 6-inch diameter pipe located under the deck to an existing pier location. At the pier, the pipe is discharged onto a new riprap pad at existing grade to prevent erosion.
- Drain spacing is based on KYTC criteria for a rainfall intensity of 4.00 in/hr with spread limited to the shoulder width and total or near total interception achieved upstream of expansion joints.

#### **Approach to Selection of Materials**

Material selection for roadway elements meet current INDOT / KYTC standard drawings and specifications and listed items defined in the RFP. Our solution does not require borrow for earthwork as existing project elements are being maintained or rehabilitated. Subgrade treatment for pavement is defined on the Roadway Roll Plot.

#### **Description of Quality, Longevity and Service Life of Roadway Elements**

New roadway elements provided meet requirements set forth in the RFP and current INDOT / KYTC standard specifications. This approach ensures quality, longevity and expected service life. Our rehabilitation provides low maintenance solutions for years to come.

Overlays, full-depth pavement replacement and temporary widening pavement being installed matches recommendations provided in Section 9.3.2 of the Technical Provisions.

#### **Approach to Addressing Geotechnical Related Issues for Temporary Maintenance of Traffic**

We don't anticipate Geotechnical issues related to temporary maintenance of traffic. Existing shoulders are strengthened in accordance with the RFP. Indiana crossovers remove existing concrete barrier and utilize the I-64 roadway template. Temporary Kentucky crossovers involve minimal earthwork but are located over roadway embankment that has been in place and consolidated for numerous years. Geotechnical analysis will be performed upon NTP to confirm the existing median is a stable platform.

#### **How Project ROW and Adjacent Roads and Properties will be Maintained and Protected**

We recognize that maintaining a good reputation within communities we are working in is paramount to delivering a successful project in the eyes of the public. We routinely work in narrow urban corridors with residential neighborhoods and store front businesses and understand what it takes to be a good partner.

Much of the project's scope is isolated to bridge work which is not immediately adjacent to neighborhoods. However, repaving work in New Albany will directly affect these communities. We provide access to homes and local business through flagging operations and maintain driveways with partial width construction.

Our construction means and methods developed for this rehabilitation was devised around utilizing day-shift operations and supplementing with night-shift operations on an as-needed basis to maintain project schedule. By limiting night-shift operations we mitigate noise and light pollution for residents.

Additionally, dust control is managed with the use of a water truck on access roads and at staging/laydown areas. Erosion and sediment control is handled with appropriate BMPs. These will be checked and maintained regularly to remain in compliance with the project's stormwater and pollution prevention plan.

#### **d) Innovative Best Management Practices Planned to be used During MOT Phases**

We implement the following items as part of the DBT's best management practices for traffic control and MOT.

- Use of message boards during lane closures, allowable full closures, and at detour routes to provide positive directional reinforcement to drivers.
- Coordinate Intelligent Transportation System (ITS) messages to improve public communication and reduce emergency response time.
- Annual and pre-MOT phase switch meetings with local police, fire, and emergency agencies to discuss upcoming changes to the work zone in case of an accident on the jobsite for construction personnel or vehicular accident on the roadway.
- Temporary CCTV camera coverage of the bridges, adjacent I-64 interchanges and at the I-265/I-65 interchange to provide constant updates for the controlling agencies.
- Temporary lighting at levels consistent with existing conditions through the construction zone until new permanent lighting is installed.

#### **e) Preliminary Plan Showing the Maintenance of Traffic Concept and Technical Solutions**

Temporary traffic control plans for each construction phase are shown MOT Roll Plots and meet Section 12 requirements of the Technical Provisions. A detailed description of our Transportation Management Plan approach is described in Part a) above.

MOT PLAN AREA	LOCATION
Maintenance of Traffic Layout	Shown on each roll plot for all four construction phases
Traffic Control Devices for Each Stage/Phase of Construction	
Location of Positive Protection	
Location of Crossovers (if applicable)	
Critical Typical Sections	Approved EB and WB routes shown in strip map form for full closure
Detour Routes and Alternate Routes	

#### **f) Conceptual Signing, Lighting, ITS and Signal Plans**

##### **Sign Improvements**

Proposed sign improvements meet requirements set forth in the Section 11 of RFP Technical Provisions and generally follow suggestions included in Section 11 of the RID. See the Signing Roll Plot.

All existing signs, sign structures, and foundations are removed within station limits defined in the RFP. New regulatory, warning, recreation, ground mounted and overhead guide signs are provided within the same limits. A summary of new guide signs is as follows:

##### **Westbound Description**

- New guide signs mounted to an overhead truss are located at Station 62+65 EB Lanes directing system users of lane assignments for Evansville/St. Louis and the New Albany exit. This sign is placed approximately 1-mile in advance of the New Albany exit and located on the Kentucky Approach bridge due to conflicts with the existing concrete crib retaining wall separating EB and WB I-64.
- New guide signs for Evansville/St. Louis and the New Albany exit are provided just south of Pier 2 on the Sherman Minton Bridge. This sign is placed approximately 1/2-mile in advance of the New Albany exit. This location provides optimal line of sight and visibility to best understand lane assignments. Existing bracing on the structure will be retrofitted to mount the new signs.
- At the gore location of the New Albany exit (Elm Street), the existing overhead signs and truss

structure is replaced with new Evansville/St. Louis and a New Albany exit signs.

- The existing Indiana welcome sign is replaced and reference markers along I-64 are provided.

#### Eastbound Description

- New I-64/US-150 route signs and Ohio River/Sherman Minton Bridge signs are provided.
- New guide signs mounted to an overhead truss are located at Station 106+75 EB Lanes directing system users of lane assignments for the Shively exit and Louisville/Lexington. This sign is placed approximately 1-mile in advance of the Shively exit and located on earth embankment just north of the Main Street bridge. A new speed limit sign is also provided.
- Ideally there should be an overhead sign at the exit striped gore, ½-mile in advance and 1-mile in advance. Since the recommended ½-mile advance sign would be located under the top deck thus reducing vertical clearances or minimizing sign visibility, a new sign structure is placed at Station 71+00 EB Lanes. This provided vehicles exiting the lower deck a chance to see the new sign and position themselves into the correct travel lane. These signs replace existing overhead signs located approximately 800-feet further east.
- Reference markers along I-64 are provided.

#### Pavement Markings

New pavement markings and delineators are provided within the following project limits for I-64 and the New Albany local street system as defined in the RFP.

Retro-reflective pavement marking materials are grooved wet reflective preformed plastic for interstates. Contrast lane lines are provided and in accordance with Technical Provision Attachment 11-1 (USP: Traffic Control Device), Attachment 11-3 (Contrast Edge Line Detail) and Attachment 11-4 (Contrast Lane Line Detail). Pavement marking shields and cardinal direction message markings are installed to delineate lane assignments at locations in advance of any option-lane and multi-lane splits.

#### Lighting Improvements

##### Overall Approach

All lighting is replaced within the project limits which includes the Kentucky Approach Bridges, Sherman Minton Bridge and Indian Approach Bridges. See the Lighting Roll Plots. New roadway lighting is LED luminaires mounted 40' above the roadway along the upper deck and approach structures. To accommodate construction phasing on the bridge, new lights are placed on the east side of the bridge at 275' spacing. Summary of the lighting calculations are below.

On the lower deck, LED wall pack light fixtures are provided and spaced at 100' increments. Like the upper deck, these lights are placed on the east side of the bridge to accommodate construction phasing. Underpass lights at Main Street, Spring Street and Market Street are all replaced with LED wall packs.

AREA	AVERAGE (fc)	MINIMUM (fc)	UNIFORMITY (AVG/MIN)
WB Bridge	0.92	0.3	3.07
EB Bridge	1.20	0.4	3.00
Main Street	2.09	0.7	2.99
Market Street	2.28	0.7	3.26
Spring Street	1.40	0.4	3.50
WB Bridge Temp. Condition	1.02	0.3	3.40
EB Bridge Temp. Condition	1.96	0.5	3.92

##### Summary of Lighting Calculations

##### Lighting Circuitry

A new lighting controller for all new lights is provided at Spring Street. This location feeds the lights on the bridge as well as the underpass lights at the cross streets. Existing circuit information was not provided in the RFP, so it is assumed one controller will be used for all lighting. A connection is also be provided to verify existing lights beyond the project limits are maintained.

When existing circuit diagrams are available, further investigation will be required to make sure lighting outside project limits is maintained and can be adjusted accordingly. However, our approach handles a worst-case scenario for powering all lights from a single side of the bridge. Voltage drop calculations have been



performed, and #2 wire is sufficient to support all new lights on this project. Circuitry is designed as a separate circuit for EB and WB lights as well as a separate circuit for the underpass lights at Main, Market, and Spring Streets.

### ***Temporary Condition***

To verify light levels are maintained during construction wall packs are attached to the temporary painting platform on the lower deck. Since the mounting height of these must be lower, a spacing of 85' on center is used to achieve minimum light levels.

On the upper deck, fixture heads on the west side of the bridge are replaced with LED luminaires. The existing lights are roughly 250-275' on center, which matches the permanent design approach, so utilizing the proposed light fixtures on existing poles in these locations provides lighting levels sufficient for construction.

Light fixtures outside of the bridge limits are maintained until permanent light fixtures are installed.

## **Intelligent Transportation Systems (ITS) Improvements**

### ***Maintenance of ITS and Temporary Surveillance***

INDOT and KYTC have ITS equipment deployed along I-64 that are maintained throughout construction. A Maintenance of ITS Plan will be developed during final design prior to impacting any existing device. Existing devices being maintained, and supplemental equipment added provide continuous video coverage of the entire corridor during construction.

### ***Permanent ITS Infrastructure***

New ITS devices including CCTV cameras, wireless vehicle detection, and Lane Control Signal (LCS) are installed along I-64 in accordance with the Chapter 17 of the RFP Technical Provisions. Devices are networked back to the INDOT TMC utilizing new fiber optic cable between Spring Street and south end of Sherman Minton Bridge.

### **CCTV CAMERAS**

New cameras are installed to provide complete video coverage of the upper and lower decks of the Sherman Minton Bridge and along I-64 within the construction

limits. Two cameras are installed for INDOT per location for redundancy. Additionally, at the eastern terminus of the Sherman Minton bridge, two cameras are provided for KYTC (one upper and one lower) that will not be integrated with INDOT. All camera mounting locations will be coordinated with INDOT.

### **WIRELESS VEHICLE DETECTION SYSTEMS**

New wireless Vehicle Detection Systems (VDS) are installed to monitor traffic speeds and provide vehicle counts and classifications. They are co-located with CCTV camera locations. In-pavement sensors are used as microwave radar systems suffer rebound interference due to the bridge superstructure.

### **LANE CONTROL SIGNALS (LCSs)**

Lane Control Signals are provided in the EB direction of travel along I-64 from the Spring Street Interchange (Sta. 114+00) to the south end of the Sherman Minton Bridge (Sta. 80+00) in accordance with Section 17.3.3.4 of the Technical Provisions. Signs are mounted every 500-feet. Integration of the LCS with INDOT will be performed by Others.

### **POWER SERVICE**

New separate power services are provided to support INDOT and KYTC ITS equipment. Service locations will be coordinated with the local Utility Owner. Power conductors are provided to each device location and the appropriate number of conduits per NEC are installed in conjunction the fiber duct package. Separate handholes are used for power.

### ***Safety and Maintenance Access***

Safe access is provided to all new ITS equipment in accordance with Section 17.3.4 of the Technical Provisions. Devices are co-located to reduce the overall number of locations that will need to be maintained and placed such that the need for lane closures during maintenance on structure is minimized.

### ***Integration and Testing***

ITS devices will be integrated in accordance with Section 17.4 of the Technical Provisions with the exception of the LCS system. The LCS will be integrated by Others in accordance with Section 17.3.3.4 of the Technical Provisions as revised in Addendum #2.

# Bridge Structural Repairs



VOLUME 2

## 4.2.2 | Bridge Structural Repairs

### a) Approach to the Selection of Materials that will Meet the Requirements of the PPA Documents and a Description of Quality, Longevity and Service Life of all Rehabilitated Bridge Elements

#### Kentucky Approach Bridge (056B00161N)

##### Substructure Repairs

**The piers will be rehabilitated to address the existing chloride contamination and degradation.** A hands-on inspection will capture the extent and nature of deterioration on all caps, columns, and struts. This information will inform the Preliminary Capacity and Load Rating Evaluation of the substructure units. Elements that do not meet the acceptance criteria per TP 14.3.2.1.9.b shall be repaired.

We understand that the chloride concentrations in the cover concrete have reached or exceeded levels associated with initiation of rebar corrosion over significant portions of the existing pier caps, and the existing reinforcement is likely in active corrosion. The contaminated concrete will be removed and replaced to 1 inch behind the first layer of reinforcing steel. This work will include all cover concrete at each face of the cap beams, except around existing bearings that are to remain. Localized areas of delaminated and/or spalled concrete on the caps, columns, and abutments shall be repaired.

We have preliminarily analyzed the piers and developed a strategy for safely removing the cover concrete on the cap beams without the need for temporary supports. The cover concrete shall be removed in discrete sections at each face of the caps as follows: front face, back face, ends, bottom faces outside of columns, bottom face between columns, and top face. Removal and replacement shall be limited to

no more than half the length of the cap at any face. This will be accomplished using of state-of-the-art hydro demolition equipment. Minor hand chipping will also be utilized along with water pressured wands to reach into tight areas and clean out debris.



*AquaJet Aqua Cutter is a remote controlled and telescoping hydro demolition equipment to be utilized for cover concrete removal*

Repairs at the top face shall be staggered as follows: areas between existing bearings followed by areas below existing bearings (to be replaced). The girders will be temporarily supported to facilitate bearing replacement and concrete repairs while subject to traffic load. No other temporary works or supports will be required.

Concrete for substructure repairs shall be Class C. The mix design shall incorporate either fly ash or silica fume **to provide increased resistance to contamination of the new concrete from chlorides** remaining in the existing concrete or from those transported onto the substructure surfaces with uncaptured deck drainage. All new concrete shall be surface sealed in accordance with Section 709 of the Indiana Standard Specifications.

New Grade 60 reinforcing bars shall be spliced to existing bars that are damaged or that display more

than 50% section loss. Exposed reinforcing bars will be coated with epoxy.

Galvanic nodes shall be installed in accordance with USP 14-5 Galvanic Nodes.

***The service life of the proposed substructure repairs is expected to exceed the required design service life of 30 years.***

#### ***Elimination of Bridge Deck Joints***

A total of 10 joints will be eliminated on the eastbound and westbound structures and replaced with link slabs. ***This strategy will reduce maintenance costs over the 30-year service life by minimizing the exposure of the steel superstructure and substructure elements to deck drainage, which is the primary driver of corrosion and deterioration, and by reducing the number of deck joints to clean and maintain.***

Refer to Section 4.2.3 for details related to link slab design and materials selection.

Expansion joints that are to remain shall be replaced with strip seals.

The bearings on the eastbound and westbound structures will also be replaced with reinforced elastomeric bearing devices in accordance with TP 14.3.2.1.4. The existing bearing configuration consists of alternating piers with either two lines of expansion rocker bearings or two lines of fixed shoe bearings. The link slabs are to be installed at the piers with two fixed bearing lines.

The proposed expansion bearings will follow INDOT Standard Details for reinforced elastomeric bearings. A steel bolster will be used to accommodate the difference in height between the existing and new bearings. Anchor bolts that are installed into the existing concrete caps will be galvanized.

The proposed fixed bearing devices will be designed in accordance with AASHTO-LRFD and INDOT Bridge Design Manual and will consist of a reinforced elastomeric bearing pad bonded to a sole plate. The sole plate will be attached to the girder flange. One of

the two bearing lines at a fixed pier will include anchor bolts that extend through the sole plate (preventing translation of the bearings). The anchor bolts will be designed to provide longitudinal restraint for the back and ahead spans for all applied loads. ***Industry experience suggests poorer performance of link slabs at locations with two lines of fixed bearings. For this reason, where link slabs are proposed anchor bolts will be omitted on one of the two fixed bearing lines.*** Anchor bolts that are installed into the existing concrete caps will be galvanized.

***Longitudinal restrainers will be installed to address the deficient seat length at the expansion piers.*** The girder ends are restrained at the fixed piers through the combined action of the link slab and bearing anchor bolts. The restrainers will consist of threaded bars or cables attached to the girder webs through the existing bearing stiffeners with local stiffening plates. The restrainers will accommodate service displacements but tie the two span ends together under seismic loading. We have used this retrofit as an effective strategy to mitigate risk of unseating on structures like the I-64 double deck structure in St. Louis, MO.

***The expansion joints at the eastbound and westbound abutments will be eliminated and the abutments modified to be semi-integral.*** The approach slab and backwall will be removed level with the top of girders. The girder ends will be cast in a diaphragm. Rotations will be accommodated by lining the vertical and horizontal interfaces between the diaphragm and existing backwall and bearing seats with polystyrene. The slab will extend to the fill face of the abutment. A notch will accommodate the standard INDOT approach slab, modified per TP 14 3.2.1.6.

***The proposed configuration of bearings and link slabs will result in little or no change in distribution of longitudinal forces to the piers due to applied loads.*** The piers will be evaluated for the proposed conditions to demonstrate their adequacy for AASHTO-LRFD strength and service limit states.

#### ***Structural Steel Repairs***



Our inspection teams will conduct a hands-on inspection of the structural steel and identify the extent and nature of defects in the primary and secondary members. The defects shall be incorporated in the Preliminary Capacity and Load Rating Evaluation, which will be used to identify components for rehabilitation based on the acceptance criteria provided in TP 14.3.2.1.1.

A summary of members with anticipated defects and proposed repairs is shown in Figure 1. Primary members that do not meet the acceptance criteria shall be strengthened. **The strength of the rehabilitated section shall equal or exceed the original, as-built capacity.** Many of the cross frames under existing expansion joints exhibit significant pack rust. Cross frames with cracked welds or located under deck joints

in the final condition will be replaced. Cross frames locate under link slabs shall be cleaned and treated with an alkaline penetrating sealer before painting.

All new structural steel shall be in accordance with ASTM A709 Grade 50. High strength bolts shall be in accordance with ASTM F3125 Grade A325.

All strengthening and rehabilitation work shall consider strength and stability during construction. Steel repairs will generally be performed and staged in conjunction with the deck replacement. **Bearings will be replaced with the structure under vehicle load.** All girders on a pier will be replaced in a single stage. The girders shall be jacked and supported by either a temporary saddle support system set over the pier cap or by jacking beams installed at the bottom struts of the cross frames.

Figure 1: Summary of steel repairs at Kentucky Approach Spans

KENTUCKY APPROACH STEEL REPAIRS				
ELEMENT	LOCATION	DEFECT	REPAIR	FRACTURE CRITICAL
Girders	Web	Section loss	Plating at web/stiffener	N
	Flange	Section loss	Plating at flange/web	N
	Bearing stiffener	Section loss	Plating at flange/stiffener end	N
	Various	Cracks	Perform NDT testing and crack arrest holes	N
Transverse girders	Web/bottom flange	Deterioration/section loss	Clean, inspect, repaint - plating if needed	Y
	Knee joint	Deterioration/bent plates	Clean and paint, plate as needed	N
	Lateral Restrainer	Deterioration/section loss	Remove, clean, and reinstall or replace restrainer plate. Replace guide angles	N
	Various	Cracks	Perform NDT testing and crack arrest holes	Y
Cross frames	Girders near joints	Pack rust with cracked welds	Replace cross frames and bolts	N
	Girders near joints	Pack rust	Clean and apply penetrating sealer or replace cross frame and bolts	N
	Girder connections	Missing bolts	Replace bolts	N

### Sherman Minton Bridge (I64-123-04691 E)

#### Elimination of Deck Joints

A total of 28 joints will be eliminated on the eastbound and westbound decks and replaced with link slabs.

**This strategy will reduce maintenance costs over**

**the 30-year service life by minimizing the exposure of the steel superstructure and substructure elements to deck drainage,** which is the primary driver of corrosion and deterioration, and by reducing the number of deck joints to clean and maintain.

Refer to Section 4.2.3 for details related to link slab design and materials selection.

Finger plate expansion joints at Piers 2 and 3 shall be replaced. Deck joints at Piers 1 and 6 shall be replaced with compression seal type joints.

***Stringer bearings at the lower deck will be replaced with new slider bearings at critical locations to provide a relief mechanism between the floor system and primary structural system.*** The existing deck joints spaced along the lower deck currently allow the tie girder to expand and contract under live load without causing significant forces to build up within the floor system or slab. The joints are complemented by sliding bearings along the exterior stringers. Removal of the joints will eliminate this relief mechanism, resulting in the generation of unintended forces within the floorframes, stringers, and the slab. For this reason, all the bearings at the exterior stringers and some of the bearings at the first interior stringers will be replaced with slider bearings. This configuration will be confirmed by analysis. With the conversion of some of the existing fixed bearings to expansion bearings at the lower deck, the longitudinal forces will be carried by fewer bearing connection bolts. The existing connection bolts that remain will be checked for the larger loading and replace with larger or higher strength bolts if needed. All bearing connection bolts will be inspected and replaced where more than 25% section loss is observed.

The slider bearings will mimic the existing steel plate slider bearings. Rather than a steel-on-steel slip surface, however, a stainless-steel plate with a PTFE sheet will be provided between the upper and lower plates. ***This system will provide a lower friction slip surface that is less likely to lock up over time due to metal corrosion.***

#### **Structural Steel Repairs**

Our inspection teams will conduct a hands-on inspection of the floor systems, tied arch, and trusses and identify the extent and nature of defects in the primary and secondary members. The defects shall be incorporated in the Preliminary Capacity and Load

Rating Evaluation, which will be used to identify components for rehabilitation based on the acceptance criteria provided in TP 14.3.2.21.

A summary of members with anticipated defects and proposed repairs is shown in Figure 2. Primary members that do not meet the acceptance criteria shall be strengthened. ***The strength of the rehabilitated section shall equal or exceed the original, as-built capacity.***

All new structural steel shall be in accordance with ASTM A709 Grade 50. High strength bolts shall be in accordance with ASTM F3125 Grade A325.

All strengthening and rehabilitation work shall consider strength and stability during construction. Steel repairs and bearing replacements will generally be performed and staged in conjunction with the deck replacement. The tied arch spans will be modeled and investigated for the proposed staged deck replacement sequence. Deck removal limits within a span for each construction stage will be established based on strength and stability criteria.

The existing inspection catwalks below the lower deck and along the tie girders will be rehabilitated. The horizontal lifeline and all attachments to the structure along the lateral bracing in each bay of Spans 1 and 2 will be replaced in-kind. A new lifeline will be installed at handrail height along the upstream and downstream tie girders. The cable ends will be attached to floor frames and supported intermittently between these points by vertical posts bolted to the tie girders. The existing catwalk grating will be replaced in-kind within 5 feet on either side of floorframes located beneath existing deck joints.

***New inspection access will be provided along the upstream and downstream top chords of the tied arch trusses.*** The top chords will be accessed by new ladders provided at each of the three main piers. The lifeline cable will be supported by vertical posts bolted to the top chords.

New lifeline cables shall be galvanized or stainless steel.

Figure 2: Summary of steel repairs at Sherman Minton Spans

SHERMAN MINTON STEEL REPAIRS				
ELEMENT	LOCATION	DEFECT	REPAIR	FRACTURE CRITICAL
Floorframes/ Floorbeams	Flange	Section loss	Plating at flange/web	Y
	Web	Section loss	Plating at web	Y
	Floorframe	Notch/cut near tie	Grind and feather detail	N
	Flange stiffener	Fatigue detail	Cut and grind stiffener termination	N
	Web stiffener	Section loss	Plating at flange/stiffener end	N
	Bolted Splice	Deteriorated/missing bolts	Remove and replace bolts	N
Tie girders	Varies	Residual shavings	Blast clean, apply penetrating sealer, caulk, paint	Y
Stringers	Ends	Section loss/cracks	Plating at flange/web or replacement	N
	Cover plates	Fatigue detail	Perform impact treatment	N
Diaphragms	Stringers near joint	Pack rust	Unbolt elements, clean, reinstall	N
	Stringers away from joint	Pack rust	Clean and apply penetrating sealer	N
Bearings	Bearings	Pack rust	Clean pack rust, apply penetrating sealer, replace where shown in plans	N
	Anchor bolts	Deterioration/missing	Replace bolts	N

## Hanger Cable Replacement

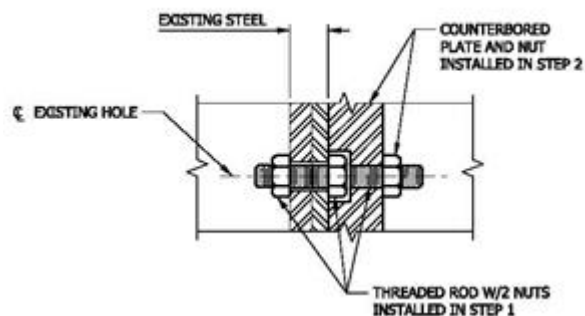
### INTRODUCTION

**The Kokosing team is proposing an innovative approach to the hanger cable replacement which will speed up the construction process and result in a robust system meeting all structural and serviceability requirements.** The team has proposed, and received approval for, an Alternative Technical Concept (ATC), to facilitate this approach.

The proposed system involves relocating the hangers to an outboard configuration, thus allowing installation of the new hangers while the existing hangers are still in place. **This eliminates the need for temporary hangers, making it both safer and faster to construct. The outboard hanger configuration will also make future inspection of the hanger system easier as all components will be visible and accessible for hands-on inspection,** unlike the existing top anchor sockets which are currently hidden from view.

The constructability of this concept borrows on techniques often employed on truss bridges to repair gusset plates. The technique involves a 2 step process: 1) the existing bolts are removed one at a time and replaced with longer bolts; a nut is placed on the bolt

and fully tensioned to meet slip-critical requirements prior to removing the next bolt, then 2) once all the bolts have been replaced, a fill plate is installed (often called a “cheese plate” because it contains oversize holes which fit over the first nut), followed by the gusset plate, and a second nut is placed on each bolt and fully tensioned to engage both plates. In this way, **the new gusset plate can be installed while loads are maintained on the existing connection** (the strength is only temporarily reduced by one bolt during the process).



For this project, instead of a gusset plate, we will be using this technique to install the new hanger brackets, as shown in the detail above. Note that in this case, the hanger bracket will utilize a counter-bored plate instead of using a separate “cheese plate” and high-strength threaded rods (ASTM A354) are used instead of long

bolts in order to allow for installation within the tight confines of the existing steel connections. Due to the eccentric loads introduced by the outboard brackets, the existing upper and lower hanger socket castings will remain in place to act as diaphragms. All new bolts will be designed to carry the combined shear and tension loads due to eccentricity. Faying surfaces will be prepared to meet Class A slip-critical requirements (or Class B, if dictated by design loads) prior to installation of the new brackets. The use of high-strength rods and slip-critical connections is a change to the existing hanger specification and was approved under ATC #05R1.

#### CONCEPTUAL TEMPORARY SUPPORTS

**The advantage of the proposed system is that no temporary supports are required.** The only temporary system is the one used to de-tension the existing suspenders and to tension the new suspenders (for details, see the drawing “TEMPORARY JACKING SYSTEM”). This means that the temporary system is the same for each suspender and can be re-used at other locations on the bridge, making it very efficient and cost effective.

#### DESIGN AND ANALYSIS REQUIREMENTS

The design of the hanger system (strand and associated connections) will accommodate the FWS load of 20 psf.

The hanger system will be designed for AASHTO HS20 live load (six lanes total, with reduction for multiple presence).

All weldments and connections will be designed in accordance with the latest AASHTO LRFD design specifications, as required by the RFP documents.

Temporary jacking systems will be designed for the actual loads in the hangers, which will be verified by tension measurements during the construction phase. All jacking loads will be factored by 1.5 when sizing the hydraulic jacks to provide an appropriate factor of safety.

#### CONSTRUCTION SEQUENCE AND PHASING WITH OTHER ASPECTS OF WORK

One of the first items of work related to the suspender replacement will be to measure the existing tension in the hangers. This information will be used to optimize the design of the replacement suspenders and the jacking system components.

Survey measurements of profile grade will also be obtained to establish base line conditions. This will be used to compare to the final profile grade.

As required by the hanger specification, installation records will be kept to monitor the distance between the upper and lower hanger anchor points during all phases of construction (prior to the start of hanger replacement, after each hanger is replaced and after the conclusion of all hanger replacement activities). The measurements will make sure that an individual hanger length is not changed by more than 1/4 inch (an amount that is necessary to account for field tolerances).

Detailed field records will also be kept and provided to IFA for the following items:

- Survey records
- Date, time and ambient temperature
- Jacking forces (and corresponding cable forces)
- Cable elongation (calculated from cable force)
- Deck loading conditions
- Any other special notations

**The suspender replacement work is designed to handle the full dead and live load capacity of the bridge and is therefore independent of the construction sequence.** The sequence for suspender replacement will include installation of monitoring devices, installation and slack removal of the new outboard suspenders, and installation of a de-tensioning system on the existing hanger system. The de-tensioning process will be iterative and incrementally apply hydraulic pressure to the existing system until tension is relieved at which time the existing hangers will be cut. After removal of existing hangers, the de-tensioning system will be reset to place the floorbeam back to elevation “0”, and the structural lifting devices will be removed.



## Indiana Approach Bridges (I64-123-02294 DWBL, I64-123-02294 DEBL, and I64-123-02294 JDEB)

### ***Joint Elimination and Bearing Replacement***

A total of five joints will be eliminated on the eastbound and westbound structures along the Indiana Approach and replaced with link slabs. ***This strategy will reduce maintenance costs over the 30-year service life by minimizing the exposure of the steel superstructure and substructure elements to deck drainage, which is the primary driver of corrosion and deterioration, and by reducing the number of deck joints to clean and maintain.***

Refer to Section 4.2.3 for details related to link slab design and materials selection. The proposed deck overlay will extend over the link slabs, sealing the construction joint between the existing and new concrete.

Expansion joints that are to remain shall be replaced with strip seals or finger plates where the movements exceed five inches.

The expansion rocker bearings and some of the fixed shoe bearings on the eastbound and westbound structures will also be replaced with reinforced elastomeric bearing devices. All new bearings will follow INDOT Standard Details for reinforced elastomeric bearings. A steel bolster will be used to accommodate the difference in height between the existing and new bearings. Anchor bolts that are installed into the existing concrete caps will be galvanized.

***The expansion joints at all abutments will be eliminated and the abutments modified to be semi-integral.*** The approach slab and backwall will be removed level with the top of bearing seat. The girder ends will be cast in a diaphragm. Rotations will be accommodated by lining the horizontal interfaces between the diaphragm and existing bearing seats with polystyrene. The slab will extend to the fill face of the abutment. A notch will accommodate the standard INDOT approach slab.

The proposed configuration of link slabs / joint eliminations will change the distribution of longitudinal forces to the piers due to applied loads, though the bearing replacements are intended to mute these impacts. The approach bridge units will be modeled to capture the distribution of forces for the final conditions and the piers will be evaluated for AASHTO-LRFD strength, and service limit states.

### ***Structural Steel Repairs***

Our inspection teams will conduct a hands-on inspection of the floor systems, tied arch, and trusses and identify the extent and nature of defects in the primary and secondary members. The defects shall be incorporated in the Preliminary Capacity and Load Rating Evaluation, which will be used to identify components for rehabilitation

Girder ends with ship lap joints on I64-123-02294 DWBL have existing CJP welds at the bottom flange of the web cope. These welds will be inspected and testing using either UT or PAUT. Welds that are rejected shall be removed and repaired. Working one side of the web at a time, the flange CJP weld along the top of the flange will be excavated in a v-notch to three-quarters of the flange thickness by either air gouging or grinding. The notch will then be filled with weld metal and the procedure repeated on the bottom side of the flange. The repaired weld will be tested using either UT or PAUT for acceptance.

The discontinuous backer bars at the inside of the flange-to-web welded connections along the box girder at Pier 11 of I64-123-02294 DWBL will be rehabilitated by coring relief holes through the web at locations of the discontinuities. The holes will be covered with rodent screens.

## **b) Preliminary Bridge Plans**

Please see our Preliminary Bridge Plans provided in the Appendix for the following bridge units:

- Kentucky Approach
- Sherman Minton Bridge
- Indiana Approach

# Bridge Deck Overlays and Deck Replacements



VOLUME 2

## 4.2.3 | Bridge Deck Overlays and Deck Replacements

### a) Approach to the Bridge Deck Design, Factors for Consideration in Redecking, and Selection of Materials that will Meet the Requirements of the PPA Documents and a Description of Quality, Longevity and Service Life of all Bridge Deck Elements

#### Bridge Deck Design and Service Life

Kokosing will replace the existing bridge decks on the Sherman Minton Bridge and Kentucky Approach Spans with an 8-inch cast-in-place concrete slab designed in accordance with the INDOT Design Manual and the TP 14.3.1.8. ***Using the minimum slab thickness allows us to construct the haunches per IDB Fig. 404-2B while still matching the existing profile grade. It also allows us to optimize the load ratings by limiting the dead load we add to the structure.***

The slabs will be designed and detailed per INDOT and industry standard practices to provide a 30-year design life with only routine maintenance. The driving surface will be detailed with 2 ½" clear cover to the top transverse reinforcing steel and it will be surface sealed. All construction joints shall be epoxy sealed. Furthermore, removable forms will be used in bays containing longitudinal construction joints or beneath transverse construction joints (i.e. at link slabs). The structural slab thickness will include a ½-inch sacrificial thickness to accommodate future milling and overlay if required.

***Select expansion joints will be eliminated and replaced with link slabs*** per PPA requirements and as described in Section 4.2.2. The remaining expansion joints will be replaced with strip steel joints per Indiana Standard Specifications Section 724. Where joint movement demands are less than about 1 ¾", preformed compression seals will be used. Finger plate

expansion joints will be used where movements exceed 5 inches. Finger plate joints will be in accordance with Attachment 14-2: USP Finger Expansion Joints.

Link slabs will be designed and detailed according to industry best practices to resist the demand rotations with limited transverse cracking. The overall length of the link slabs shall be 7.5% of the adjacent span lengths. They will be formed and poured full depth using INDOT standard concrete mix for bridge decks (Class C), modified to include non-metallic synthetic fibers to provide crack control and improve long-term performance. The concrete mix shall be modified per Attachment 14-3: USP Link Slab. The link slabs will be debonded from the girders over a length equal to 5% of the ahead and back spans using a compressed synthetic gasket. Shear studs shall be excluded within this region and if SIP forms are used, the flutes shall be filled with foam. The reinforcing steel shall be designed for the strength and service limit states as required by TP 14.3.1.26.

All new slabs shall be poured full depth using INDOT standard concrete mix for bridge decks (Class C). All reinforcing steel shall be in accordance with ASTM A615 Grade 60 and epoxy coated.

A minimum of 1% longitudinal steel area will be provided throughout the Sherman Minton Spans and over supports at the Kentucky Approach Spans where link slabs are proposed to limit transverse cracking due to deck continuity and girder rotations. The required area of reinforcing steel will be determined through design of the link slabs, taking into consideration applicable loads including live load, thermal gradients, and superimposed dead load. The continuity of the deck will not be considered in evaluation and load rating of the steel girders and stringers.

INDOT standard bridge rail Type FT will be used throughout the Sherman Minton and Kentucky

Approach Spans in accordance with TP 14.3.1.16 and Kokosing ATC 03. ***Using one type throughout the bridge will simplify construction and reduce schedule. The proposed Type FT barrier does not include a metal railing, making it less costly to maintain.*** Any additional dead load or wind loads resulting from the use of the Type FT railing on the Sherman Minton Spans will be considered in the evaluation and load rating of the structure.

### Considerations for Redecking

While redecking is routine rehabilitation work, some special considerations are required for this project related to strength and stability of the structure and protection of the vehicular traffic during deck removal and replacement operations. The Sherman Minton Spans 1 and 2 were fabricated and constructed based on a particular sequence of work that allowed the tie girders to stretch with progressive application of deck load while minimizing the effects to the floor system and slab. Removal of the deck will need to consider the interaction between the floor system and global load resisting system, with removal limits selected to limit the buildup of axial forces in the stringers and/or shearing of stringer connection bolts. As the deck is removed in stages, the structure will be subjected to uneven vehicular loading and dead load. The strength and stability of the global force resisting system will be evaluated for each construction stage. Deck pour limits will be established to meet the required criteria.

The double deck form of the structure will require particular attention to safety of vehicles adjacent to or below deck removal and replacement operations. This topic will be addressed in subsequent sections in addition to containment of debris and handling of materials deemed to be contaminated.

### b) Approach to Ensuring Stability of the Structure Throughout all Phases of Construction

The Sherman Minton Spans will be evaluated by Modjeski & Masters for strength and stability at each

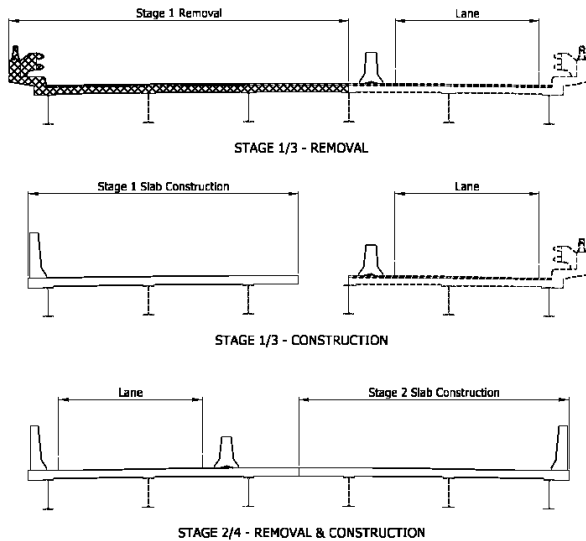
stage of deck reconstruction. Finite element models (FEM) of the spans will be created in Midas Civil and the critical steps of each construction stage will be modeled, including staged deck removal and eccentric vehicle loading on the upper and lower decks. Furthermore, consideration will be given to the additional wind load acting on the structure as a result of the painting platforms. Finally, Jacobs will perform the same strength and stability checks using their own independently developed models as a peer reviewed check, ***providing a high level of confidence to IFA with our approach to deck replacement and the stability of the bridge through all phases of construction.***

### c) Approach to the Integration of Bridge Deck Overlay and Deck Replacement Activities within the Phasing and Sequencing of Work

Our proposal consists of a four-phase construction sequencing approach as described in our Preliminary Transportation Plan. Bridge deck overlays and deck replacement activities on the Kentucky Approach, the Sherman Minton Bridge, and Indiana Approach structures will be performed throughout each of the phases as shown in the conceptual phase diagram on the next page.

***The proposed staging plan minimizes joints in the new decks and overlays.*** Longitudinal joints in the new slab will be located at the midpoint of the center lane. Forms will be removed at all bays containing longitudinal joints. The overlay on the Indiana Approach will have a longitudinal joint located at the midpoint of the center lane.





#### d) Approach to Construction Activities Including the Protection of Traffic During the Deck Removal and Replacement Activities Adjacent to or Overtop of Traffic

**Safety of the traveling public and our workforce is our foremost objective on the project.** In order to safely protect pedestrians which are crossing under the bridges on the Shawnee Golf Course cart path and the bike paths next to the river on both the Indiana and Kentucky river banks, we will provide a protective covered walkway. Deck removal in these areas will be accomplished by temporarily stopping vehicles and pedestrians from crossing under the bridge in short intervals. After any backups have cleared we will resume the removal process.

The I-64 EB bridge deck will be removed with sawcutting and slab removal for the Sherman Minton spans. Adjacent travel lanes will be temporarily closed with allowable closures to facilitate the staging of trucks to haul the slabs to a staging area for potential lead paint removal and processing. The Indiana and Kentucky approach spans will be removed with laboury. Nightly lane closures will continue to be utilized during decking operations to deliver stay-in-place deck forms, rebar, and concrete. The I-64 WB deck will be treated in a similar manner as the EB deck

except when deck removal operations occur over the lower deck an allowable full closure of traffic will be used to further the safeguard the public in case of an accident. Both bridge decks will utilize stay-in-place deck forms which will accelerate the decking operation and allow work to continue over multiple shifts. The middle bay of both the EB and WB decks will be traditionally formed rather than SIP decking.

***An additional level of protection throughout all phases of construction will be the use of the temporary metal pan decking platform*** erected primarily for use by the painters. This painting platform will be installed under both the I-64 EB and WB bridge decks along with installation under the upper arch of the Sherman Minton spans. This platform provides full coverage and gives the DBT positive protection from any debris or objects being dropped onto the roadway, golf course, or park area below.

#### e) Bridge Plans

Please see our Preliminary Bridge Plans provided in the Appendix for the following bridge units:

- Kentucky Approach
- Sherman Minton Bridge
- Indiana Approach

# Bridge Painting



VOLUME 2

## 4.2.4 Bridge Painting

Kokosing and North Star Painting will partner with The Sherwin-Williams Company to supply a state-of-the-art high-performance structural steel coatings system for the long-term protection of the Sherman Minton Bridge. The Kokosing DBT and its partners are dedicated to the high standards of quality necessary to complete the Sherman Minton Rehabilitation Project and provide the anticipated life cycle extension desired by the IFA, INDOT and KYTC.

### **a) Approach to the Bridge Coating System and Selection of Materials that will Meet the Requirements of the PPA Documents Including Quality, Longevity, and Service Life**

The Sherwin-Williams Company (SW) has been an industry leader in coatings technology and innovation for more than 150 years and is currently the world's largest coatings manufacturer. Sherwin-Williams maintains a robust quality control program for each manufacturing facility worldwide. Each manufacturing facility is certified compliant to ISO-9001 and each batch of product produced is quality control tested to meet product specific quality control standards.

We anticipate the use of Sherwin-Williams' Zinc Clad II Plus, Steel Spec Epoxy and INDOT Acrylic Urethane as the inorganic zinc rich primer, epoxy intermediate and urethane finish coat three-coat system as approved by Indiana DOT and contained on the QPL for structural steel coatings.

The Zinc Clad II Plus, Steel Spec Epoxy and INDOT Acrylic Polyurethane coating system provides a high-performance and standard specification compliant coating system anticipated to meet the long-term corrosion protection expectations for the rehabilitation of the Sherman Minton Bridge.



*North Star painting rehabilitation of the Mathew Welsh Bridge over the Ohio River*

### **b) Approach to the Integration of Bridge Painting Activities within the Phasing and Sequencing of Work**

North Star Painting has been integrated with the DBT throughout the procurement process. Routine painting specific taskforce meetings were held to develop a cohesive construction plan and schedule to accomplish structure painting and rehabilitation work efficiently. This collaborative effort to involve the North Star Painting will continue throughout construction to optimize work on site.

At project startup North Star Painting will finalize the containment drawings and mobilize to begin installing a Multi-level platform on the Arch Trusses above the top deck followed by Safe Span Platforms beneath each deck. This will give North Star access to the entire structure while other work is being done such as deck replacement and steel repairs.

North Star's containments will be built to the standards of a class 2A containment as described in SSPC-Guide 6. Following installation of the containment North Star will commence with the removal of the existing coating using recyclable steel grit that is continuously recycled

using our ARS recycling systems to complete the cleaning process in a timely manner. North Star will be using multiple blasting crews at various locations on the Sherman Minton Bridge at one time.

As North Star starts work on the upper truss, Kokosing will begin deck rehabilitation on the lower I-64 EB deck. North Star will then fall in behind the Kokosing bridge deck demo to blast and prime structural steel members including those which receive structural repairs. After the replacement of the bridge deck North Star will follow up with the finish coat. This process of deck removal, blast and priming, deck installation and finish coat will continue throughout all phases of construction.

### **c) Approach to Removal, Handling and Processing of Lead Based Paint and other Lead Contaminated Materials**

North Star Painting will abrasive blast and remove the hazardous existing coatings from the structure. All hazardous paint removal will be done in an enclosed engineered approved containment system. In addition to the structure coatings removal, lead paint remaining on the bridge deck slabs will be removed prior to the slabs being removed for crushing and recycling.

All hazardous coating removal is performed by North Star Paintings certified lead removal team. In addition, all hazardous coating removals are supervised and documented under North Stars Painting certified SSPC hazardous competent personal.

At the end of each workday, all hazardous debris is vacuumed up and is stored in approved hazardous bags, labeled with an EPA ID number, and then stored in a locked and secured waste storage area.

At the end of a 90-day period, the hazardous material is picked up and sent to an approved landfill for disposal. A waste manifest that the hazardous material was disposed of properly will be sent to project engineer.

### **d) Bridge Plans**

Conceptual painting containment plans are located in the Appendix. Final containment drawings which are stamped by an engineer licensed in the state of Indiana

will be submitted for Indiana Finance Authority review. Included in the drawings will be all necessary calculations and the material design sheets for the material necessary to construct the containment system. Also included will be load ratings for the staging of equipment necessary to complete the cleaning process of the existing steel.

The containment design will be similar to the containment design North Star has used in the past when they completed the cleaning & painting of the Bob Cummings Lincoln Trail Bridge over the Ohio River in Cannelton, IN. The



only difference will be adding an additional platform above the traffic on the lower deck which will be similar to the platform installed below the lower deck. Pictured above is an example of what the containment will look like while driving on the lower deck. The tarpaulins will only be installed in working areas during cleaning & painting operations.

Abrasive blast equipment will be staged on the bridge deck on the center of the of the arch spans above pier 2 to clean and paint panel points 11-22 on span 1 of the arch truss and panel points 0-11 on span 2 of the arch truss with 2 different blast crews responsible for their own spans. As the deck is being removed and the blasting operation has moved beyond the midway points of the arch truss all equipment staging shall be moved to the embankments of each side of the river to complete the remainder of the blasting operation on the arch trusses. Doing this gives access to Kokosing for the bridge deck removal operation. All other cleaning and painting operations will be conducted as to not interfere with the deck removal and replacement throughout the multiple phases of the project.



# Total Project Duration

■ Form L

Total Project Duration - Form L



VOLUME 2

**FORM L**

**COMPLETION DEADLINES**

**Last Allowable Dates:**

<b>Milestone</b>	<b>Deadline</b>
Substantial Completion Deadline	930 days after issuance of NTP
Final Acceptance Deadline	150 days after Substantial Completion Deadline

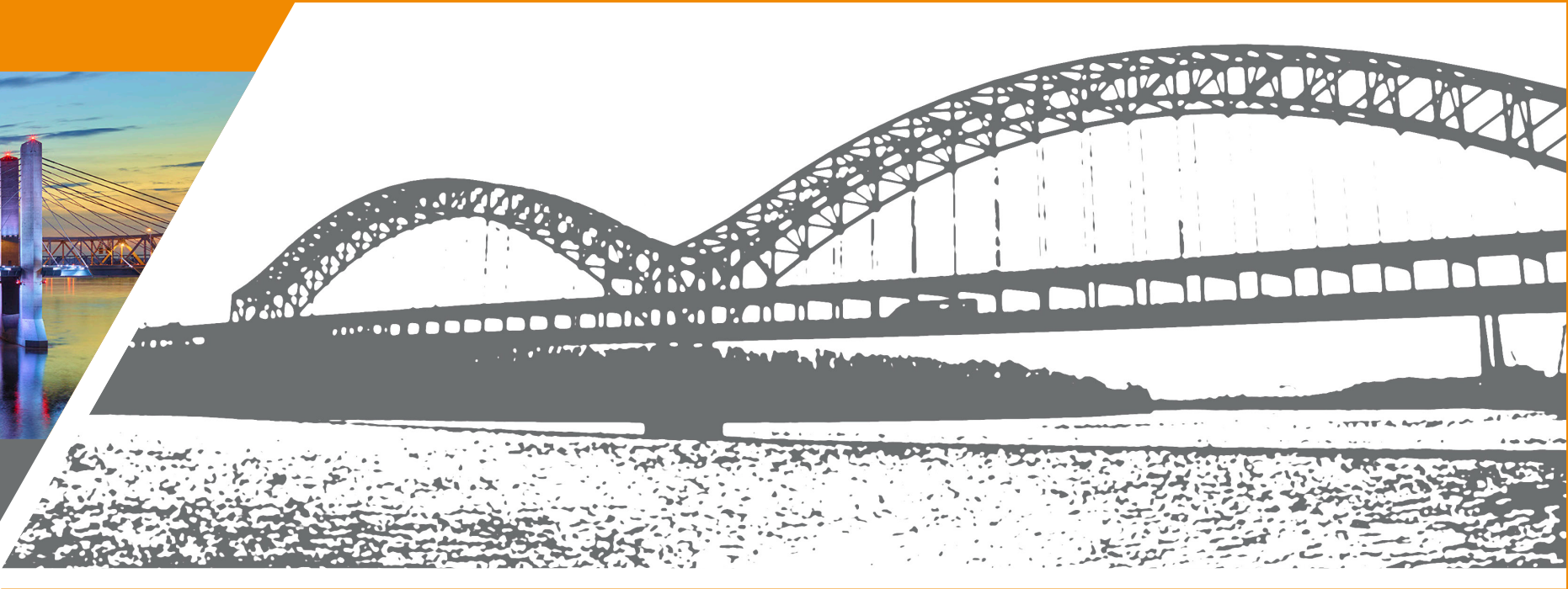
**Proposal Commitment Dates (cannot exceed the above table):**

<b>Milestone</b>	<b>Deadline</b>
Substantial Completion	930 Days



# Volume 2 Appendices

Volume 2  
Appendices



# Key Personnel Resumes



VOLUME 2



## Vince Martini

### PROJECT MANAGER

*With more than 25 years of construction experience, Vince provides expert contract management, subcontractor and supplier relations, CPM schedule development, quality and cost control. His project experience ranges from heavy-grading to urban reconstruction through both the design-bid-build and construction management/design-build delivery methods. Vince works closely with multiple stakeholders to build consensus and ensure that all parties are highly informed throughout the project.*

#### EDUCATION

BS, Civil Engineering,  
University of Cincinnati

#### LENGTH OF SERVICE

26 years

#### REGISTRATIONS/ CERTIFICATIONS

CESSWI Certified

Over 15 discipline-  
specific training  
certifications including  
Trench Safety and  
Traffic Safety

#### UNIQUE QUALIFICATIONS

Local Southeast Indiana  
Resident

Phased Interstate MOT  
Experience

Coordination with RR  
Entities

Work throughout Urban  
Corridors

Previous Work with  
Construction Manager  
Brad Young

#### RELEVANT PROJECT EXPERIENCE

- CVG Airport Hub, Hebron, KY. 3/2019 – Current** Project Manager for Kokosing. Vince is a lead Project Manager on this \$900 Million construction of a new sortation facility at the CVG Airport. This project is being delivered as a Construction Management/Progressive Design Build arrangement between the Owner, Contractor, and Design Team. Vince serves as the Project Manager for the site/civil component of the Construction Management Team, an approximately \$250 Million piece of the overall project. Design has been ongoing throughout the first year of Kokosing's contract, and Vince coordinates between the design and construction teams, manages changes and additional work packages, and ensures that the project schedule is maintained. The physical sitework entails over 7 million-cubic-yards of mass excavation including significant rock blasting, 75-miles of underground utilities including major storm trunk lines, water, sanitary, electric and fuel, and 500,000-square-yards of heavy-duty concrete pavement. This project is being constructed adjacent to, and in some cases within the boundary, of the CVG airport, requiring daily coordination with multiple airport entities, adjacent property owners, and local government agencies.



- Lick Run Valley Conveyance, Cincinnati, OH. 7/2018 – 3/2019** Project Manager for Kokosing. Vince served as a Project Manager on this \$90 million sewer separation project within the Lick Run watershed which is part of the combined sewer overflow reduction strategy to comply with EPA mandated consent decree. Complete separation of all storm sewer flow from the combined sewer system was achieved by installation of a new 1.5-mile box conduit conveyance and replacement of 45 existing storm sewer systems. Major elements include a flood channel, hybrid urban waterway, forebay, utility relocations, vehicular bridges at 5 road crossings, street signals, pedestrian

**VINCE MARTINI**  
*continued*

**CLIENT  
REFERENCES**

**CVG Airport Hub**

Jeremy Smart  
Regional Construction  
Manager  
Owner: Amazon  
2111 7th Ave.  
Seattle, WA 98121  
jersmart@amazon.com  
317.258.3113

**Lick Run Valley  
Conveyance**

Don Lythburg  
Project Manager - MWH  
MWH Constructors  
CM Owners Rep for City  
of Cincinnati  
370 Interlocken Blvd.  
Suite 400  
Broomfield, CO 80021  
Donald.Lythberg@cincinnati-oh.gov  
239.896.5095

**I-275 Reconstruction**

Kelly Wessels, PE  
Project Engineer-ODOT  
Owner: Ohio Dept. of  
Transportation  
505 S. State Route 741  
Lebanon, Ohio 45036  
Kelly.Wessels@dot.ohio.gov  
513.520.2925

lighting, roadway reconstruction, and urban public space elements. Vince managed the site/civil construction team, coordinating with multiple local stakeholders and performed outreach to ensure community buy-in while working on this urban street network.

- **I-75 Reconstruction, Cincinnati, OH. 12/2012 - 6/2018** Project Manager for Kokosing. Vince served as the Project Manager/Lead Field Engineer on this \$91 million complex project that included realignment of 1.61-miles of I-75. Major work included retaining walls, lighting, traffic control, signals, deep underground storm sewers and bridges. Mainline I-75 utilized full-depth asphalt pavement while new and reconstructed ramps were finished with concrete pavement. Major quantities of work included 25,902-linear-feet of drainage, 5 bridges, 19 retaining walls, (9 MSE, 6 CIP, 2 SPL w/tiebacks), 1,000-linear-feet of box culvert, 4 junction chambers, and 3,500-linear-feet of waterline.



- **I-275 Reconstruction, Cincinnati, OH. 3/2007 – 9/2011** Senior Project Engineer for Kokosing. Vince served as the Senior Project Engineer on this \$139 million major reconstruction of seven miles of I-275 on the north side of Cincinnati carrying over 150,000 vehicles per day. The project was split into four phases. The scope of work included 28 bridges, 172,000-cubic-yards of excavation, 41,000-linear-feet of concrete barrier, 16,000-linear-feet of drainage, 543,000-tons of asphalt, 31,000-square-yards of concrete pavement, 3,000-linear-feet of waterline, multiple retaining walls totaling 80,000-square-feet, 325,000-square-feet of noisewall, and 27,000-cubic-yards of structural concrete. Multiple Value Engineering proposals were implemented saving the project over \$1.25 million. Kokosing received both available \$1 million incentive payments for meeting project milestone dates.
- **I-70/75 Interchange Reconstruction, Dayton, OH. 2001 – 2016** Senior Project Engineer for Kokosing. Vince served in this role on a series of adjacent and overlapping projects to completely reconstruction the I-70 and I-75 system interchange on the north side of Dayton. This \$169 million high-visibility, complex urban project known as the “Crossroads of America” increased traffic capacity and improved safety throughout the corridor. Traffic was maintained using intricate MOT patterns that required continual coordination between the contracts. The project constructed 45 retaining walls and 19 bridges, including the 2,400-foot-long Ramp C Flyover Bridge. Multiple incentives were earned for beating allowable bridge closure durations.

## Daniel M. Morris, PE

### DESIGN MANAGER

*Dan has more than 30 years of project management, infrastructure design, highway and site development engineering experience with an extensive background in roadway alignments, hydrology and hydraulics, right of way, erosion and sediment control, maintenance of traffic, signing, pavement marking, quantities, and cost estimates. He brings particular expertise in project management of alternative (Design-Build, P3) delivery of highway and bridge design projects, leading multidisciplinary design teams on large, complex transportation infrastructure projects. He exhibits commitment to quality of design, from initial establishment of design criteria, through strict adherence to rigorous quality management practices. He has a broad background in transportation engineering, understanding potential inter-discipline conflicts, and identifying and proactively resolving design coordination issues. Dan excels at implementing detailed planning of design activities, executing an efficient, proactive, and cost-effective work plan that fosters inter-discipline coordination and minimizes rework.*

#### EDUCATION

MS and BS, Civil  
Engineering, Missouri  
University of Science &  
Technology

#### LENGTH OF SERVICE

34 years

#### REGISTRATIONS/ CERTIFICATIONS

Registered Professional  
Engineer: MO, 1991  
(#24485); IN, 2007  
(#PE10707463); KY,  
2014 (#30355)

PMAP Certificate #0408

#### UNIQUE QUALIFICATIONS

Relevant DB mgt.  
experience, especially  
ORBDC/JFK Truss  
Rehab

Longstanding work with  
John Finke, incl. DB for  
INDOT and KYTC

Work through urban  
corridors, MOT phasing,  
and RR

Multidisc. Team Leader  
(structures, MOT,  
drainage, roadway)

#### RELEVANT PROJECT EXPERIENCE

- **Ohio River Bridges, Downtown Crossing Design-Build, Louisville, KY. 2012-2015.** Design Manager for Jacobs. Jacobs was the lead designer of the design-build team for the Ohio River Bridges Downtown Crossing to improve traffic movement across the Ohio River on the vital I-65 North South Corridor and provide congestion relief and safety improvement within the interchange of I-65, I-64, and I-71 in downtown Louisville. The project included the Kentucky approaches to the downtown Ohio River Bridges, the new I-65 northbound Ohio River Bridge and existing JFK Bridge and the Indiana approaches to the downtown Ohio River Bridges. The new I-65 Ohio River Bridge crossing carries northbound I-65 traffic across the river and extends from the northern end of the Kennedy Interchange from the south in Kentucky to the newly constructed approach spans in Indiana. The new main structure, the Abraham Lincoln Bridge is a three-tower cable stay bridge located parallel and just upstream of the existing JFK Bridge and carries six, 12-foot lanes and two, 12-foot shoulders.

Dan served as the Design Manager for the overall design team, providing direct Owner and Contractor coordination interface with the Jacobs design engineers and eleven design subconsultant companies. Previous to his role as Design Manager, Dan served as the Section 3 Design Manager, for the Indiana approach of the project, extending I-65 northward improving local access to the City of Jeffersonville and the Town of Clarksville. Dan excelled in this design leadership role in part due to his broad engineering background in multi-discipline design, enabling him the ability to understand the potential for interdiscipline effects and conflicts that may result from any given technical decision. By participating in all task force meetings and by facilitating all interdiscipline design checks, and subconsultant management, he verified that the appropriate coordination took place and that conflicts were identified and resolved before plans were released for construction. The Indiana approach included 1.5-miles of I-65 and US 31 mainline reconstruction, 20 bridges, 40 MSE retaining walls, storm sewer network, erosion control (INDNR Rule 5 permits), and maintenance of traffic for six construction stages.



**DANIEL M.  
MORRIS, PE**  
*continued*

## **CLIENT REFERENCES**

### **Ohio River Bridges Downtown Crossing**

Andy Barber, PE  
State Highway Engineer  
Owner: Kentucky  
Transportation Cabinet  
200 Metro Street  
Frankfort, KY 40622  
andy.barber@ky.gov  
502.782.4961

### **California High-Speed Rail**

Jorge Granados  
Design and  
Construction Manager  
Owner: California High-  
Speed Rail Authority  
1111 H Street  
Fresno, CA 93721  
jorge.granados@hsr.ca.  
gov  
559.283.1177

### **I-69, from CR 1400N to US 231**

David Butts, PE  
Pavement Asset  
Management Engineer  
Owner: Indiana  
Department of  
Transportation  
100 N. Senate Ave.,  
Room #N642-PV  
Indianapolis, IN 46204  
dbutts@indot.in.gov  
317.232.3767

- **Interstate 69 Design-Build, From CR 1400N to US 231, Daviess and Greene Counties, IN. 2010-2012.** Deputy Project Manager and Civil/Roadway Lead for Jacobs. 10.5-miles of new interstate in Daviess and Greene counties as the lead design-build consultant teamed with Weber Construction. Dan assisted the Project Manager with facilitating client meetings, design oversight, financial reviews, and schedule adherence for this design-build project; while also leading the roadway and drainage technical disciplines, design, and plan production. Design for Segments 12 & 13 of this new corridor included 26 bridges, mainline highway, interchanges, and extensive embankment and drainage features. Major stream crossings included First Creek, Doan's Creek, Weaver Ditch, Vertrees Ditch, and several smaller tributaries. Additional scope included the preparation of erosion control plans, SWPPP, and INDNR Rule No. 5 permit.
- **California High-Speed Rail Design-Build, CP2-3 Fresno to Bakersfield, Sacramento, CA. 2015-2016.** Segment 1 Design Manager for Jacobs. Jacobs is the lead designer of the design-build team for the California High-Speed Rail project to provide 65 of the first 95-miles of test track infrastructure to set the standards for future statewide highspeed rail integration. To achieve enhanced project oversight and resource efficiency, we organized the alignment into three linear segments of similar scope and complexity. Our three segments permit more efficient coordination of reviews and permitting, greater ability to monitor and control work, quicker response times, optimal use of resources, and more flexibility to work around third-party delays and ROW acquisition needs, all of which mitigate schedule risk. Dan served as the Segment 1 Design Manager for the project, providing Owner and Contractor coordination interface and directing the Jacobs design engineers and geotechnical subconsultant for the northern 20-miles. This segment includes nine bridges carrying the high-speed rail line over local roadways, Caltrans SR-43, BNSF rail, and the Kings River complex. Also included are eleven grade separation structures maintaining connectivity of Fresno County local collectors over the new high-speed rail tracks.
- **DART Cotton Belt Line Design-Build, Dallas, TX. 3/2019-12/2019.** Management and Leadership Roles for Jacobs. The Cotton Belt Regional Design is a Dallas Area Rapid Transit (DART) Design- Build project being delivered by the Archer Western Herzog (AWH) Joint Venture with Jacobs Engineering as the lead designer. The 26-mile Cotton Belt Corridor extends between DFW airport and Shiloh Road in Plano. The project will provide passenger rail connections and service that will improve mobility, accessibility and system linkage to major employment, population and activity centers in the northern part of the DART service area. Dan serves the Jacobs design team in a management and leadership role in Project Controls and Scheduling, providing oversight of earned value method (EVM) financial monitoring and design package delivery schedule adherence and reporting to AWH. Dan evaluates the review cycle and submittal process to streamline functionality and improve efficiencies; coordinating with Segment Managers, Discipline Leads, designers, reviewers, and quality auditors to maintain the design schedule and mitigate schedule risk.



## John Finke, D. Engr., PE, SE, F. SEI

### STRUCTURAL DESIGN LEAD ENGINEER

*John is experienced in structures and bridges comprised of steel and reinforced concrete, pretensioned and posttensioned concrete designs. Bridge analysis and design scope includes seismic analysis and design, strengthening, widening, and rehabilitating, bridge condition inspections and evaluations, computer development for structural analysis and designs, and finite element analysis and structural dynamics. Bridge structures include all manner of bridges having short, medium and long spans. As a designer, he has experience with concept design, bridge type studies and final design of numerous long span bridge types including steel cable stayed, steel truss, steel tied arch and reinforced and post tensioned concrete.*

#### EDUCATION

Doctorate of Engineering, Structural Engineering, Missouri University of Science & Technology

MS, Structural Engineering, Washington University

BS, Civil Engineering, Missouri University of Science & Technology

#### LENGTH OF SERVICE

29 years

#### REGISTRATIONS/ CERTIFICATIONS

Professional Engineer: MO, 1994, #026588; IN, 2011, PE11100226; KY, 2012, 28920

#### UNIQUE QUALIFICATIONS

Major bridge design and construction experience

Bridge re-decking for SB John F. Kennedy Truss Bridge

Doctorate dissertation on Static and Dynamic Characteristics of Tied Arch Bridges

Previous work with Dan Morris

#### RELEVANT PROJECT EXPERIENCE

- **I-40 over the White River, Prairie County, AR. 1/2014– 12/2014.** Engineer of Record for Jacobs. Analysis, design, plan development, and specifications for the five-unit structure, total length of 2,842-feet and carrying EB/WB I-40 over the White River. Each unit is a continuous, composite, steel plate girder with spans ranging from 120- to 148-feet for the approach spans while the main river unit has spans of 265 to 330 feet. The substructure units are open, round column bents founded on 18- to 24-inch concrete filled shell pile. The bridge is located in seismic site class B having an unfactored 1.0 period spectral acceleration coefficient of 0.119 based on a 7 percent chance of exceedance in 75 years. We completed a site-specific seismic analysis yielding a 1.0 period spectral acceleration coefficient of 0.29. The AASHTO seismic site class is D.
- **I-435 South Loop Link Design-Build Project, Kansas City, MO. 1/2018- 5/2018.** Project Engineer for Jacobs. development of TS&L and final Bridge plans for seven bridges spanning both EB and WB I-435 over local roads (two locations), UPRR, and the Blue River. Bridge work included new bridge design and construction as well as rehabilitation and widening of existing structure. Superstructures include prestressed concrete NU girders, steel wide flange and steel plate girder. All substructure units are comprised of open, round column bents founded on steel H-pile or drilled shafts. All work completed in five-month time period. Value of the DB contract is \$75 million.
- **I-4 Ultimate Project-P3, Orlando, FL. 2015-2019.** Engineer of Record for Jacobs. analysis, design, load rating, plan development, and specifications for 8 bridges on the I-4 corridor. Bridges included prestressed concrete FL girders up to 98-inch depths in Section 3 and curved structural steel spans in Section 4. Additional structures include five bridges over Rio Grande Avenue located over a relic sink hole with poor soil conditions and pile lengths up to 400-feet. Bridge foundations include pipe pile design and consideration for a consultant developed, FDOT approved, extreme event for sink holes.
- **Ohio River Bridges, Downtown Crossing, Louisville, KY. 2012-2014.** Section Design Manager for Jacobs. responsible for the execution, performance, coordination, schedule and quality for design and plan development for two main river bridge structures over the Ohio River at Louisville. Responsibilities includes leading coordination and execution of design build pursuit plans and upon win, the final design effort. Coordination

**JOHN FINKE, D.  
ENGR., PE, SE, F.  
SEI**

*continued*

## CLIENT REFERENCES

### Ohio River Bridges Downtown Crossing

Mike Hancock, PE  
Deputy Secretary  
Owner: Kentucky  
Transportation Cabinet  
200 Metro Street  
Frankfort, KY 40622  
mike.hancock@ky.gov  
502.564.5102

### I-435 South Link Loop

Perry J. Allen, Jr., PE  
Asst. District Engineer  
Owner: Missouri DOT  
600 NE Colbern Road  
Lee's Summit, MO  
64086  
perry.allen@modot.mo.  
gov  
816.607.2283

### I-4 Ultimate Project P3

Paul Wabi, PE  
I-4 Ultimate  
Construction Program  
Manager  
Florida Department of  
Transportation  
I-4 HUB Office  
1551 Sandspur Road,  
Suite 200  
Maitland, FL 32751  
[Paul.wabi@dot.state.fl.us](mailto:Paul.wabi@dot.state.fl.us)  
s  
407.670.2341

and scheduling of multiple offices for Jacobs structural design team and subconsultants for the design of a four-span cable stay bridge (303'-750'-750'-303') and a five-span north approach span which includes geotechnical, seismic, wind, electrical, security, ITS, and structural bridge and peer review services. Engineer of Record for the rehabilitation of existing five-span JFK truss bridge (300'-700'-500'-700'-300') and adjacent north approach spans.

- **I-69 Design-Build from CR1400N to US 231 Interchange, Daviess and Greene Counties, IN. 2010-2012.** Structural Project Manager for Jacobs. Design of 10.5-miles of new interstate highway, including 26 bridges and associated access roads and improvements. Responsibilities include project management for development of technical proposal and final engineering calculations, quality, bridge and MSE wall plans preparations, structural cost proposal, coordination of multi-offices Jacobs structural design team, coordination with surveying and geotechnical subconsultants, coordination with design-build contractor project team, and coordination with INDOT project team. Bridges are precast, prestressed I-girders supporting an 8-inch CIP deck. Foundations include extended pile bents, multi-round column bents, and integral endbents. All structures located in a high seismic area where liquefaction issues and poor soil conditions are project wide.
- **Page-Olive Connector Design-Build, St. Louis County, MO. 2009-2011.** Structural Lead for Jacobs. Design-build to extend Rte. 141 north of Olive Blvd to Page Avenue. Originally involved two bridges for a total length of 3,300-feet. The Jacobs team reconfigured the watershed area to reduce the amount of structure necessary to about 1,100-feet, resulting in significant savings. Four bridges resulted for the 1,100-feet; all bridges were typical Missouri DOT precast, prestressed, girders with slabs on precast panels. The substructure consisted mainly of pile bents, which greatly reduced the amount of work necessary in a sensitive environment.
- **MO Route 141 from St. Luke's Hospital to Route 340 (Olive Blvd.), St. Louis County, MO. 1/2009-12/2009.** Deputy Structural Project Manager for Jacobs. preliminary and final design, plans, specifications and estimates for eight bridge structures. Two bridges were Single Point Urban Interchanges with single spans of about 95-feet and widths exceeding 200-feet. A single span (125-feet) over existing Route. 141 and Maryville Creek and several multi-span bridges over Creve Coeur Creek were also included. The multi-span bridges varied in spans and lengths from four to seven spans with the typical span of 85-feet. The project was greatly accelerated and eight bridges were delivered within a five-month period. The project required overseeing staff in multiple offices.

## Brad Young

### CONSTRUCTION MANAGER

*Brad has over 41 years of experience in the construction industry as one of Kokosing's top managers. He has operated in positions of management in both DB and traditional projects - including Twelvepole Creek, Dick Henderson Bridge, and the Hamilton I-71-1.59 Bridge. He brings physical construction expertise in complex bridges, demolition, piling, structural concrete, and beam erection to this project, as well as interpersonal experience in schedule management, substantial phasing, and structure replacement. As construction manager, he will oversee all project construction and have the authority to leverage Kokosing's personnel and equipment resources, ensuring the project is built safely to plans and specifications and on schedule.*

#### LENGTH OF SERVICE

41 years

#### REGISTRATIONS/ CERTIFICATIONS

More than 20 work-type specific certifications, including ODOT-Approved Traffic Control Training, Certified OSHA 30-hour and Supervisory Teambuilding

#### UNIQUE QUALIFICATIONS

Design Build Experience

Multiple Urban Interstate Highway Structures

Marine Construction Experience

Previous Work with US Coast Guard

Previous Work with Project Manager Vince Martini

#### RELEVANT PROJECT EXPERIENCE

- **Mill Rd Bridge Replacement Design-Build, Scioto Co., Ohio. 5/2018 – 9/2018.** Construction Manager for Kokosing. Brad led the on-site construction effort on this project and was responsible for all labor, equipment, productions, safety protocols, and overall success of the project. This \$1.1M design-build project involved construction of a new single span bridge replacement over an environmentally sensitive creek area. This project involved setting Ohio's longest concrete box beams measuring 132 ft long for the 48" deep pre-stressed box beams.
- **Hamilton I-71-1.59 Bridge Rehabilitation (160392), ODOT D8, Cincinnati, OH. 8/2016 – 5/2018** Construction Project Manager for Kokosing: Brad served as Project Manager during this \$10 million two-phase replacement of the bridge deck and parapet walls on the NB and SB I-71 bridges over Eggleston Avenue. Additional major rehabilitation work on the structure included the addition of shear studs, replacement of expansion joints, patching, and painting. An additional ramp bridge was overlaid with super-dense concrete. Associated tie-in work at each end of the bridge was also performed, including electrical, signing, and pavement markings. Some major quantities of work were: 3,700-cubic-yards of concrete, 1,000 sy of overlay and over 1.2M pounds of rebar.
- **Martin Luther King Interchange Design-Build (133026), ODOT D8, Cincinnati, OH. 6/2014 – 8/2016** Structures Superintendent for Kokosing. This \$80M project involved the design and construction of a new full interchange at MLK Drive and I-71. Construction included rehabilitation and widening of I-71, new entrance and exit ramps from MLK Drive, and reconstruction of local city streets. All overpass crossings of I-71 through the heavily traveled "Uptown" community remained open during construction. Brad directly oversaw the construction of several bridges on this project. Major items of work included 100,000-square-feet of retaining walls, 475,000-cubic-yards of earthwork, 18,000-linear-feet of drainage and waterline, and concrete and asphalt paving. Brad was 100% committed to this project for the entire construction period as the Structures Superintendent.
- **I-275 Reconstruction (060414), ODOT D8, Cincinnati, OH. 3/2007 – 10/2009** Structures Superintendent for Kokosing. Brad served as a Structures

**BRAD YOUNG***continued***CLIENT  
REFERENCES****MLK Interchange DB**

Kristen Haus, PE  
Project Engineer-ODOT  
ODOT D8  
505 S. State Route 741  
Lebanon, Ohio 45036  
Kristen.haus@dot.ohio.gov  
513.564.6106

**Mill Rd Bridge DB**

Nathan Prosch, PE  
Project Engineer  
Scioto County  
Engineering Office  
56 OH-728  
Lucasville, OH 45648  
nathan.prosch@sciotocounty.net  
740-259-5541

**HAM-71 Bridge Rehab  
(160392)**

Marvin Lennon  
Project Engineer-ODOT  
ODOT D8  
505 S. State Route 741  
Lebanon, Ohio 45036  
Marvin.Lennon@dot.ohio.gov  
513-320-5413

Superintendent on this \$139 million major four-phase reconstruction of seven miles of I-275 on the north side of Cincinnati carrying over 150,000 vehicles per day. He oversaw the construction of 6 mainline structures of the twin bridges, and one overhead structure. The scope of work included: 28 bridges, 172,000-cubic-yards of excavation, 41,000-linear-feet of concrete barrier, 16,000-linear-feet of drainage, 543,000-tons of asphalt, 31,000-square-yards of concrete pavement, 3,000-linear-feet of waterline, multiple retaining walls totaling 80,000-square-feet, 325,000-square-feet of noisewall, and 27,000-cubic-yards of structural concrete. Kokosing implemented multiple VE proposals, saving the project over \$1.25 million. The company also received both available \$1 million incentive payments for meeting project milestone dates.

- **Dick Henderson Bridge, Project S320-P25-0.05 00, West Virginia Division of Highways, Nitro, WV. 1/2012 – 10/2013** Construction Project Manager for Kokosing: Brad managed all aspects of this \$24 million project which replaced an existing three-span truss bridge over the Kanawha River near Charleston. The project scope included the demolition of an existing 1,400-foot-long structure, including three truss spans over the river totaling 900-linear-feet, and construction of 400-linear-feet of MSE wall. New abutments were constructed, and existing piers strengthened to allow the erection of new 11-foot-tall plate girders and superstructure. The demolition and construction of the new superstructure was completed during an aggressive 10-month closure window.



- **I-64 Twelvepole Creek Bridge Replacement, Huntington, WV 10/2009 – 1/2012** Construction Project Manager for Kokosing: Brad managed all aspects of this \$12 million project which replaced existing twin bridges on I-64 over Twelvepole Creek and multiple surface streets. The existing bridges were demolished in phases to allow for construction of new 10-span, 2,125-foot-long concrete I-beam structures. Over 5,000-cubic-yards of structural concrete and 5.5 million-pounds of rebar were placed on this project. Traffic was maintained on I-64 at all times by using a face-on-face traffic configuration in one bridge while demolishing and reconstructing the other.
- **US 35 Ramp Reconstructions at MOT-75-11.75 (140353), ODOT D7, Dayton, OH. 2014** Structures Superintendent for Kokosing: Brad managed this \$4 million project which improved ramps for 2 bridges crossing Norfolk Southern railroad at the I-75 and US 35 Interchange. This project included structure rehabilitation of MOT-75-11.75 and deck replacement of MOT-75-11.80, as well as roadway improvements on ramps. Traffic was maintained at all times. Major quantities included: 533,000-pounds of rebar, 17,000 welded shear studs, and 1,650-cubic-yards of deck concrete.



## Mark Maday, PE

### DESIGN-BUILD COORDINATOR

*Introduction Mark is a senior project manager and structural engineer technologist specializing in the design of highway bridges and large urban interchanges. His project design and construction experience include bridges, highways, retaining structures, as well as industrial facilities. Mark has successfully performed a variety of roles in all phases of highway and bridge projects including project management and technical leadership; conceptual and environmental studies; execution and coordination of preliminary and final design work; the preparation of contract plans, specifications, and estimates; and providing services during construction. Mark's design-build project delivery experience includes completing his current work as the Design Manager (DM) on the I-480 Valley View Viaduct project in Cleveland Ohio. Other significant DB project experience includes the Virginia Route VA 288 bypass project in Richmond Virginia, the I-670/71 Columbus Crossroads Interchange in Columbus, Ohio and the I-5 HOV lane expansion project in Everett, Washington.*

#### EDUCATION

MS, Civil Engineering,  
University of Colorado

BS, Civil Engineering,  
University of Illinois

#### LENGTH OF SERVICE

30 years

#### REGISTRATIONS/ CERTIFICATIONS

Professional Engineer in  
Seven States

Structural Engineer:  
Illinois, 1990, #081-  
004860

#### UNIQUE QUALIFICATIONS

Previous DB Experience  
on \$200M Project with  
Kokosing

Previous Project  
Manager / Design-Build  
Design Manager

Experience on large,  
geometrically complex,  
multi-level urban  
interchanges

#### RELEVANT PROJECT EXPERIENCE

- I-480 Valley View Viaduct Design-Build, Cleveland, OH. 2017-2020.** Deputy Design Manager for Jacobs. This \$228 million project involves the design and construction of a new steel girder bridge in the median of I-480 across the Cuyahoga River Valley between the existing EB and WB bridges. All three bridges are approximately 4,10-feet-long. After construction of the new center bridge is complete, traffic will be staged to facilitate re-decking of the existing EB and WB bridges along with structural steel and substructure repairs. As the DM, Mark was involved throughout the project pursuit phase and played a key role during the prebid design phase. He attended and presented structural design information at three pre-bid Proprietary Technical Information meetings to the Ohio DOT. Working and coordinating with Walsh construction, Mark managed a team of engineers to create, evaluate and quantify alternatives, developed and created submittals for ATC alternatives, and provided cross discipline coordination among roadway, geotechnical and other technical disciplines. After submission and acceptance of the successful bid proposal by the Walsh DBT, Mark continues as the DM on the I-480 project currently in the final design and construction phases. Specific tasks include daily management and coordination of the DB design team, developing, coordinating and monitoring the project design schedule, managing a large multi-discipline team of design engineers, leading task force meetings, coordinating design activities and details, and coordinating multiple technical disciplines, including roadway, geotechnical, drainage, and MOT.
- I-670/71 Columbus Crossroads Interchange Reconstruction Design-Build, Columbus, OH. 2010-2012.** Structures Task Lead for Jacobs. Mark served as the structures task lead for the redesign and reconstruction of the I-70 / I-670 system interchange in Columbus, Ohio. The \$200 million project included 22 bridges and the redesign of 26 retaining walls. the project was awarded to Kokosing Construction with CH2M HILL (now Jacobs) designated as Kokosing's lead engineering design partner. Design and construction began in 2011. Design was completed in 2013 and construction was completed in 2014. Mark was collocated with the Kokosing project team and the Ohio DOT in a dedicated project office and led a project structure design team consisting of

## MARK MADAY

*continued*

## CLIENT REFERENCES

### **I-480 Valley View DB**

Kirk Gegick, PE  
Project Manager- ODOT  
Owner: Ohio Dept. of  
Transportation  
5633 Brecksville Road  
Independence, OH  
44131

[Kirk.Gegick@dot.ohio.gov](mailto:Kirk.Gegick@dot.ohio.gov)

or

216.584.4032

### **Mitchell Interchange Bridge Deck Overlays and Repairs**

Dean Fitz, PE  
Wisconsin DOT  
Southeast Region  
141 NW Barstow Street  
Waukesha, WI 53188

[Dean.Fitz@dot.wi.gov](mailto:Dean.Fitz@dot.wi.gov)

414.750.2014

### **WisDOT Wind-Loaded Structures, Process, Policy and Standards**

William (Bill) Oliva, PE  
Chief of Structures  
Development Section  
Wisconsin DOT Bureau  
of Structures

4822 Madison Yards  
Way, 4<sup>th</sup> Floor South,  
PO Box 7916

Madison, WI 53707

[William.Oliva@dot.wi.gov](mailto:William.Oliva@dot.wi.gov)

or

608.266.0075

CH2M HILL (now Jacobs) and subconsultant design staff. His responsibilities included directing design and plan production work, coordinating design work with other design disciplines, adhering to project QC requirements, providing QC reviews, coordination with the contractor, and providing coordination and interaction with the Ohio DOT.

- **Mitchell Interchange Bridge Deck Overlays and Repairs, Milwaukee, WI. 2016-2019.** Project Manager for Jacobs. The project included developing construction contract bid plans, specifications and estimates for bridge deck overlays and maintenance repairs for 22 bridges and three cut-and-cover tunnel structures within WisDOT's Mitchell Interchange (I-94 / I-43 / I-894) in Milwaukee, Wisconsin. Specific tasks included conducting site visits to identify and confirm needed repairs; and preparation of Structure Survey Reports, development of preliminary and final plans and construction contract specifications. The effort included extensive MOT development with plans and specifications that required all work to be performed within overnight lane closures during periods of expected low traffic volume. All construction contract documents were delivered to WisDOT on time in March of 2019. Construction of the project was successfully completed in 2019 – 2020.
- **WisDOT Wind-Loaded Structures, Process, Policy and Standards, Madison, WI. 2017-2020.** Project Manager for Jacobs. This project involved transitioning and updating the design and details of WisDOT's standard highway sign structures to the current AASHTO LRFD structural design specifications. Mark initially lead the Jacobs team to perform an evaluation and assessment of WisDOT's current policies and procedures related to sign structure design development. This included questionnaire development to solicit input from WisDOT and external industry stakeholders (consultants, contractors and fabricators). After completion of the Phase 1 Summary Report that included recommendations for moving forward, WisDOT elected to proceed with the development of all new standard sign structure designs and details in accordance with the AASHTO LRFD design specifications. Jacobs developed structural models, design calculations and standard details drawings for a range of standard sign structures that is expected to cover and be utilized for the vast majority of Wisconsin DOT's sign structures that will be required on future highway projects across the state.
- **Zoo Interchange Reconstruction, Milwaukee, WI. 2011-2013.** Senior Project Manager and Senior Bridge Technologies for Jacobs. The Zoo System Interchange in Milwaukee connects I-94 / USH 45 / I- 894 and is the busiest interchange in Wisconsin serving 300,000 vehicles per day. The project included 65 bridge structures with over 1,000,000-square-feet of bridge deck and over 10-miles of retaining walls. As a Senior Project Manager and Senior Bridge Technologist, Mark led the bridge design team and served as the bridge design team Quality Manager. He provided bridge design coordination with WisDOT, technical direction to the bridge project team, cross discipline design coordination, design reviews and verification, construction specifications, and subconsultant management.

## Debra Herrmann, AICP

### DESIGN QUALITY MANAGER

*Debra more than 40 years of planning, design and QC experience on complex, largescale transportation projects across the United States. She recently served as Design Quality Manager for the I-65 Louisville-Southern Indiana Ohio River Bridge (ORB) Downtown Crossing Design-Build and Design Quality Manager for the I-4 Ultimate Project in Florida, and currently serves as the Design Quality Manager for Segment 1 of the California High Speed Rail DB project and the DART Silver Line Regional Rail System DB in Dallas, TX.*

#### EDUCATION

MS and BA,  
Environmental Science,  
University of Virginia

#### LENGTH OF SERVICE

30 years

#### REGISTRATIONS/ CERTIFICATIONS

American Institute of  
Certified Planners,  
#8983

#### UNIQUE QUALIFICATIONS

Design Quality Manager  
on mega design-build  
projects

Hands on experience  
with five different  
design-build projects

Lead Design Quality  
Manager on three  
design-build projects

#### RELEVANT PROJECT EXPERIENCE

- **Ohio River Bridges, Downtown Crossing Design-Build, Louisville, KY. 2013–2014.** Lead Quality Design Manager for Jacobs. Project entailed the design and construction of a new cable-stayed bridge crossing of the Ohio River from downtown Louisville, KY, to Jeffersonville, IN. It included 46 bridges and associated walls, roadway, drainage and ground improvements on the KY and IN approaches, and rehabilitating the existing truss crossing of the Ohio. Project included several complex interchanges, a signature cable stay bridge crossing the Ohio River, maintenance of traffic for two interstates and side streets, and reconstructing the existing bridge. Completed design phase on schedule and conducted hundreds of quality audits. Quality Assurance activities completed involved 7,882 work hours, finishing \$3.4M under budget.
- **I-4 Ultimate Project-P3, Orlando, FL. 2014–2015.** Lead Design Quality Manager for Jacobs. The project extends more than 21 miles from Orange County to Seminole County and is the largest P3 project in the United States. Bridge improvements include 13 widened, 74 replaced, and 53 added, totaling 140 permanent bridges. In addition, two temporary bridges are maintaining traffic during construction phasing. In addition, 15 major interchanges will undergo complete reconstruction. New Express Lanes with dynamic toll pricing are being added to the center of I-4, two in each direction, and the general use and auxiliary lanes are being rebuilt. Project included several complex interchanges, and maintenance of traffic for the interstate and side streets in a highly congested area. In addition to serving as Lead Design Quality Manager, Debra was responsible for developing the Design Quality Control Plan, including design quality assurance/quality checking processes and procedures and plan implementation. Conducted hundreds of quality audits.
- **DART Silver Line Regional Rail System Design-Build (formerly called Cotton Belt), Dallas, TX. 2019-Current.** Design Quality Manager (DQM) for Jacobs. Jacobs is the lead design firm for the Archer Western Herzog Design Build joint venture to construct a 26-mile commuter rail system. The Cotton Belt Corridor extends between DFW Airport and Shiloh Road in Plano to provide passenger rail connections and service in the northern part of the DART Service Area. In the role of DQM, she is responsible for implementing all aspects of the Design Quality Plan for the Cotton Belt project. This includes verification of the implementation of the QA/QC plan of each design discipline and design subconsultant. Debra leads the audit team and performs audits on design submittal packages, reviewing design records to verify conformance with the written DQP, and provides training to design QC and QA staff.

**DEBRA  
HERRMANN, AICP**  
*continued*

#### **CLIENT REFERENCES**

##### **Ohio River Bridges, Downtown Crossing Design-Build,**

Andy Barber  
State Highway Engineer  
Andy.Barber@ky.gov  
502-782-4961

Heather Shepherd  
Administrative Assistant  
Heather.Shepherd@ky.gov  
502-782-4961

##### **DART Silver Line Regional Rail System Design-Build**

Reza Shirmanesh, P.E.  
DART Project Manager  
DART (Dallas Area Rapid  
Transit)  
1401 Pacific Ave., Dallas,  
Texas 75038  
RShirman@dart.org  
214-749-3278

##### **I-4 Ultimate Project-P3, Orlando, FL. 2014–2015**

Loreen Bobo  
FDOT  
1551 Sandspur Rd.  
Maitland, FL 32751  
Loreen.bobo@dot.state.fl.us  
407-670-2341

- **California High-Speed Rail Design-Build, Construction Package 2-3, Fresno to Bakersfield, Sacramento, CA. 2016– 2017** Segment Design Quality Manager for Jacobs. Construction Package 2-3 is the second significant construction contract executed on the Initial Operating Section of the high-speed rail program. The construction area extends approximately 60-miles from the terminus of Construction Package 1 at East American Avenue in Fresno to one mile north of the Tulare-Kern County line and includes approximately 36 grade separations in the counties of Fresno, Tulare and Kings, including viaducts, underpasses and overpasses. Duties include coordinating with the Contractor's quality personnel and auditing and report the design team's compliance to the requirements of the contract documents as stipulated in the Design Quality Management plan.
- **Dulles Corridor Metrorail Silver Line, Phase 1, Herndon, VA. 2007–2011.** Manager of Projects for Jacobs. The Dulles Corridor Metrorail Project extends the existing Washington Metropolitan Area Transit Authority (WMATA) system approximately 23-miles through the Dulles International Airport and into Loudon County including 11 new stations. Jacobs is providing Program Management Support Services (PMSS) to the program manager, MWAA. Specific responsibilities include program planning, project concept development, program coordination, annual budget preparation, right-of-way acquisition, constructability and bid-ability reviews, engineering/design oversight, and construction management. As Manager of Projects, Debra made sure the project met client expectations for staffing, change orders, customer satisfaction, quality, schedule, budget, and safety. She worked with the project manager to resolve issues to achieve client satisfaction and help manage field engineering. Debra also conducted client surveys and served as the Designated Project Executive for this on-time and on-schedule project.
- **WMATA New York Avenue Station Design-Build, Washington, DC. 2004–2006.** Project Manager for Jacobs. The \$65M at-grade transit station design-build project was built on a combination of existing railroad embankment and bridges and served as WMATA's first in-fill station. As the Designer of Record to the constructor JV, Jacobs used resources from five of its civil engineering offices as well as local subconsultants. Debra worked successfully to resolve multiple issues related to change orders and claims.
- **Blue Line Extension to Largo, Addison Route, Track Work and Systems Design-Build Project, Washington, DC. 2004-2008.** Manager of Projects for Jacobs. This design-build project included a 3.1-mile extension of the subway system beyond the current terminal station location. It entailed design and construction of both the inbound and outbound tracks in cut and cover tunnels, covered box structures, and on steel plate girder aerial structures. The project also included all systems work associated with a rail extension, including electrical, ventilation, drainage, power and traction, signals, track work, and lighting. As Manager of Projects, Debra made sure the project met client expectations for staffing, change orders, customer satisfaction, quality, schedule, budget, and safety. Worked with Project Manager to resolve issues to achieve client satisfaction and help manage field engineering. Conducted client survey and served as Designated Project Executive for this on-time and on-schedule project.



## Michael B. Leavitt, PE

### CONSTRUCTION QUALITY MANAGER

*Mr. Leavitt, as the Field Services Division Manager of DLZ's Indianapolis office, is responsible for managing construction services for the central and southern Indiana region. With over 30 years of experience in transportation, infrastructure and building construction and materials he is a recognized leader in construction inspection and construction administration. He has served in key roles in many of the complex high-profile projects in Indiana such as I-69 and the Lucas Oil Stadium. As a former City Engineer and INDOT Project Engineer, he is proficient in design, contract document preparation, bidding procedures, construction inspection, development of standard operating procedures, fiscal and capital management, materials testing and construction documentation using AIA, CSI and INDOT methods.*

#### EDUCATION

B.S., Civil Engineering,  
Rose-Hulman Institute  
of Technology

#### LENGTH OF SERVICE

30 years

#### REGISTRATIONS/ CERTIFICATIONS

Professional Engineer:  
Indiana, 1995,  
#19500033  
Kentucky, 2002, #22807  
Ohio, 2002, #67437  
Michigan, 2003,  
#620050192

30 Hour Construction  
Safety, OSHA

Confined Space Entry,  
OSHA

#### UNIQUE QUALIFICATIONS

PSMJ Project Manager  
Training

Change Order  
Management, INDOT

Project  
Engineer/Supervisor,  
INDOT

INDOT SiteManager  
Design-Build Experience

#### RELEVANT PROJECT EXPERIENCE

- **Profile Parkway Extension. Bloomington, Indiana. 2020.** Project Engineer for DLZ responsible for construction inspection and administration. \$5.2M Roadway Extension Inspection
- **Indiana American Water – Water Main Installation Inspections. Johnson County, Indiana. On-going Project** – Project Manager for DLZ for construction observation and administration along with inspection of over 25 developer water main installations.
- **INDOT Contract R-377991 I-69 Section 5. Bloomington, Indiana. 2015 - 2019.** Construction Manager and Field Engineer for DLZ. Responsible for processing of pay applications, negotiating change orders, final quantities, and management of the design build inspection team. \$234M Roadway Inspection
- **Newfields Multi-Use Path, GT-17-002, Indianapolis, Indiana. 2019.** Project Manager for DLZ for construction observation and administration. \$630,500 Trail Inspection
- **Thoroughfare Structural Rehab, ST-19-016, Indianapolis, Indiana 2019.** Project Manager for DLZ for construction observation and administration. \$5.8M Roadway Inspection
- **SR32/Nucor Road Area Sanitary Sewer System, Crawfordsville, Indiana. 2018 – 2019.** Project Manager for DLZ for construction observation and administration. \$4.8M Sanitary Inspection
- **Hancock County Bridge 71 and 93 Replacements, Greenfield, Indiana. 2018.** Project Manager for DLZ for construction observation and administration. \$1.2M Bridge Replacements Inspection
- **Franklin and Southport Intersection Improvement, ST-41-011, Indianapolis, Indiana. 2018.** Project Manager for DLZ for construction observation and administration. \$778,000 Roadway Inspection
- **Holt Road and Kessler Bridge Repairs, BM-23-074, Indianapolis, Indiana. 2018.** Project Manager for DLZ for construction observation and administration. \$346,000 Bridge Inspections

**MICHAEL LEAVITT,  
PE**  
*continued*

## CLIENT REFERENCES

### **Profile Parkway Extension**

Lisa Ridge  
Public Works Director  
501 N Morton St  
Suite 216  
Bloomington, IN 47404  
lridge@co.monroe.in.us  
812-349-2555

### **INDOT Contract R- 377991 I-69 Section 5**

James Culbertson  
INDOT - District  
Construction Area  
Engineer  
185 Agrico Lane  
Seymour, IN 47274  
jculbertson@indot.in.gov  
812-524-3744

### **Indiana American Water – Water Main Extensions**

Miquel Morales  
Project Manager -  
Indiana American Water  
Company  
153 N. Emerson Avenue  
Greenwood, IN 46143  
Miquel.moreles@amwater.com  
317-885-2444

- **Boone County Bridge 13 Replacement, Lebanon, Indiana. 2014.** Project Manager for DLZ for construction observation and administration. \$20,000 Bridge Inspection
- **R-34793 Wayfinding Signage, Kokomo, Indiana. 2014.** Project Manager for DLZ for construction observation and administration. \$398,000 Roadway Signage Inspection
- **B-31764, Johnson County Bridge 23 Replacement, Franklin, Indiana. 2013.** Project Manager for DLZ for construction observation and administration. \$635,000 Bridge Replacement Inspection
- **INDOT Seymour District On-Call, Various Locations in the Seymour District. 2006 – 2012.** Contract Manager for DLZ responsible for providing staffing with appropriate qualifications, experience, equipment and overall QC/QA. ~\$34M Various roadway, traffic, and bridge inspections

## Shane Santos

### MAINTENANCE OF TRAFFIC DESIGN-BUILD COORDINATOR

*Shane has 18 years of experience in the transportation industry specifically managing Maintenance of Traffic within work zones on some of the busiest urban interstates in the Midwest. His expert knowledge of creating safe work zones for both the traveling public and construction workers is paramount to ensuring a successful project for all stakeholders. Shane will work closely with the MOT Design Lead, the IFA, and other government entities to ensure that the Traffic Management Plan is properly implemented and provide proper supervision of the on-site MOT activities to ensure safety, conformance, and compliance with all regulations. He will draw from his previous Design-Build experiences to provide valuable constructability reviews and plan design refinements.*

#### LENGTH OF SERVICE

18 years

#### REGISTRATIONS/ CERTIFICATIONS

Certified Worksite Traffic Supervisor (WTS), Ohio

OSHA 30 HR

CPR/First Aid Training

#### UNIQUE QUALIFICATIONS

Previous MOT Coordination on DB projects

Experience with high ADT urban interstate corridors

Multiple traffic coordination efforts between interstate-to-interstate interchanges

#### RELEVANT PROJECT EXPERIENCE

- **I-71 Widening Project, Columbus, OH. 8/2020 – Current.** MOT Coordinator for Kokosing. Shane has been responsible for initiating MOT activities and getting traffic placed into the Phase 1 alignment as the project's construction is just getting started. This \$49 million project is to provide over 5-miles of 3<sup>rd</sup> lane widening to I-71 entering Columbus on the south side of the city. I-71 carries over 50,000 daily vehicles which will be maintained in order to facilitate over 250,000-cubic-yards of excavation, two sets of twin bridge widenings, and interchange reconstruction with US-62.
- **I-70 Reconstruction Design-Build, Columbus, OH. 2/2018 – 8/2020.** MOT Coordinator for Kokosing. Shane led Kokosing's on-site MOT effort for this Design-Build project. Responsible for the implementation of all traffic schemes and providing input to the design-build team when corrections were warranted in the field in order to maintain a safe construction zone. This \$50 million project was for the rehabilitation of six lanes of I-70 heading into Columbus and carrying over 70,000 average daily vehicles and trucks. With nearly 7-miles of reconstruction and removal of 18-inch existing concrete pavement, the project required over 285,000-cubic-yards of excavation. Traffic was placed into a contra-flow traffic scheme for two construction seasons to complete work and traffic had to be placed back into original alignment each season before the winter to maintain snow removal operations.
- **IR 270 Widening Project, Columbus, OH. 1/2017– 2/2018.** MOT Coordinator for Kokosing. As MOT Coordinator, Shane was responsible for the successful implementation of the MOT plan on the project, which included implementation of an MOT scheme revised by a contractor led Value Engineering Proposal to reorder the traffic phases to save the project time and money. This \$61 million project was for the rehabilitation and widening of an 8-mile stretch of I-270 on the west side of Columbus. Work on the project included full-depth roadway widening, rehabilitation and



**SHANE SANTOS***continued***CLIENT  
REFERENCES****I-71 Widening**

Bryce Wagner  
Transportation Engineer  
ODOT D6  
400 E. William Street  
Delaware, Ohio 43015  
bryce.wagner@dot.ohio.  
gov  
740-816-3814

**I-70 DB****Reconstruction**

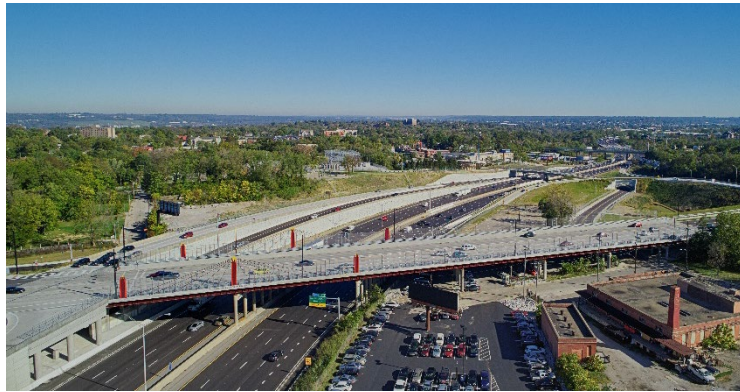
Jeff Vance, PE  
Project Engineer  
ODOT D6  
400 E. William Street  
Delaware, Ohio 43015  
Jeffrey.vance@dot.ohio.  
gov  
740-815-6029

**I-270 Columbus  
Widening**

John Kesling  
Transportation Engineer  
ODOT D6  
400 E. William Street  
Delaware, Ohio 43015  
John.kesling@dot.ohio.  
gov  
614-375-0831

widening of 3 sets of mainline twin bridges, median barrier installation, an asphalt mill and fill of 3-4 lanes in each direction of travel, and construction of 4 noise walls on the east side of the northbound travel lanes. Major quantities include 129,000-square-yards of pavement removal, 210,300-linear-feet of underdrain installations, 380,600-tons of asphalt pavement, 107,900-square-feet of noise wall, 145,000-pounds of structural steel, and 581,700-pounds of reinforcing steel

- **Martin Luther King Interchange Design-Build, Cincinnati, Ohio. 10/2016 – 1/2017.** MOT Coordinator for Kokosing. Shane was responsible for on-site MOT operations on this Design-Build project. This project involved the design and construction of a new full interchange at MLK Drive and I-71. Construction consists of rehabilitation and widening I-71, new entrance and exit ramps from MLK Drive, and reconstruction of local city streets. All overpass crossings of I-71 have remained open during construction through the heavily travelled “Uptown” community. Major items of work include 100,000-square-feet of retaining walls, 475,000-cubic-yards of earthwork, 18,000-linear-feet of drainage and waterline, and concrete and asphalt paving.



- **I-75 Reconstruction, Cincinnati, OH. 8/2014 - 10/2016** MOT Coordinator for Kokosing. Shane led Kokosing’s on-site MOT effort for this highly complex and phased traffic project with over 150,000 average daily vehicles. The MOT for the project was unique since the job was Design-Bid-Build but the MOT was a contractor led Design-Build plan. This was a \$91 million complex project that included realignment of 1.61-miles of I-75. Major work included retaining walls, lighting, traffic control, signals, deep underground storm sewers and bridges. Mainline I-75 utilized full-depth asphalt pavement while new and reconstructed ramps were finished with concrete pavement. Major quantities of work included 25,902-linear-feet of drainage, 5 bridges, 19 retaining walls, (9 MSE, 6 CIP, 2 SPL w/tiebacks), 1,000-linear-feet of box culvert, 4 junction chambers, and 3,500-linear-feet of waterline.

- **Previous Employment**

Prior to working with Kokosing, Shane worked for A&A Safety, a traffic control specialist subcontractor providing striping, traffic control setups and removals, sign installations, waterblasting, and MOT consultation. Shane managed the MOT operations on many heavily traveled interstate projects during his employment. Responsible for labor, materials, specifications conformance, and safety on the jobsite.



## Ioannis Kalouris

### STRUCTURAL STEEL PAINTING MANAGER

*Ioannis has worked at North Star Painting CO. for 14 years while having been around the bridge painting industry for 20 years. He has worked on 14 major structures over various bodies of water including one over the Mississippi river and seven over the Ohio river that included building various types of containments and platforms to complete large cleaning & painting operations. With having been involved in industrial painting much of his life Ioannis was able to complete his NACE CIP Peer review at the age of 25.*

#### EDUCATION

Attended Youngstown State University STEM college

#### LENGTH OF SERVICE

14 years

#### REGISTRATIONS/ CERTIFICATIONS

ATSS Traffic Control Supervisor

HAZCOM/GHS Training System  
First Aid/CPR

SSPC C-3/C-5 Competent person training for lead abatement

SSPC QCS Quality control supervisor training

NACE International Coating Inspector Training & Certification Program Peer Review (#50839)

Painters Local 476 Member

#### UNIQUE QUALIFICATIONS

NACE Coating Inspector Program (CIP) Levels 1 & 2

SSPC CAS – Coating Application Specialist Program

Prior painting experience on 7 bridges over the Ohio River

#### RELEVANT PROJECT EXPERIENCE

- **I-70, Wheeling, WV. 09/2019– Current.** Structural Steel Painting Project Manager for North Star Painting. Ioannis is the Chief Project Supervisor for the painting portion of this project. The total project reconstruction value was \$215 Million. Ioannis was the Lead Estimator for the painting package during the bid process. The project consists of the rehabilitation of a 12-mile stretch of Interstate 70 beginning in Ohio which consist of 27 bridges one of which is a single arch span that crosses the Ohio River (Fort Henry Bridge) that will receive a SSPC SP-10 abrasive blast clean, 3 coat paint system, and various concrete protective coatings on the abutments, piers, & parapets. While also having majority of the concrete bridge decks replaced North Star has been cleaning & priming the top flanges on the bridges that are receiving new bridge decks. The project has approximately 1.4 million-square-feet of steel surfaces to be cleaned and painted.

Ioannis coordinates between both the General Contractor and the third-party

consultant on the project which consists of a complex schedule and coordination between the GC and all other Sub Contractors on the project while also managing 6 different cleaning & painting crews currently on the project.



- **Korean War Veterans Mem. Bridge, New Martinsville, WV. 09/2018– 10/2019.** Structural Steel Painting Manager for North Star Painting. Ioannis had complete supervision oversight of this \$8 million painting project which consisted of Installing a class 2A containment, complete SSPC SP-10 Abrasive Blast Cleaning, and application of an OZEU 3 coat paint system this Bridge is a through truss spanning across the Ohio River connecting Ohio & West Virginia.



- **Matthew Welsh Bridge, Mauckport, IN. 07/2017– 11/2018.** Structural Steel Painting Manager for North Star Painting. Ioannis served as the Project Supervisor for this \$7 million painting project across the Ohio River that

## CLIENT REFERENCES

### WV I-70 Bridges Rehab

Alexander Bradley Cottrell  
WVDOT Highway Engineer  
40 Fourfox Ave.  
Wheeling, WV 26003  
Alexander.b.cottrell@wv.gov  
(304)-830-1836

### Korean War Veterans Memorial Bridge

Marty Carder  
Area Supervisor - WVDOT  
1 DOT DR.  
Moundsville, WV 26041  
Marty.w.carder@wv.gov  
(304)-771-9967

(WV I-70 & Korean War Bridge Projects)  
Donavon Cunningham  
Senior Associate, Field Services Manager  
Stantec Consulting  
111 Elkins St  
Fairmont, WV 26554  
Donavon.cunningham@stantec.com  
681-753-2359

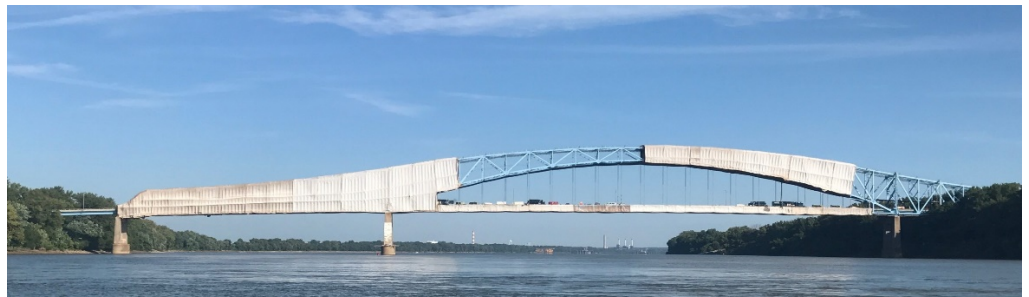
### Bob Cummings Lincoln Trail Bridge

Doug Smith  
Construction Engineer  
INDOT - Vincennes District  
3650 Old US HWY 41,  
Vincennes, IN 47591  
(812)-840-0246  
Dougsmith@indot.in.gov

Russell Clark  
Senior Coatings Inspector - GPI  
1317 Johnsbury CT  
Roanoke, VA 24019  
Rclark@gpinet.com  
434-826-0075

connected Indiana & Kentucky. This project involved installing a class 2A containment on the structure to conduct SSPC SP-10 abrasive blast cleaning and then applying a 3 coat IZEU paint system. Ioannis was involved in the bidding process, overseeing all submittals for quality control and containment drawings, and overseeing all cleaning and painting operations utilizing three separate work crews to complete the project

- **Bob Cummings Lincoln Trail Bridge, Cannelton, IN. 07/2016– 10/2017.** Structural Steel Painting Manager for North Star Painting. Ioannis served as project manager for this \$12 million project a steel through arch bridge spanning across the Ohio River connecting Kentucky & Indiana. This project included building a complex platform and containment to clean & paint using SSPC SP-10 abrasive blast, an IZEU paint system, & chemical cleaning & coating the arch span suspender cables.



- **Sunshine Bridge, St. James Parish, LA. 02/2014– 10/2015.** Structural Steel Painting Project Supervisor for North Star Painting. Ioannis was the Project Supervisor & the Quality Control Supervisor on the \$25 million Sunshine Bridge project. The Bridge was a 4-Tower cantilever through truss and one under deck truss span spanning across the Mississippi River in St. James Parish, LA. The total project length was over 3,500-feet-long with approximately 1.2 million-square-feet of structural steel to be contained using a type 2A containment, abrasive blast cleaned to SSPC SP-10, and coated with an OZEU 3 coat paint system. During the project Ioannis oversaw two blasting crews containing two painting crews and one rigging crew and three quality control inspectors. Due to the nature of the project location being near the Gulf of Mexico multiple smaller containments were used to be able to quickly and efficiently remove the tarpaulins and heavy equipment from the bridge had a tropical storm entered into the gulf, or a storm with winds sustaining over 45mph.

### Other Major Projects Involved with

- Jennings Randolph Bridge Over Ohio River - Chester, WV
- Shippingport Bridge Over Ohio River- Shippingport, PA
- Judge J. Frank Graff Bridge Over Allegheny River – Kittanning, PA
- William S. Ritchie Jr. Bridge Over Ohio River– Ravenswood, PA
- Parker Bridge Over Allegheny River – Parker, PA
- Interstate 80 Deer Creek Bridge Over Deer Creek– Clarion County, PA
- Interstate 80 Allegheny River Bridge Over Allegheny River – Parker, PA
- Interstate 80 Clarion River Bridge Over Clarion River– Clarion, PA

## Brandon Lowe, PE

### PUBLIC INFORMATION COORDINATOR

*Brandon has served as Project Manager for numerous rural and urban highway projects for the Kentucky Transportation Cabinet over the past twenty-three years. His entire career has been spent in highway design with an emphasis on geometric layout, traffic analysis, plan development and public involvement. His role today includes overseeing the day to day management of highway projects for DLZ with a focus on design build pursuits. Having participated in the NEPA process for numerous projects over the years, Brandon has been able to interact with the public and convey information in an accurate and understandable manner.*

#### RELEVANT PROJECT EXPERIENCE

##### EDUCATION

B.S. Civil Engineering  
University of Kentucky,  
1997

##### LENGTH OF SERVICE

23 years

##### REGISTRATIONS/ CERTIFICATIONS

Professional Engineer  
Kentucky, 2003, #23095

##### UNIQUE QUALIFICATIONS

KYTC Project Managers  
Bootcamp Xpress  
(2017)

- **Ohio River Bridges - Downtown Crossing, Louisville, KY. 5/2010 – 9/2016.** Project Engineer for DLZ and Roadway Lead for project team. As part of a four-consultant design team, we were responsible for 25% of the design and development of final plans on this enormous design/build endeavor demanding expertise in handling complex and evolving design constraints. Brandon played a significant role in a design process having specific goals to be accomplished requiring innovation, timely revisions and tailoring the schedule to meet critical milestones.
- **KY 627 Interchange, Madison County, Kentucky. 2/2010 – 10/2020.** Project Manager for DLZ. Evaluated range of alternative interchange configurations using a traffic simulation model and coordinated with companion project to reconstruct frontage roads along east side of I-75. Existing interchange has an existing truck stop, fast food restaurant and service station in close proximity to the interchange along the east side and a major route (US 25) paralleling I-75 along the west side. Access management, public involvement, coordination of the two projects and consideration for a major interstate connector (US 27 – I-75 connector between Nicholasville and I-75) were significant concerns in the eventual selection of the best interchange for current and future traffic needs.
- **US 60 Bypass Extension, Daviess County, KY. 01/2003 – 01/2013.** Project Engineer for DLZ. Developed alternatives for Phase I design and implemented an extensive public involvement effort which included a citizen's advisory group. In Phase II, Brandon managed the design effort of this 4.9-mile project which was let in two construction sections. The project included 4.5 miles of ramps, eight bridges and three box culverts.
- **KY 922 (Newtown Pike), Lexington, KY. 01/2005 – Current.** Project Manager for DLZ. The project consists of Phase I and Phase II Design for the widening of Newtown Pike from the north limits of the New Circle Road Interchange to the I-64 – I-75 Interchange. Project included an accelerated section to provide an auxiliary lane from the Common Route (I-64/I-75) to Aristides Boulevard. DLZ coordinated an extensive stakeholder process in Phase 1 design for this gateway route to downtown Lexington.
- **KY 16, Kenton County, KY. 01/1998 – 01/2014** Project Engineer for DLZ– Responsible for developing alternate alignments, grades, cross sections, and level of service analysis for this 5.1-mile Phase I Design project. Also



**BRANDON LOWE,**  
**PE**  
*continued*

## CLIENT REFERENCES

### **KYTC, Central Office Ohio River Bridges**

Mike Hancock, PE  
Deputy Secretary  
200 Mero Street  
Frankfort, KY 40622  
mike.hancock@ky.gov  
502.564.5102

### **KYTC, District 7 KY 627 Interchange**

Rob Sprague, PE  
Project Development  
Manager  
800 Newtown Court  
Lexington, KY 40511  
robin.sprague@ky.gov  
859.246.2355

### **KYTC, District 5 KY 1450**

Matt Bullock, PE  
Chief District Engineer  
8310 Westport Road  
Louisville, KY 40242  
matt.bullock@ky.gov  
502.210.5400

responsible for estimating quantities for construction cost, preparing preliminary plans, and coordinating public involvement.

- **US 127 Reconstruction – Clinton County, KY. 2012-Present.** Project manager responsible for Phase II design of a new alignment for US 127 to improve geometry and safety along the corridor. The project involves the reconstruction of US 127 from just south of Aaron Ridge Road traveling north 2.7 miles to approximately Salt Lick Road in some very rough terrain. This is one section of an overall improvement to US 127 that will extend north to the Jamestown Bypass.
- **KY 1450 Blue Lick Road – Jefferson County, KY (5-247) 2000-Present** Project Engineer/Manager – Brandon was responsible for development of detailed roadway design, drainage, traffic and traffic management details after project substantially revised in response to cost and impacts, including requirements for significant utility relocations within project corridor. Project was proposed as a five-lane reconstruction, but significantly revised through a Practical Solutions approach to ensure some level of improved roadway was provided to the correct roadway, drainage, and poor roadside safety conditions.
- **KY 1072 Extension (Fidelity Connector) – Kenton County, KY.** Project Engineer – Developed alignments and grades for Phase I and Phase II Design for this 1.9-mile project which includes a single lane roundabout. Also responsible for the preparation of Preliminary and Right of Way plans.
- **US 60 - US 62 – McCracken / Livingston Counties, KY. 1997- Present** Project Engineer/Manager - Developed digital terrain models from DGN data files. Assisted in developing alternate alignments, grades, and cross sections using InRoads design software for preliminary plans for three kilometers of four-lane divided highway including US 60/US 62 Interchange. Responsible for property research and property acquisition lines for preliminary plans.
- **US 421/KY 626 (Leestown Road) – Franklin County, KY 2000-2010** Project Engineer – This project involved the realignment of 3.6 miles of five-lane arterial highway east of Frankfort. Four alternate alignments were studied for both rural and urban typical sections. Responsible for development of digital terrain modeling and assisted in alignment studies, geometric calculations and capacity analysis of US 421 including the rehab of the US 60 / US 421 Interchange. Assisted with design coordination of a change from a rural roadway section to an urban roadway section after right of way was acquired and utilities relocated.
- **US 68 (Campbellsville Bypass) – Taylor County, KY 1999-2000:** Assistant Project Engineer – Developed studies and preliminary plans for two alternative layouts for 6.3-miles of the four-lane Southern Campbellsville Bypass. Responsible for the development of digital terrain modeling, and assisted in alignment studies and geometric calculation and layout. Prepared Preliminary Plans, performed capacity analysis, and construction cost estimates.



## Samantha Wickizer

### ENVIRONMENTAL COMPLIANCE MANAGER

*Samantha is a stormwater quality professional with over 5 years of experience. She was responsible for implementation and oversight of the regulatory aspects of construction permitting (Rule 5), industrial storm water permitting (Rule 6), and municipal separate storm sewer permitting (Rule 13) with IDEM. Her responsibilities in this role included inspections of regulated entities, review of regulatory documents including SWPPP, SWP3, and municipal ordinances, as well as audits of municipal programs to evaluate compliance with the applicable statutes. Samantha transitioned to Metric Environmental from IDEM and has operated as the Stormwater Quality Manager for several Level 1 INDOT projects.*

#### EDUCATION

Bachelor of Science,  
Biology

Lamar University, Texas

#### LENGTH OF SERVICE

5 years

#### REGISTRATIONS/ CERTIFICATIONS

Certified Erosion,  
Sediment, and  
Stormwater Inspector  
(CESSWI), Envirocert  
International, Inc.

INDOT Construction  
Storm Water Certified  
Inspector

MS4 Compliance &  
Enforcement Certified  
Inspector (CECI),  
NPDES Training  
Institute

Indiana Association for  
Floodplain and  
Stormwater  
Management

#### UNIQUE QUALIFICATIONS

Experience on similar  
Ohio River crossings  
DB projects for ORB  
East End and  
Downtown

#### RELEVANT PROJECT EXPERIENCE

- **INDOT, SR 1 Slide Correction- Dearborn County, Indiana. June 2020-Current.** Environmental Compliance Manager for Metric Environmental. The SR 1 Slide repair project involves remediation of a roadway slide that exists within the floodway of Tanner's Creek. Metric developed the Stormwater Quality Control Plan (SWQCP), and Samantha has operated as the Stormwater Quality Manager (SWQM) for the project to provide guidance and oversight for implementation of erosion and sediment control measures to assist in compliance efforts to meet the requirements of Rule 5 and the IDNR Construction in a Floodway permits.
- **INDOT, SR 54 Slide Correction- Greene County, Indiana. August 2020-Current.** Environmental Compliance Manager for Metric Environmental. The SR 1 Slide repair project involves remediation of a roadway slide that exists along challenging terrain in a rural part of Greene County. Metric developed the Stormwater Quality Control Plan (SWQCP), and Samantha is operating as the Stormwater Quality Manager (SWQM) for the project to provide guidance and oversight for implementation of erosion and sediment control measures to assist in compliance efforts to meet the requirements of Rule 5 and the 401/404 permits.
- **INDOT, Louisville Southern Indiana Ohio River Bridge (LSIORB) East End – Clark County, Indiana. October 2015-April 2017.** Environmental Compliance Manager for IDEM. The LSIORB East End construction project involved construction of four miles of new-terrain highway from SR 62 to the Ohio River. Samantha was involved in monthly inspections of the project to evaluate compliance with the SWPPP, erosion and sediment control standards, as well as compliance with the 401 WQC for impacts to wetlands and streams.
- **INDOT, I-69 Section 5 Corridor – Monroe & Morgan County, Indiana. Summer 2016-Fall 2019.** Environmental Compliance Manager for IDEM. Samantha worked in conjunction with Doug Wolf to perform quarterly environmental compliance inspections along the entirety of the I-69 Section 5 corridor for evaluation of compliance with the SWPPP, erosion and sediment control standards, as well as compliance with the 401 WQC for impacts to wetlands and streams.
- **City of Seymour, US 50 Sanitary Sewer Interceptor Project – Jackson County, Indiana. October 2018-October 2019.** Environmental Compliance

**SAMANTHA  
WICKIZER***continued***CLIENT  
REFERENCES****I-69 Section 5 Corridor,  
Level 2**

Greg Couch, CISEC  
Stormwater Specialist –  
INDOT  
100 N Senate Ave.  
Room N642-ES  
Indianapolis, IN 46204  
gcouch@indot.in.gov  
317-232-4770

**INDOT SR 1 Slide  
Correction, Level 1**

Lance Erhart  
Section Engineer –  
INDOT  
185 Agrico Lane  
Seymour, IN 47274  
LErhart@indot.IN.gov  
812-525-6869

**INDOT SR 262 Slide  
Correction, Level 1**

Robert Daugherty  
Project Supervisor –  
INDOT  
185 Agrico Lane  
Seymour, IN 47274  
rdaugherty@indot.IN.gov  
812-525-0637

Manager for IDEM. The US 50 sanitary sewer project involved the installation of nearly six miles of new sanitary sewer line including force main and gravity sewer as well as a new lift station just south of the city. Numerous challenges existed for the project including high water tables and numerous stream crossings. Samantha coordinated with local officials to perform inspections in conjunction with the contractor, Atlas Excavating. She also provided compliance assistance for improving the self-monitoring of the project.

- **IU Health, IU Health Bloomington Hospital Regional Academic Health Campus – Bloomington, Indiana. March 2018-October 2019.** Environmental Compliance Manager for IDEM. This project consisted of a 75-acre development of a new IU Health Hospital and associated health campus at IU Bloomington. Samantha worked in conjunction with the Indiana University MS4 program to review the SWPPP submittals for the project. She performed routine regulatory inspections and provided guidance to the contractors for maintaining compliance standards for Rule 5.
- **American Development, Woodridge Estates – Dearborn County, Indiana. September 2015-November 2019.** Environmental Compliance Manager for IDEM. Woodridge Estates is a multi-phase subdivision development along 126 acres of ridgetop property in Dearborn County. Samantha was initially called to the property following receipt of complaints for sediment impacts into receiving streams. She provided guidance to the developer to implement SWPPP alterations and installation of erosion and sediment control practices to help bring the site back into compliance

## Ashley Hagan

### SAFETY MANAGER

*Ashley has served as Kokosing's Safety Manager on many large-scale civil projects including interstate reconstructions and Design-Build projects. In her capacity as Site Safety Manager, Ashley works with management to implement the company safety program onsite. She is responsible for administering the daily workings of the safety program including Pre-Task Planning as it relates to safety, Job Hazard Analysis, worker safety training, new-hire orientations, daily Morning Action Plan (MAP) meetings, and ensuring that all workers have the necessary training and certifications to perform their project roles*

#### EDUCATION

Bachelors of Science,  
Occupational Safety  
and Health, Murray  
State University

#### LENGTH OF SERVICE

10 years

#### REGISTRATIONS/ CERTIFICATIONS

Safety Trained  
Supervisor

OSHA 30 Hour  
Construction – General  
Industry

USACE EM 385-1-1 16  
Hour

Blood Borne Pathogen  
DOT Certified Collector

First Aid/CPR

#### UNIQUE QUALIFICATIONS

American Society of  
Safety Engineers  
Member

Experience in urban  
interstate projects with  
maintenance of traffic

Exemplary Safety  
Record

#### RELEVANT PROJECT EXPERIENCE

- **CVG Airport Hub, Hebron, KY. 4/2019 – Present.** Safety Manager for Kokosing. Ashley is a Safety Manager on this \$900 Million construction of a new sortation facility at the CVG Airport. This project is being delivered as a Construction Management/Progressive Design Build arrangement between the Owner, Contractor, and Design Team. Design has been ongoing throughout the first year of Kokosing's contract, and Ashley responsibilities include implementing the company safety program, leading the project safety team meetings, perform inspections to ensure the projects are meeting the company safety and health requirements, and conduct training. The physical sitework entails over 7 million-cubic-yards of mass excavation including significant rock blasting, 75-miles of underground utilities including major storm trunk lines, water, sanitary, electric and fuel, and 500,000-square-yards of heavy-duty concrete pavement.

This project is being constructed adjacent to, and in some cases within the boundary, of the CVG airport, requiring daily coordination with multiple airport entities, adjacent property owners, and local government agencies.



- **Lick Run Valley Conveyance, Cincinnati, Ohio. 7/2018– 4/2019.** Safety Manager for Kokosing. Ashley served as a Safety Manager on this \$90 million Metropolitan Sewer District of Greater Cincinnati sewer separation project within the Lick Run watershed which is part of the combined sewer overflow reduction strategy to comply with EPA mandated consent decree. Complete separation of all storm sewer flow from the combined sewer system was achieved by installation of a new 1.5-mile box conduit conveyance and replacement of 45 existing storm sewer systems. Major elements include a flood channel, hybrid urban waterway, forebay, utility relocations, vehicular

**ASHLEY HAGAN**  
*continued*

## CLIENT REFERENCES

### **I-75 Toledo Reconstruction**

Eric Laeng, PE  
Project Engineer  
ODOT D2  
317 East Poe Rd.  
Bowling Green, OH  
43402  
eric.laeng@dot.ohio.gov  
(419) 409-0752

### **Lick Run Valley Conveyance**

Jeff Schaber  
MSDGC Project Lead  
Inspector  
1081 Woodrow Street  
Cincinnati, OH 45204  
Jeffrey.schaber@cincinnati-oh.gov  
513.708.5351

### **Martin Luther King Interchange Design- Build**

Kristen Haus, PE  
Engineer  
Ohio Department of  
Transportation  
3600 OH-132, Amelia,  
OH 45102  
Kristen.haus@dot.ohio.gov  
513.564.6106

bridges at 5 road crossings, street signals, pedestrian lighting, roadway reconstruction, and urban public space elements.

- **Erie Express Interceptor Sewer, Springfield, Ohio. 6/2017-7/2018.** Safety Manager for Kokosing. Installation of new 42-inch Gravity Sewer for Sanitary Flow into a newly Constructed Pump Station housing 6 vertical centrifugal pumps to convey the flow through twin 18-inch Force Main out of the pump station eventually turning back into 42-inch gravity sanitary flow to the Springfield Waste Water Treatment Plant. 50% of this work performed in 25-30 feet deep excavations of which 20-25 feet is solid dolomite rock. The primary purpose of the Erie Express Sewer is to convey sanitary flows from the northern part of the city directly to the Springfield Wastewater Treatment Plant (WWTP) where it can be properly treated.
- **Martin Luther King Interchange Design-Build, Cincinnati, Ohio. 5/2017–10/2017.** Safety Manager for Kokosing. This project involved the design and construction of a new full interchange at MLK Drive and I-71. Construction consists of rehabilitation and widening I-71, new entrance and exit ramps from MLK Drive, and reconstruction of local city streets. All overpass crossings of I-71 have remained open during construction through the heavily travelled “Uptown” community. Major items of work include 100,000-square-feet of retaining walls, 475,000-cubic-yards of earthwork, 18,000-linear-feet of drainage and waterline, and concrete and asphalt paving.



**US-35/I-75 Ramp, Dayton, Ohio. 5/2017– 10/2017.** Safety Manager for Kokosing. Partial pier, abutment, structural steel and deck replacements OF Ramp B1 and B8 at the I-75 and US-35 interchange in Dayton, OH. Project is built in two phases with B1 & B8 in separate phases.

- **I-75 Phases A, B, and C, Toledo, Ohio. 3/2016– 4/2017.** Safety Manager for Kokosing. Kokosing reconstructed and added capacity through a six mile stretch of I-75 in downtown Toledo. Work items included the reconstruction of 20 structures and construction of three new bridges, as well as roundabouts, barrier walls, and retaining walls. Major quantities included 62,250-square-feet of noise wall, 11,500-linear-feet of concrete barrier, 1,700-cubic-yards of retaining wall concrete, 202,000-square-yards of cement stabilized subgrade, 400,000-cubic-yards of excavation, 12 million-pounds of structural steel, and 27,500-linear-feet of storm sewers and piling. The centerpiece of the project was the demolition and reconstruction of the 2,000-foot-long, 60-foot-tall I-75 mainline bridge spanning over Berdan Avenue, the Ottawa River, the Norfolk Southern Railroad, and Detroit Avenue.



## Gary Obert, PE

### PROJECT SCHEDULER

*Gary is a project manager in Kokosing's Heavy Highway Division. His major responsibilities include CPM scheduling using Primavera Project Planner, estimating projects, cost control, material procurement, negotiating and pricing change orders, coordinating subcontractors, submittals, RFI's, and quantity tracking.*

#### EDUCATION

Bachelor of Science,  
Civil Engineering, The  
Ohio State University

#### LENGTH OF SERVICE

21 years

#### REGISTRATIONS/ CERTIFICATIONS

Professional Engineer  
Certification, State of  
Ohio

Certified Erosion,  
Sediment, & Storm  
Water Inspector

Certified Worksite  
Traffic Supervisor  
(WTS), Ohio

CPR/First Aid Training

#### UNIQUE QUALIFICATIONS

Kokosing's Primavera  
Systems Manager

Multiple Design Build/  
Alternative Delivery  
Project Scheduler

Experience with  
complex bridge  
construction and  
schedules

#### RELEVANT PROJECT EXPERIENCE

- **CVG Airport Hub, Hebron, KY. 4/2020 – Present.** Project Scheduler for Kokosing. This project is being delivered as a Construction Management/Progressive Design Build arrangement between the Owner, Contractor, and Design Team. Gary managed the complex site/civil components of the schedule from both the Construction Managers role and as the General Contractor on this \$900 Million construction of a new sortation facility at the CVG Airport. The site/civil work is approximately a \$250 Million piece of the overall project. Design has been ongoing throughout the first year of Kokosing's contract, and Gary coordinates between the design and construction teams, manages changes and additional work packages, and ensures that the project schedule is maintained. The physical sitework entails over 7 million-cubic-yards of mass excavation including significant rock blasting, 75-miles of underground utilities including major storm trunk lines, water, sanitary, electric and fuel, and 500,000 square-yards of heavy-duty concrete pavement. This project is being constructed adjacent to, and in some cases within the boundary, of the CVG airport, requiring daily coordination with multiple airport entities, adjacent property owners, and local government agencies.



- **CR-13A Brown County Bridge Replacement, Brown Co., Ohio. 4/2018 – 11/2019.** Project Manager for Kokosing. Gary led the construction project engineering effort on this project and was the main communication contact with ODOT. This project involved construction of a new three span bridge over Upper Eagle Creek next to an existing covered bridge and replaced a small bridge on North Pole Road.
- **Martin Luther King Interchange Design-Build, Cincinnati, Ohio. 12/2016 – 2/2018.** Project Manager for Kokosing. Gary led the construction project engineering effort on this project and helped manage the CPM schedule. This project involved the design and construction of a new full interchange at MLK Drive and I-71. Construction consists of rehabilitation and widening I-71, new

**GARY OBERT, PE**  
*continued*

**CLIENT  
REFERENCES**

**Brown Co. Bridge  
Replacement**

Brent Davis  
Transportation Manager  
ODOT D9  
650 Eastern Avenue,  
Chillicothe, Ohio 45601  
Brent.davis@dot.ohio.gov  
937.515.2214

**Martin Luther King  
Interchange Design-  
Build**

Kristen Haus, PE  
Engineer  
ODOT D8  
505 S. State Route 741  
Lebanon, Ohio 45036  
Kristen.haus@dot.ohio.gov  
513.564.6106

**I-75 Dayton  
Reconstruction Ph 2**

Scott LeBlanc, PE  
District Construction  
Engineer - ODOT D8  
505 S. State Route 741  
Lebanon, Ohio 45036  
Scott.Leblanc@dot.ohio.gov  
937.497.6742

entrance and exit ramps from MLK Drive, and reconstruction of local city streets. All overpass crossings of I-71 have remained open during construction through the heavily travelled "Uptown" community. Major items of work include 100,000-square-feet of retaining walls, 475,000-cubic-yards of earthwork, 18,000-linear-feet of drainage and waterline, and concrete and asphalt paving.

- I-75 Downtown Reconstruction Phase 2, Dayton, Ohio. 9/2012 – 11/2016.** Lead Project Engineer/Project Manager for Kokosing. This reconstruction reconfigured all interchanges within a 0.91-mile stretch of I-75. Work included seven bridges, six MSE walls, 12,000-linear-feet of storm drainage, 40,000-square-yards concrete pavement, 24,000-cubic-yards of asphalt pavement, 101,000-linear-feet of CIP Piling, and 368,000-square-feet of sheet piling. Gary also managed the schedule on the Downtown Dayton Reconstruction Project which was completed one year ahead of schedule while effectively balancing his role as the Project Engineer.
- Jeremiah Morrow Bridge, Warren County, OH. 7/2010 – 9/2012.** Project Engineer for Kokosing. Gary was responsible for the schedule, contracts, budgets, RFIs, and change orders of this cast-in-place segmental box structure over the Little Miami River Valley just north of Cincinnati. The project constructed twin 2,252-foot-long structures, reaching 239-feet over the valley floor. Major quantities included 40,000-linear-feet of piling, 2.2 million-pounds of post-tensioning, and 47,000-cubic-yards of structural concrete. Also included were two miles of approach roadway requiring 80,000-cubic-yards of excavation and 85,000-tons of asphalt paving.
- I-275 Reconstruction, Cincinnati, Ohio. 1/2007 – 7/2010.** Project Engineer for Kokosing. Gary served as the Project Engineer on this major reconstruction of seven miles of I-275 on the north side of Cincinnati carrying over 150,000 vehicles per day. The project was split into four phases including 28 bridges, 172,000-cubic-yards of excavation, 41,000-linear-feet of concrete barrier, 16,000-linear-feet of drainage, 543,000-tons of asphalt, 31,000-square-yards of concrete pavement, 3,000-linear-feet of waterline, multiple retaining walls totaling 80,000-square-feet, 325,000-square-feet of noise wall, and 27,000-cubic-yards of structural concrete. Multiple VE proposals were implemented saving the project over \$1.25 million. Kokosing received both available \$1 million incentive payments for meeting project milestone dates.
- I-264 Waterson Expressway Reconstruction and Widening, Louisville, Kentucky. 1/2003 – 2/2005.** Project Engineer for Kokosing. Gary served as Project Engineer and Scheduler on the fast-track reconstruction of the I-264 Waterson Expressway in Louisville. The project included the reconstruction of 60 bridges, placement of 525,000-square-yards of concrete pavement and the reconstruction and widening of 24 mainline bridges. Kokosing completed all of this during an aggressive 500 calendar day no-excuses timeframe.



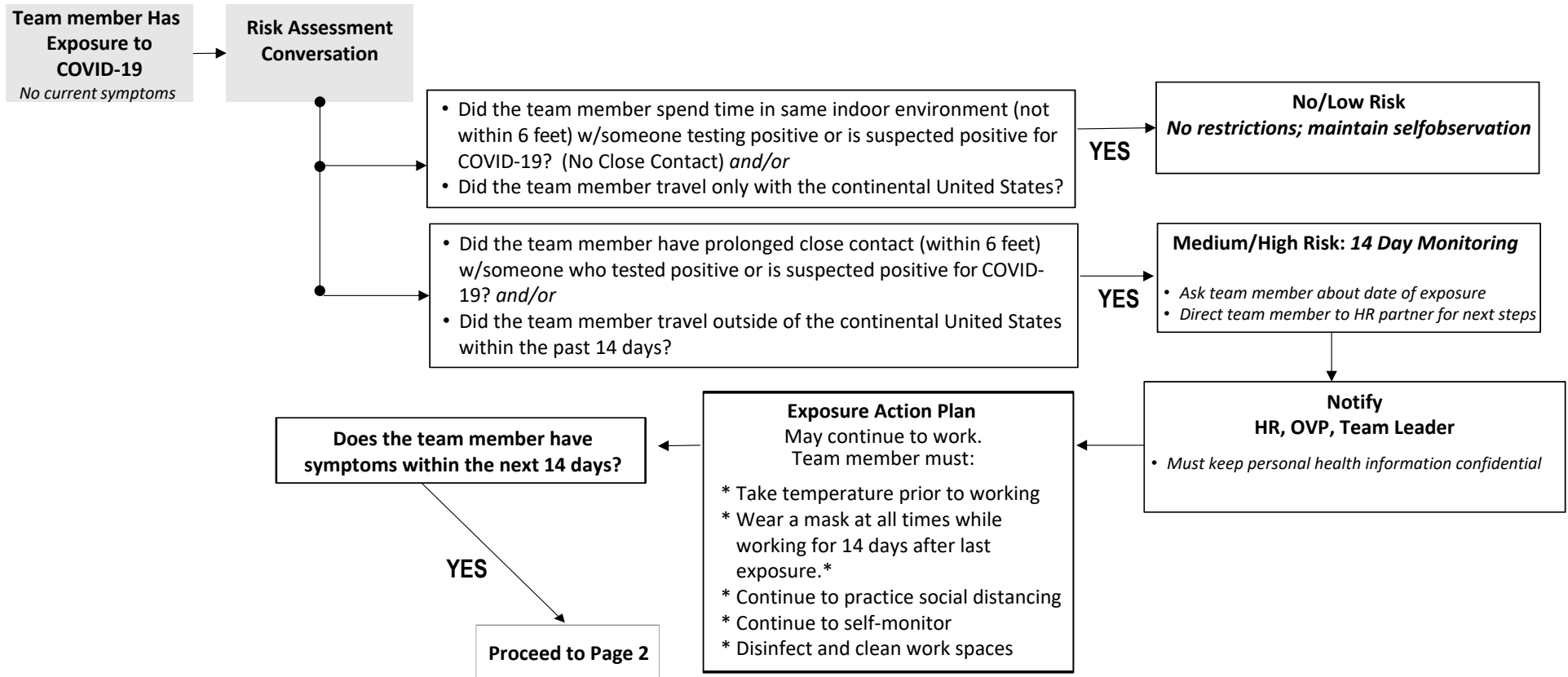
## Technical/Design Drawings, Graphs and Data



VOLUME 2



# Team Member with Exposure Who is Not Presenting Symptoms



**Close contact** is defined as being within approximately 6 feet of COVID-19 case for a prolonged period of time; close contact can occur while caring for, living with, visiting, or sharing a healthcare waiting area or room with a COVID-19 case or having direct contact with infectious secretions of a COVID-19 case (e.g., being coughed on)

**Suspected positive** is defined as someone who receives direction from a medical provider that a patient may have COVID-19 but no testing is available; Symptoms of COVID-19 (fever, cough, shortness of breath) with negative flu test results

**Note:** Written Authorization NOT required to return to work unless team member has been on FMLA

Updated 4/22/2020



\*Required to wear mask/face covering. No mask, not allowed to work.



# Team Member Is Sick

## Does Team Member Show Symptoms Of Acute Respiratory Illness

- Fever
- Cough
- Shortness of breath
- Chills, repeated shaking with chills
- Headache
- Sore throat
- Loss of taste and/or smell
- Difficulty breathing
- Muscle pain or body aches
- Vomiting or diarrhea
- Pressure in chest
- New confusion
- Inability to wake or stay awake
- Bluish lips or face
- Congestion or runny nose

\*Any known exposure\*

YES

## Risk Assessment Conversation

### While at work did the sick team member:

- Walk by anyone.
- Were they in the same indoor environment with anyone, but not within 6'. 48 hours prior to onset of symptoms.
- Were they in the same outdoor environment with anyone but not within 6'. 48 hours prior to onset of symptoms.

YES

### Low COVID-19 Risk to Others

- Send the sick team member home immediately
- Instruct the sick team member to contact a medical professional
- The sick team member should stay at home until symptom/fever free for 24 hours, and at least 10 days have passed since symptoms first appeared or until cleared by medical professional
- Inform HR / Team Leader
- Letter indicating no close contact

### Medium/High COVID-19 Risk to Others Immediate Isolation

- Send the sick team member home immediately for isolation
- Instruct the sick team member to contact a medical professional
- Remember that team member **does not have a confirmed COVID-19 case yet**
- Let the sick team member know we respect their confidentiality; personal healthcare information is protected. Do not share the quarantined team member's name or health details with team members other than direct supervisor, HR, VP, Team Leader
- Letter indicating close contact notified

YES

### While at work did the sick team member:

- Have close prolonged contact with anyone (within 6'). 48 hours prior to onset of symptoms.

NO

Treat as you would normally treat team member illness

### Team member should remain at home until the following:

- They have been cleared by their medical provider to return to work; a written note is not required **OR**
- Follow CDC guidance for human healthcare providers
  - At least 24 hours have passed since recovery defined as resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath); and,
  - At least 10 days have passed since symptoms first appeared

### Exposure Action Plan

- Notify Operations/Implement Cleaning
- Incident tracking and reporting (prior 48 hours)
- Team Communications (Work with HR/OVP)
- Anyone in close contact wear face covering for 14 days

### Notify HR, OVP, Team Leader

- Must keep personal health information confidential
- Notify HR, OVP, Team Leader

**Close contact** is defined as being within approximately 6 feet of COVID-19 case for a prolonged period of time; close contact can occur while caring for, living with, visiting, or sharing a healthcare waiting area or room with a COVID-19 case or having direct contact with infectious secretions of a COVID-19 case (e.g., being coughed on)

Updated 8/6/2020

**Suspected positive** is defined as someone who receives direction from a medical provider that a patient may have COVID-19 but no testing is available; Symptoms of COVID-19 (fever, cough, shortness of breath) with negative flu test results

**Note:** Written Authorization NOT required to return to work unless team member has been on FMLA