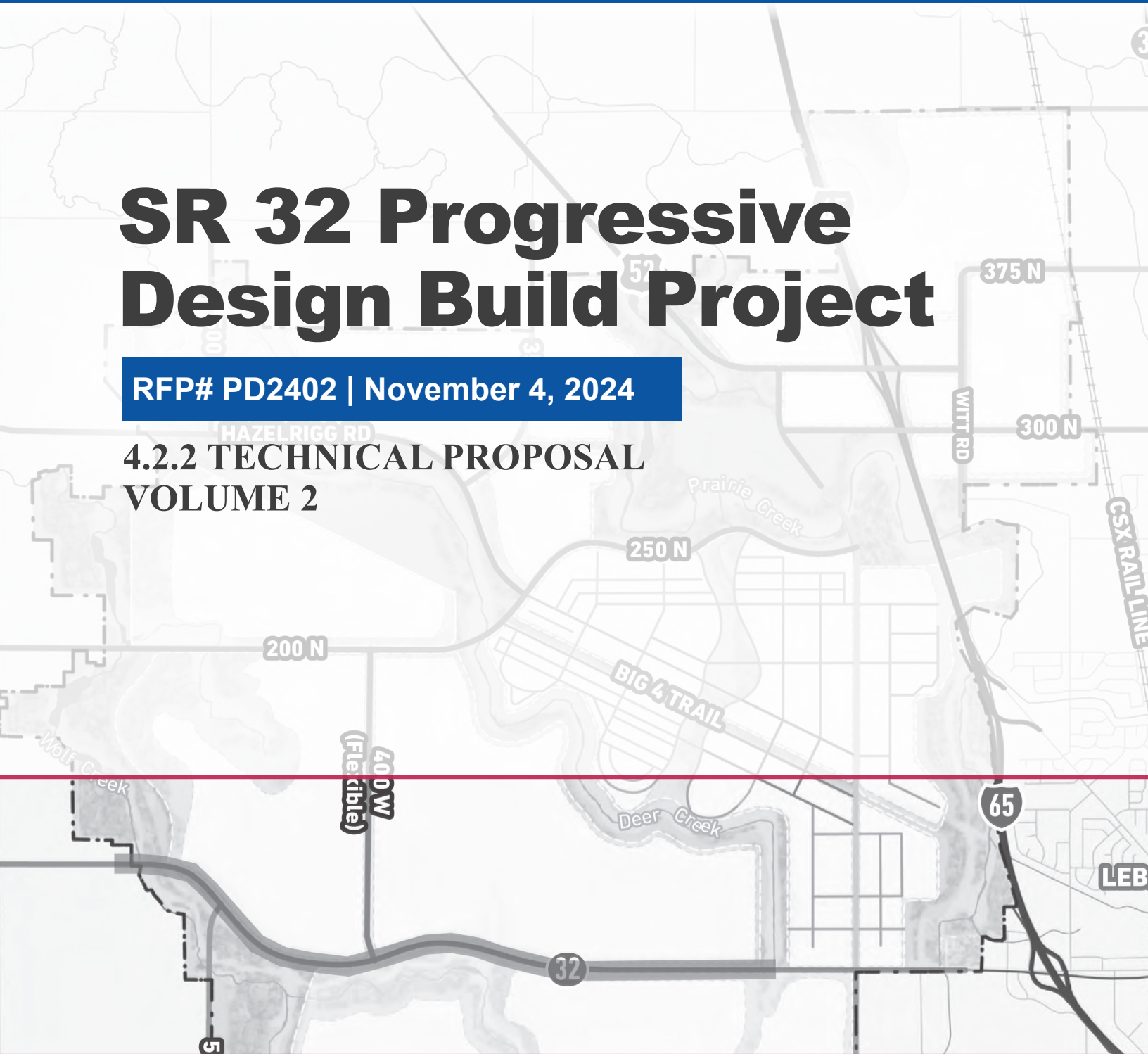


# SR 32 Progressive Design Build Project

RFP# PD2402 | November 4, 2024

## 4.2.2 TECHNICAL PROPOSAL VOLUME 2



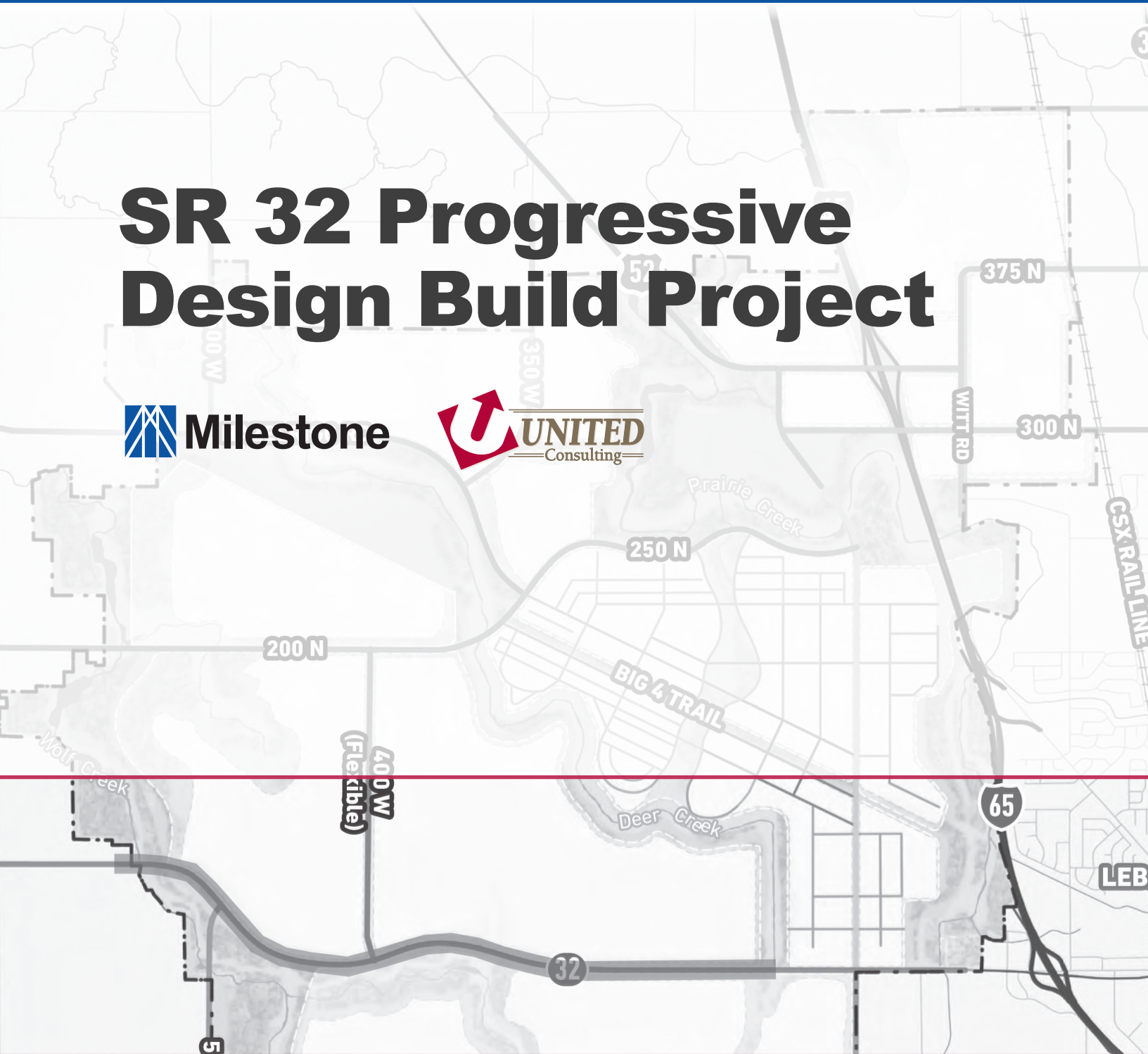
# SR 32 Progressive Design Build Project



**Milestone**

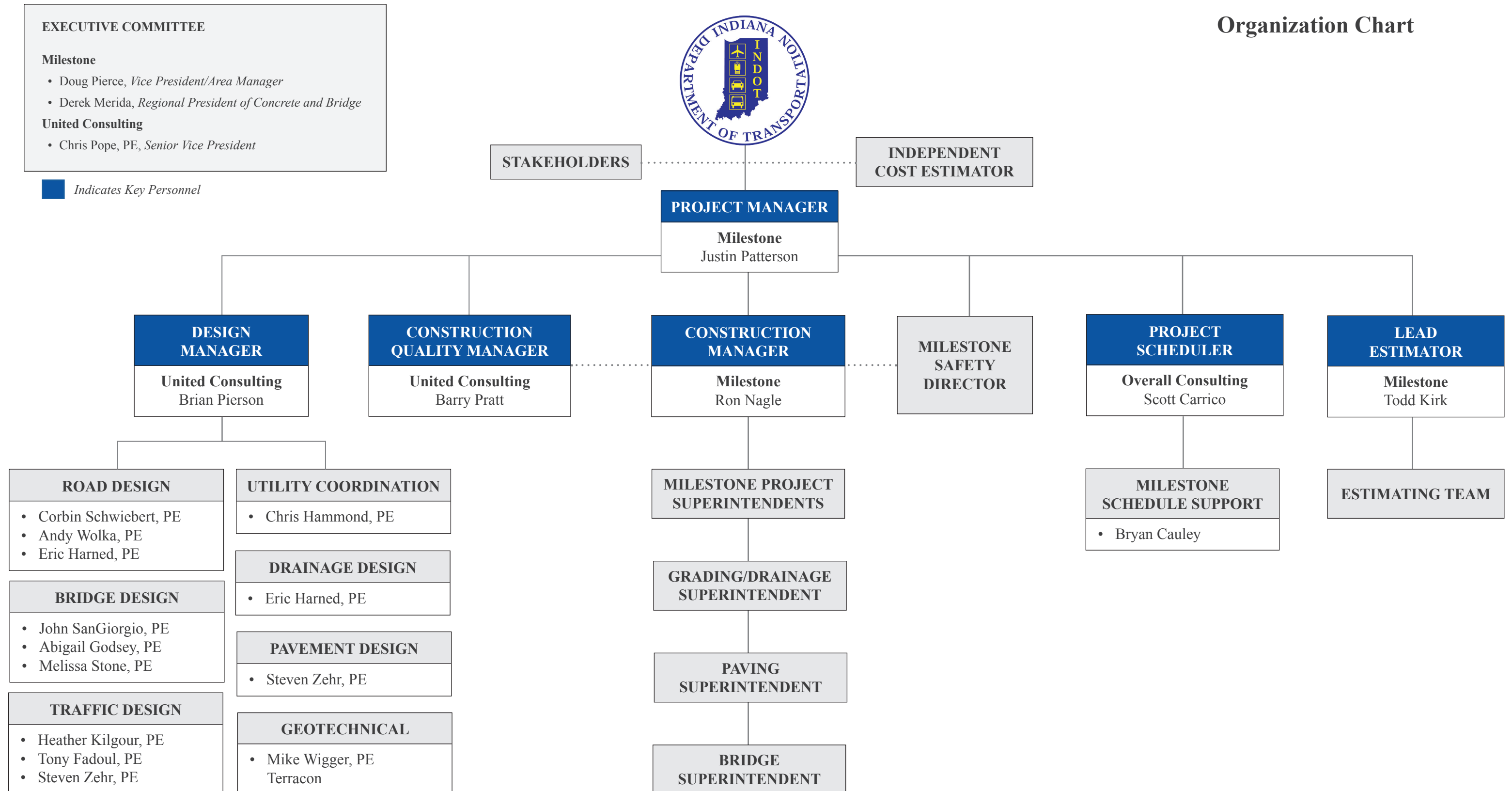


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## 4.2.2.1 Organization Chart

## Organization Chart





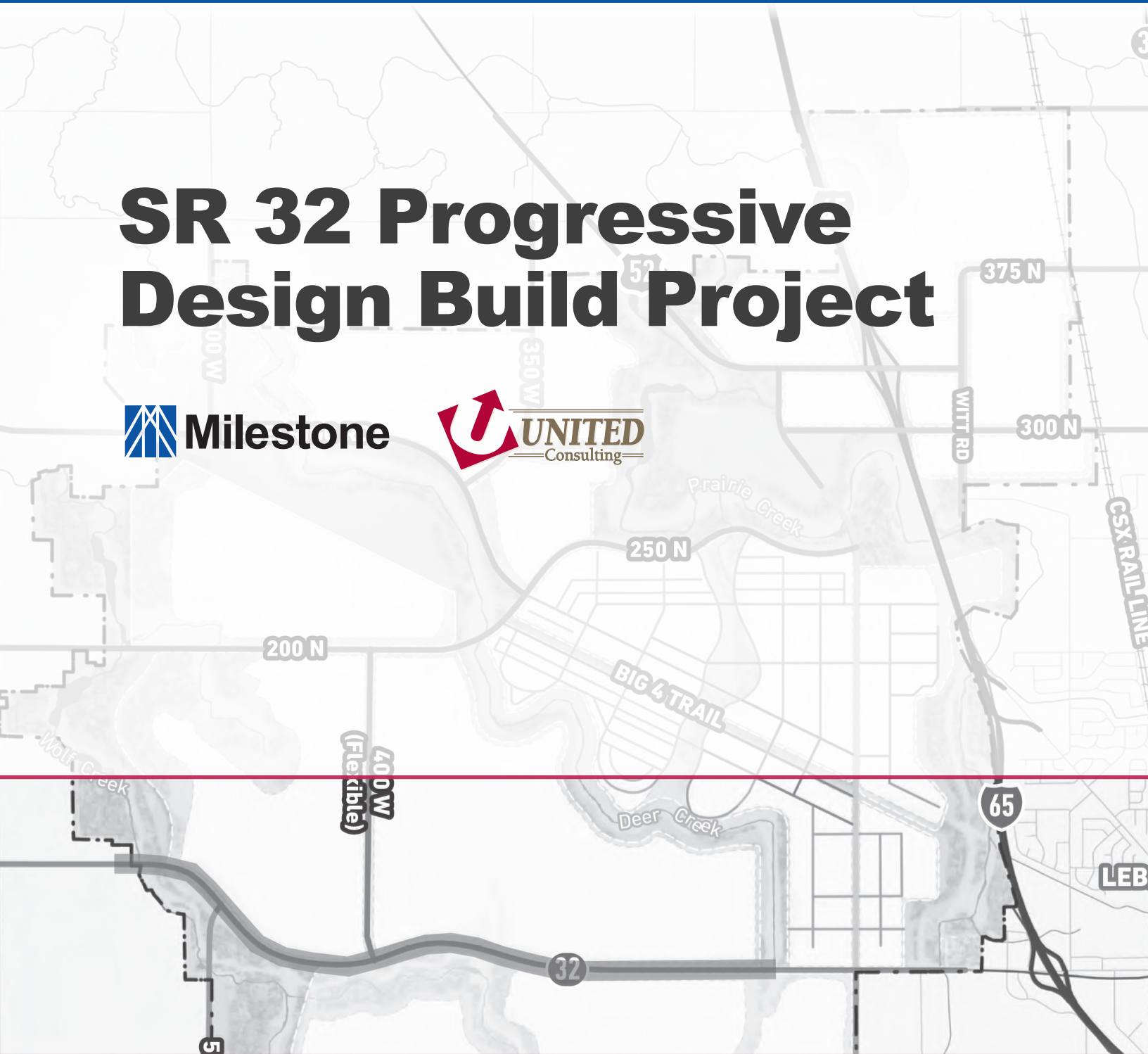
# SR 32 Progressive Design Build Project



**Milestone**



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## 4.2.2.2

### Experience of the Proposer and Identified Contractors

## MILESTONE COMPANY OVERVIEW

Milestone celebrates 30 years of quality in construction, specializing in asphalt and concrete paving, bridge construction and site development as part of the Heritage Construction + Materials (HC+M) family of companies. HC+M specializes in a wide range of innovative road construction, asphalt pavement design and material solutions throughout the Midwest. Committed to safety and sustainability, Milestone delivers innovative solutions with trust, quality and passion in every project.

Milestone is an active member of the National Asphalt Pavement Association (NAPA) and the American Concrete Pavement Association (ACPA) and received many awards through both in 2023. Six Milestone projects received the ACPA's Excellence in Concrete Award in 2023, including three at the Indianapolis International Airport, and six additional projects received NAPA's Quality in Construction Awards.

Overall, Milestone delivers:

- **A safety-first approach.** Most of all, as a family-owned business, Milestone values its people and their safety. With more than 2,000 construction professionals across Indiana, Milestone sets high standards of safety to allow its team to arrive home safely every day and protect the traveling public.
- **A commitment to building long-term relationships and mutual trust.** An experienced contractor with INDOT, the City of Indianapolis DPW and local municipalities across Indiana, Milestone understands the collaboration and requirements necessary to deliver a high-quality project on time and on budget.
- **Comprehensive resources.** Milestone maintains close partnerships with quarries and material suppliers that provide superior quality and economic value. With a large equipment fleet, full-service garages and experienced mechanics, Milestone is a full-service contractor and strategically positioned with 19 hot-mix asphalt plants, 15 concrete batch plants and nine principal offices throughout Indiana.
- **Time-honored expertise and innovation.** Over the past 15 years, Milestone has successfully completed multiple design build projects across Indiana totaling over one billion dollars. Notedly, Milestone is celebrating the near completion of its work on Section 6, Contract 5 of the I-69 Finish Line Project.

### 1. IR-37053 I-69 Major Moves Hamilton County

- **Delivery Method:** Design Build Best Value
- **Contract Amount:** \$95 million
- **Owner:** Indiana Finance Authority
- **Project Description:** In October of 2015, Milestone and United Consulting were selected as the Preferred Proposer. The procurement method for this contract was Design Build Best Value. In collaboration with INDOT, we were able to negotiate and complete the entire scope of the project providing the maximum value and meeting the goals for a successful project. The work primarily consisted of adding an additional travel lane both directions on I-69 for approximately 15 miles (from 116th Street to SR 38) in Hamilton/Madison counties. 10 mainline bridges were widened and rehabilitated and 3 overpass bridges were either rehabilitated or overlaid. The I-69 and Campus Parkway interchange was reconfigured as a double crossover diamond interchange. Major items of work included removal and replacement of the storm drainage system, 407,000 tons of asphalt, 200,000 cubic yards of earthwork.



## 2. R-41501 I-70 ATL Hancock County

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- **Delivery Method:** Design Build
- **Contract Amount:** \$170M
- **Owner:** Indiana Department of Transportation
- **Project Description:** The procurement method for this project was a Design Build Low Bid Contract. The work primarily consisted of adding an additional travel lane both directions on I-70 for approximately 10 miles (from 1.0 mile W of Mt Comfort Road to 1.2 miles E of SR 9) in Hancock County. This included widening and rehab of three mainline bridges, full replacement of an existing overpass bridge at CR 700 West, replacement of all the storm drainage system, 257,000 cubic yards of earthwork, 220,000 tons of asphalt paving and 500,000 square yards of 13" concrete paving.

## 3. R-41536 I-69 Section 6 Contract 5 Marion & Johnson Counties

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- **Delivery Method:** Design Build
- **Contract Amount:** \$728M
- **Owner:** Indiana Department of Transportation
- **Project Description:** Milestone's responsibility included the completion of the southern 2.8 miles of I-69, including the County Line Road interchange and all the asphalt and concrete paving for the entire project. The new County Line Road interchange included moving nearly one million cubic yards of earthwork, completing eight new bridges, and the construction of County Line road interchange ramp system that included two roundabouts. The approximate value of Milestone's portion of the contract is \$218M. This project presented many challenges, including design delays. Through open communication with INDOT, our team was able to work through the design challenges to complete the work on time.



## 4. LEAP Grasslands Roadways Project, Boone Co (2023)

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- **Delivery Method:** Cost Plus, Guaranteed Maximum Price (GMP)
- **Contract Amount:** In progress
- **Owner:** Pure Development, Inc.
- **Project Description:** The purpose of the project was to improve roadways within the LEAP project located in Boone County, particularly within the nearby vicinity of the new Eli Lilly Plant. The developer, Pure Development, Inc., contracted directly with Milestone to provide the construction services on an open-book, cost-plus, GMP basis with 100% of the GMP savings being returned to the developer. The contractor selection criteria included firm qualifications, proposed personnel qualifications, relevant project experience, and project schedule. The work primarily consisted of 3.3 miles of road reconstruction and 0.8 miles of new road construction. The work included a new mainline bridge, house demolition, earthwork, storm drainage, concrete curb and approaches, asphalt pavement, guardrail, signals, MOT, and striping. Milestone was heavily involved in the coordination of utility relocations, permitting, bonding, and CSX railroad crossing improvements. Milestone also facilitated open communication with Lebanon, Boone County, Fluor, Eli Lilly, Messer Construction, BLN, private utility companies, residents, local law enforcement, and school transportation.





## UNITED CONSULTING COMPANY OVERVIEW

United Consulting has been in business since 1965. During that time, United Consulting has designed many high-profile projects for INDOT and local governments and on projects with many stakeholders. Since INDOT began design-build low-bid delivery back in the 90's, United Consulting has been at the forefront of alternative delivery. The team of Milestone and United Consulting won the first design-build best-value project on I-69 during major moves, constructing more miles of added travel lanes than our competitors. Design-build delivery has forged great relationships with both INDOT and the contracting community. This progressive design-build delivery process plays to our strengths. We approach projects with cost-effective solutions in mind, delivering the best value for INDOT and for contractors. This requires innovation, something we are very good at. Over the years, we have learned what it takes for contractors to build projects and where efficiencies can be found. We will work together with Milestone and INDOT just like we have in the past, to deliver a successful project.

### 1. I-69 Major Moves 2020 Expansion Project

The I-69 Major Moves 2020 project added travel lanes to 14 miles of I-69 and modified the interchange at I-69 and Campus Parkway into a diverging diamond. The existing asphalt lanes were rehabilitated by completing full-depth patching, surface scarification, and then applying intermediate and surface layers, all while keeping traffic open. The project included 13 bridges and 51 culverts in total. United Consulting was the back-end designer for Milestone for this design-build best-value project.



### 2. I-69 Section 2 & 3

The project provided a new terrain, limited access divided highway from Oakland City to Crane, a distance of approximately 55 miles. The project was divided into 13 segments, each approximately four miles long. United Consulting provided the design for three of these segments. The project schedule was the fastest of any project seen before by INDOT. Two of United Consulting's segments were Design/Build and required a turnaround time of just five months. United Consulting was able to complete the front-end design of these segments, including multiple bridges and one interchange, on schedule and below budget. Additionally, one segment was a full Design/Bid/Build and we completed 100% of the design in just ten months.

### 3. Heavy Haul Road from Ports of Indiana to River Ridge

The Heavy Haul Road project was a regionally collaborative effort that created a new highway connecting two economic engines, the Ports of Indiana and the River Ridge Commerce Center, responsible for \$4 Billion in economic output in Southern Indiana. The project provides a direct connection between the two facilities, as well as to the East End Ohio River Crossing, allowing safe and efficient movement of raw materials and goods. The project also facilitates the rapid growth in the region by improving connectivity to the surrounding communities. Since opening in late 2021, the new roadway has achieved the vision created by the project stakeholders in 2014 despite the significant design challenges of constructing a new corridor through an environmentally sensitive area.





## TERRACON COMPANY OVERVIEW

Terracon has partnered with Milestone and United Consulting for years and is a leader in the transportation sector, providing geotechnical engineering, environmental consulting, construction materials, and pavement services. Terracon has a team of experts who are devoted to the successful delivery of complex, large-scale alternate delivery projects. Our specialized alternate delivery group partners are based in Indiana and will be with you at every step so that you can stay focused on the big picture.

Terracon has successfully delivered hundreds of transportation alternate delivery projects nationwide and over a dozen in the state of Indiana, including ORB Sections 3 and 6; I-65 added travel lanes projects in Johnson, Tippecanoe, and Lake Counties; several sections of I-69; and I-70 added travel lanes in Hancock County. Terracon also serves as INDOT's geotechnical representation for design-build projects like the North Split reconstruction, ORX, and Revive I-70 in Wayne County. Below are highlighted projects which demonstrate our experience:

### 1. I-70 Design-Build, Hancock Co., IN

Terracon is the geotechnical engineer of record and project manager for this \$124M design-build added travel lanes project in eastern Indiana. In addition to over 10 miles of reconstructed and widened interstate roadway, the project includes a new bridge, several bridge widenings, and noise barriers. The project was awarded at the end of 2021, and construction is ongoing.

### 2. Revive I-70 Design-Build, Wayne Co., IN

Terracon is serving in an owner's representative role for this design-build project. Terracon's scope included developing the geotechnical reference information documents for the proposers. This project includes 22 miles of pavement reconstruction and widening, improvements to 40 bridges, and the replacement of dozens of culverts. Due to the varied and complicated history of the pavement through this corridor, Terracon employed an air-launched GPR technique to scan the existing pavement for types and thicknesses. Geotechnical efforts for this project began in April of 2022, and the geotechnical data report was completed in July of 2023. The project was split into three contracts, the first of which was successfully awarded in the summer of 2024.



## OVERALL CONSULTING COMPANY OVERVIEW

Overall Consulting, LLC has partnered with Milestone on several projects and brings over 15 years of experience in project management, scheduling, and project controls, specializing in Progressive Design-Build and Alternative Project Delivery Methods. The firm's successes include complex infrastructure projects such as the Seattle City Lights – Denny Network, South Shore Line Double Track Project, Silicon Valley Berryessa Extension, and the Green Line Extension in Boston.

The firm's advanced project controls approach emphasizes cost and schedule management, delay analysis, and risk mitigation. These practices help ensure efficient resource allocation and timely project execution, aligning with the INDOT's goals of efficiently managing the project delivery process and maximizing the project budget. Overall Consulting integrates these objectives into detailed Critical Path Method (CPM) schedules, managing both critical and near-critical paths to keep projects on track and within budget.

Through its leadership in cross-functional collaboration and clear stakeholder communication, Overall Consulting fosters innovation in project management processes, maximizing efficiency and flexibility to address development demands, such as traffic and utility changes, during both the Preconstruction and Construction phases. Their transparent reporting offers real-time insights into project progress, enabling better decision-making and alignment with evolving project goals.



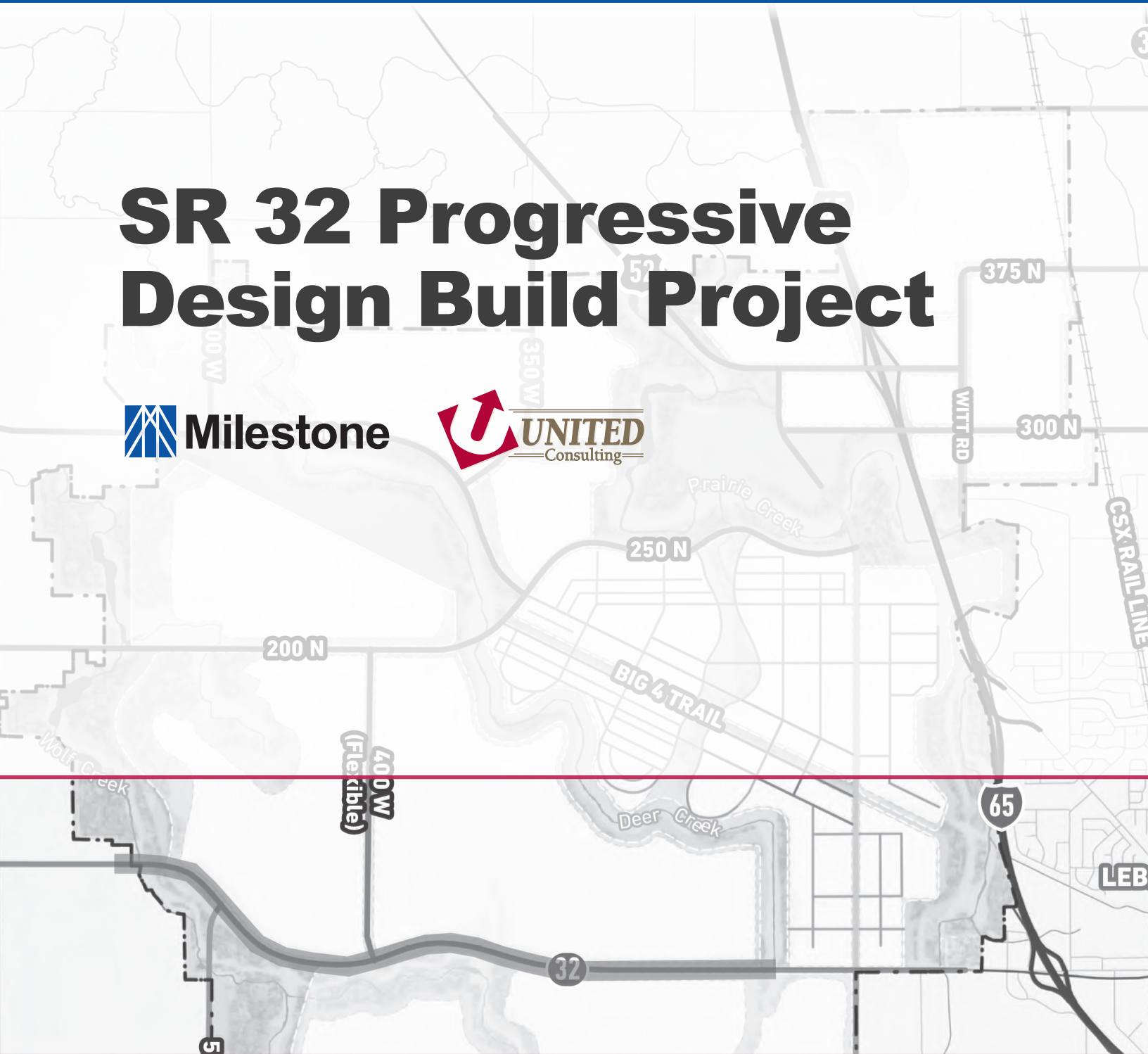
# SR 32 Progressive Design Build Project



**Milestone**



**UNITED**  
Consulting



## 4.2.2.3

## Key Personnel Experience

## JUSTIN PATTERSON

**FIRM:** Milestone

**ROLE:** Project Manager

**YEARS OF EXPERIENCE:** 18 Years with Milestone



### EXPERIENCE

Over the past 18 years Justin has had the opportunity to lead and manage many teams for over 50 projects. He enjoys working on complex projects with challenging problems and is adept at finding collaborative solutions with all stakeholders. He especially appreciates being able to work with alternative procurement contracts, such as this progressive design build, because of the collaboration through a team approach in all phases. Justin leads projects with servant leadership and a focus on relationships, built on trust, and execution of commitments. He excels in safety and scheduling. Being resourceful and strong in scheduling Justin is able to continuously modify the schedule and controlling operation to work around unexpected issues and drive desired project objectives like schedule, cost, and quality.

### RELEVANT EXPERIENCE/REFERENCES

#### 1. LEAP Grasslands - Guaranteed Maximum Price contract with PURE Development

- **Construction Cost:** In progress
- **Role on Project:** Sr. Project Manager
- **Project Description:** With the LEAP districts footprint, the 32 realignment project will encounter the same types of problems and stakeholders and will require someone to bring all parties' concerns to the table and resolve them to the best of Milestone's ability, keeping INDOT's priorities in mind. The relationships built through the LEAP Grasslands project will be helpful in finding solutions. Throughout the project, Milestone has focused on all relationships, being community partners, and having strong public relations that is proactive on issues and concerns. Justin serves as Senior PM, providing coordination between all stakeholders and parties, including coordination outside of Milestone's scope to the best interest of the Developer, City, County, Residents/Public, and Owner. Justin is responsible for all aspects of the project. The experience has allowed Justin to build relationships and credibility with the City, County, Local Government, and Developers.
- **References:** *Michael Watts*, Director of Development, PURE Developments, [mwatts@puredevelopment.com](mailto:mwatts@puredevelopment.com), 864-650-5272, Role developer for IEDC and contract holder; **Kevin Krulik**, City Engineer, City of Lebanon, [kkrulik@lebanon.in.gov](mailto:kkrulik@lebanon.in.gov), 317-697-9780; **Nick Parr**, Director of Highways, Boone County Highway Department, [nparr@co.boone.in.us](mailto:nparr@co.boone.in.us), 317-442-8483; and **Kevin Hadden**, Principal Engineer - Project Management, Global Facilities Delivery, Eli Lilly and Company, [kevin.hadden@lilly.com](mailto:kevin.hadden@lilly.com), 317-607-3020

#### 2. Eli Lilly LEAP Project

- **Construction Cost:** In progress
- **Role on Project:** Sr. Project Manager
- **Project Description:** Multiple contracts of asphalt and concrete work. Most of the work is temporary and finish work and contracts are expected to start 2025. The work is fast-paced and has strict and complex safety and quality requirements. The coordination of Milestone's work had to be very thorough due to the project being very congested with several stakeholders and other subcontractors onsite. Working on a \$9.8 billion construction project has given Milestone the ability to understand the key issues for developers and

the opportunity to propose unique solutions. It also has helped with coordination with all subcontractors and making sure Milestone is able to work with the safest and most cost-effective solutions, even if it is different than normally done. Managing and working in an area that will have large amounts of economic development requires a team with unique perspective and ability to understand and navigate unique situations that arise with multibillion dollar economic development sites. As the Sr Project Manager Justin is responsible for all aspects of the project including working within strenuous and new safety requirements.

- **References:** *Jeremy Hebenstreit*, Project Manager, Messer Construction Co., [jhebenstreit@messer.com](mailto:jhebenstreit@messer.com), 317-671-9269 and *Chase Wideman*, Construction Engineering Specialist, FLUOR, [chase.wideman@fluor.com](mailto:chase.wideman@fluor.com), 404-403-4131

### 3. SR 25 Hoosier Heartland, INDOT

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- **Construction Cost:** \$18M
- **Role on Project:** Project Superintendent
- **Project Description:** 2.25 miles of new road construction, 4 bridges, and 800,000 CYs of Embankment. Start August of 2011 and substantial completion October of 2012. Worked with INDOT and Parsons Brinkerhoff (now WSP) to build this fast-paced, high-profile new road project in 14 months. The project had several parcel and utility delays, but was able to work together to meet the completion date. As Project Superintendent, Justin was responsible for all aspects of the project, including the coordination and scheduling of all scopes of work to meet the tight time line to the highest level of safety and quality.
- **Reference:** *Kevin Hall*, (retired), formerly Construction Inspector with Parson Brinkerhoff (WSP), [kc9dym@gmail.com](mailto:kc9dym@gmail.com), 317-437-5451

### 4. Yellowwood, INDOT

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- **Construction Cost:** Phase 1 \$5M
- **Role on Project:** Project Manager
- **Project Description:** 3.6 Miles, 46,600 CYs of common excavation, 26,700 CYs of borrow, 1-3 span bridge Start February 2017 and substantial completion October of 2017. Phase 2 \$3,463,000 – 2.8 miles, 26,600 CYs of common, 6,400 CYs of borrow, start February 2018 and substantial completion October of 2018 Yellowwood was different than most INDOT road projects. The work was significant in sections but it was within the limitations of Yellowwood State Forest and required innovative process and thinking to minimize the impact on the environment. This included redesigning the bridge substructure to minimize the impact on the stream and wetlands. Another solution Milestone utilized was switching a section of road to Full Depth Reclamation (FDR) to minimize the impact on schedule, budget, and impact to the surrounding environment. Milestone also had unique requirements like snake fence to protect the Timber Rattle Snake and other unique impacts to the existing environment. The project required significant public relations with concerned residents and users of the park. It also required coordination with tight completion dates with Brown County due to the significant impact “Leaf Season” has on the county. This project had strong relationships and trust with all stakeholders. As project manager, Justin was responsible for all aspects of these projects and arranged an onsite borrow site to increase efficiencies.
- **Reference:** *Rachel Wren*, Area Engineer, INDOT Seymour District, [Rwren@indot.in.gov](mailto:Rwren@indot.in.gov), 812-525-9407



## RON NAGLE

**FIRM:** Milestone

**ROLE:** Construction Manager

**YEARS OF EXPERIENCE:** 23 Total, 18 with Milestone



### EXPERIENCE

Throughout his career, Ron has managed various construction projects. For the past 5 years he has been General Superintendent in Milestone's Lafayette office. Ron has managed multiple projects, superintendents and crews to complete several projects per year while working with owners both public and private. Ron has coordinated between public and private entities to schedule work and ensure it is completed safely and on time while meeting their specific projects goals. Ron has coordinated and led public information meetings for projects with high impact to the flow of traffic on major highways helping reduce the impact on the motorist. Ron's involvement with projects starts with estimating the bid, then developing submittals and shop drawings, and finally, managing the project's construction of the project from start to completion.

### RELEVANT EXPERIENCE/REFERENCES

#### 1. SR-37053: I-69 Major Moves 2020 Expansion Project, INDOT/IFA

- **Construction Cost:** \$96M
- **Role on Project:** Project Manager
- **Project Description:** Hamilton County and Madison County, Indian. Ron acted as the signal point of contact between Milestone and IFA/INDOT on the project to resolve unforeseen conditions and delays keeping the project moving to completion. Ron handled the overall management of the project and was authorized to act on contractual matters and resolve issues between the contractor and IFA/INDOT. The \$95.4 million Design-Build Best Value Project added a travel lane to 15 miles of I-69 from Fishers, IN to Pendleton, IN. The project included widening and overlay of 13 bridges including converting the existing Campus Parkway Interchange to a Double Diverging Diamond interchange while keeping the interchange open and maintaining traffic. Ron coordinated with Ruoff Music Center to maintain traffic and access during their concert season and with local emergency services and businesses during construction.
- **Reference:** *Ed Wilson, Retired Project Supervisor, INDOT Greenfield District, 765-617-4357*

#### 2. R-35730-A: I-65/I-70 South Split Reconstruction, INDOT

- **Construction Cost:** \$15M
- **Role on Project:** Project Manager
- **Project Description:** Marion County, IN, Ron was responsible for oversight of all aspects of construction activities and safety for this fast tracked, high public impact project. Ron was the point of contact for communication with INDOT resolving unforeseen conditions and delays keeping the project ahead of schedule. Ron coordinated project activities between Milestone, INDOT, City of Indianapolis, subcontractors and trucking companies to complete this project ahead of schedule and reducing the impact to the customer. The project was a \$14.5 million reconstruction project of I-65/I-70 South Split in Indianapolis. The project was a complete closure of one of the busiest sections of road in the State. In order to reduce the impact on the public the project had to be completed in 59 days. Under Ron's leadership the project was completed in 44 days,

15 days ahead of schedule. The project was the first in 30 years for INDOT to use continuous reinforced concrete pavement and Milestone was able to plan and perform this work without delay.

- **Reference:** *Rachelle Pemberton, Resident Engineer, HNTB, [rapemberton@hntb.com](mailto:rapemberton@hntb.com), 317-699-0660*

### 3. R-40577-A: SR 26 Asphalt Resurface and Small Structure Replacement, INDOT

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- **Construction Cost:** \$15M
- **Role on Project:** General Superintendent
- **Project Description:** Warren County, IN. Ron managed all the scheduling and coordination of the crews for this project. Ron was responsible for planning and directing safety efforts on the project. Due to utility conflicts the schedule of the project changed. Ron worked with INDOT to minimize the cost impacts of the changes and keep the time extension to a minimum. The project included the replacement of storm sewers, box culverts, HMA patching of the existing pavement, HMA widening of existing road, Cold-In-Place recycling of the existing pavement and asphalt resurface of 15.6 miles of State Road 26.
- **Reference:** *Justin Krout, Sr. Inspector/Project Supervisor, HNTB, [jkrout@HNTB.com](mailto:jkrout@HNTB.com), 317-954-1528*

### 4. Reconstruction of Tippecanoe County 450 South, Tippecanoe County

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- **Construction Cost:** \$10M
- **Role on Project:** General Superintendent
- **Project Description:** Tippecanoe County. Ron coordinated the crews and efforts to complete the project that was delayed by utility relocation. Utility relocation delayed the project and Ron worked with Tippecanoe County to change the phasing of the project to keep progress moving forward and minimize the delay. The project changed the alignment of roads 450 South and 500 East so the intersection with US 52 was perpendicular and added turn lanes on US 52. There was over 55,000 CYS of common excavation that built 3 retention ponds on the project and constructed the roads through farm fields.
- **Reference:** *Stewart Kline, PE, Executive Director, Tippecanoe County Highway Department, [skline@tippecanoe.in.gov](mailto:skline@tippecanoe.in.gov), 765-423-9210*

### 5. SIA East Drive Reconstruction, West Drive Reconstruction, Container Yard Expansion and Drive, Subaru of Indiana Automotive

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- **Construction Cost:** \$16M
- **Role on Project:** General Superintendent
- **Project Description:** Tippecanoe County, IN. During the past 10 years, Milestone has completed multiple projects at Subaru of Indiana Automotive (SIA) in Lafayette, where Ron has been the lead. The projects included asphalt resurfacing, concrete patching, new concrete pavement, reconstruction of roads, construction of new roads and underground utilities. Ron was the point of contact for these projects and coordinated and scheduled the crews to complete the work. Ron worked with SIA's construction team to keep projects on schedule and within budget with changes in scope during construction. SIA and Ron worked together to design projects and MOT to decrease disruption to production and workers access to the plant.
- **Reference:** *Eric Brown, Building Engineering Manager, Subaru of Indiana Automotive, [eric.brown@subaru-sia.com](mailto:eric.brown@subaru-sia.com), 765-449-6682*

## BARRY PRATT

**FIRM:** United Consulting

**ROLE:** Construction Quality Manager

**YEARS OF EXPERIENCE:** 38 Years Total, 17 with United Consulting



### EXPERIENCE

As a Construction Project Supervisor, Barry's responsibilities have included overseeing all facets of major transportation and water/wastewater infrastructure projects. Barry Pratt started his 38-year career as an INDOT Project Supervisor in the LaPorte District for 10 years. Barry has spent his last 28 years working for a consultant with his specialty leading major road and bridge transportation infrastructure projects throughout central Indiana. Over the past 18 years Barry has worked solely on projects representing the owner and working directly with the local city, counties and town's along with INDOT Area Engineers in the Greenfield District. Barry has managed projects his entire 38-year career that followed the INDOT Standard Specifications, so he understands all aspects of construction that will be followed on the SR 32 project.

Barry's role during his tenure has been to manage and supervise infrastructure projects. One of Barry's constant responsibilities has been to ensure each project is built to the plans and specifications while performing or overseeing all the material testing. Barry then completes and submits a final construction record as well as completing the material records to ensure the materials used on each project are approved and tested in accordance with the INDOT Frequency Manual for Testing.

Barry has also been serving as the owner's representative for the Muncie Sanitary District over the past several years managing over \$135 million of projects for the city of Muncie. Barry's role on these projects has been to provide overall project management and supervision of dozens of projects while overseeing the quality and overseeing the testing of all aspects of the projects. These projects have ranged from road and bridge construction, deep sewer installation, levee construction, and lift station construction. The role Barry has performed on these MSD projects is very similar to the role of the Construction Quality Manager for the SR 32 project. Barry ensured all the contractors were following the required construction methods set out in the contract documents. Barry also witnessed and reviewed the material testing performed by the contractor's testing firm for each facet of their work.

### RELEVANT EXPERIENCE/REFERENCES

#### 1. 2013 Bond/2016 Bond/2018 Bond/2021 Bond Projects, City of Muncie Sanitary District

- **Construction Cost:** \$135M
- **Role on Project:** Construction Project Manager
- **Project Description:** Responsible for construction inspection of \$135 million of projects to address CSO Long Term Control Plan requirements and other improvements. The Guaranteed Savings Performance Contract included the construction of more than 60 separate projects involving 13 design engineers with additional projects designed, permitted, and constructed as savings was achieved. The construction contract included the CSO 025/026 Separation Project, CSO 028 Separation Project, Cowan School Lift Station & Forcemain Project, Madison Street Underpass Stormwater Pumping & Storage Project, WPCF Wet Weather Storage Basin Project, WPCF Wet Weather Pump Station, Kilgore Avenue Interceptor Junction Structure, WPCF UV Disinfection Project, Elm Street Levee Improvements Project, CSO 028 Kimbrough Project, Cowan Residential Sewer Project, Whitely Stilling Basin Project, Burlington Residential Sewer Project, Beech Grove Cemetery Siphon Repair Project, and various savings projects.
- **Reference:** *John Barlow, MSD District Administrator (765-808-1512)*



## 2. Keystone Avenue over 86th Street, Indianapolis Department of Public Works (IDPW)

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- **Construction Cost:** \$3M
- **Role on Project:** Project Manager
- **Project Description:** The Keystone Avenue bridge rehabilitation project over 86th Street included twin four-span, continuous composite steel I-beam bridges and a complete deck replacement. The superstructure was widened from a width of almost 38 feet to 44 feet, which required the addition of a new outside beam to the northbound structure and the replacement of the existing outside beam on the southbound structure. Each existing bridge end bent, mud walls, wing walls, and portions of the slope walls were reconstructed to accommodate the widened bridge and replace the existing bearing assemblies.
- **Reference:** *Bill Chappell, DPW PM retired*

## 3. I-65 Interchange Relocation at Washington Street and I-65 and I-70, IDPW

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- **Construction Cost:** \$14M
- **Role on Project:** Project Manager
- **Project Description:** Responsible for the removal of three ramps (Ohio Street entrance ramp, Market Street exit ramp, and Market Street entrance ramp) to and from I-65. The project also included the construction of two new ramps (Washington Street entrance and exit ramps) to and from I-65, new sanitary sewer, storm sewer, stormwater treatment structures, the relocation of Southeastern Avenue at Washington Street, and the relocation of Davidson Street at Washington Street. Additional elements included new traffic signals at seven intersections, ornamental street lighting, gateway monuments, highway and city street signage, box truss, relocation of a high mast light tower, roadway weather sensors, and bridge painting.
- **Reference:** *Bob Zieles, Indianapolis Department of Public Works Senior Project Manager*  
[Bob.Zieles@indy.gov](mailto:Bob.Zieles@indy.gov), 317-317-327-8431

## 4. Emerson Avenue from Company Drive to Shelbyville Road, IDPW

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- **Construction Cost:** \$8M
- **Role on Project:** Project Manager
- **Project Description:** The project extended from Company Drive to Shelbyville Road in Marion County (1.64 miles). The project included the widening of the existing roadway to a five-lane road with curb and gutter, enclosed drainage, and pedestrian facilities. The project also included the replacement of an existing three-span bridge structure over Little Buck Creek. The rehabilitation included shifting the existing centerline to reduce right-of-way acquisition and caused special consideration to be given to the treatment of the roadway crown and resurfacing. Right-of-way limits were set on a parcel-by-parcel basis to minimize the right-of-way costs and acquisition.
- **Reference:** *Bob Zieles, Indianapolis Department of Public Works Senior Project Manager*  
[Bob.Zieles@indy.gov](mailto:Bob.Zieles@indy.gov), 317-317-327-8431

## TODD KIRK

**FIRM:** Milestone Contractors, L.P.

**ROLE:** Lead Estimator

**YEARS OF EXPERIENCE:** 28 Years Total, 13 with Milestone



### EXPERIENCE:

As Senior Estimator for Milestone, Todd has over 13 years of experience bidding large, complex INDOT projects, including estimating and leading 15 design build pursuits ranging from \$35M to over \$400M either as a Lead Contractor or JV Partner. Todd has vast knowledge and project experience in estimating and bidding large earthwork, drainage, asphalt paving and concrete paving projects. His extensive design build experience from pursuit to construction offers an expertise that is unmatched in the area.

Todd's primary function as Senior Estimator is to plan, direct and coordinate estimating activities for all aspects of Heavy Highway Construction. Including, but not limited to, reviewing and preparing bid documents for accuracy, completeness and constructability, preparing production-based construction cost estimates and identifying and managing risks.

During the construction phase, Todd is responsible for preparing and negotiating subcontracts, material procurement and finalizing the construction budget. Additionally, he will provide estimating and engineering support to our project team throughout the duration of the project.

### RELEVANT PROJECT EXPERIENCE/REFERENCES

#### 1. IR-37053 I-69 Major Moves Design Build Best Value Hamilton County, INDOT

- **Construction Cost:** \$95M
- **Role on Project:** Senior Estimator
- **Project Description:** The procurement method for this contract was Design Build Best Value and was secured by the Milestone/United Consulting team. The work primarily consisted of adding an additional travel lane both directions on I-69 for approximately 15 miles (from 116th Street to SR 38) in Hamilton/Madison counties. 10 mainline bridges were widened and rehabilitated and 3 overpass bridges were either rehabilitated or overlaid. The I-69 and Campus Parkway interchange was reconfigured as a double crossover diamond interchange. Major items of work included removal and replacement of the storm drainage system, 407,000 tons of asphalt, 200,000 cubic yards of earthwork.
- **Reference:** *James Colonis, INDOT Construction Director, [jcolonis@indot.IN.gov](mailto:jcolonis@indot.IN.gov), 317-650-3041*

#### 2. R-41501 I-70 ATL Design Build Hancock County, INDOT

- **Construction Cost:** \$170M
- **Role on Project:** Senior Estimator
- **Project Description:** The procurement method for this project was a Design Build Low Bid Contract. The work primarily consisted of adding an additional travel lane both directions on I-70 for approximately 10 miles (from 1.0 Mile W of Mt Comfort Road to 1.2 miles E of SR 9) in Hancock County. This included widening and rehab of three mainline bridges, full replacement of an existing overpass bridge at CR 700 West, replacement of all the storm drainage system, 257,000 cubic yards of earthwork, 220,000 tons of asphalt paving and 500,000 square yards of 13" concrete paving.
- **Reference:** *Fielding Tipton, INDOT Construction Manager 765-745-1751 [ftipton@indot.in.gov](mailto:ftipton@indot.in.gov)*

### 3. R-37075 I-65 ATL Design Build Marion & Johnson County, INDOT

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- **Construction Cost:** \$35M
- **Role:** Senior Estimator
- **Project Description:** 3.5 miles of added travel lane on I-65 in Marion & Johnson Counties from Southport Road to Main St in Greenwood. The scope of the project included, pavement removal, replacement of all the drainage systems, 230,000 tons of asphalt paving, 112,000 cubic yards of earthwork and multiple bridge widenings and rehabs.
- **Reference:** *James Colonis, INDOT Construction Director, [jcolonis@indot.IN.gov](mailto:jcolonis@indot.IN.gov), 317-650-3041*

### 4. R-37096 I-65 ATL Design Build Johnson County, INDOT

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- **Construction Cost:** \$85M
- **Role:** Senior Estimator
- **Project Description:** 11 miles of added travel lane on I-65 in Johnson County from Franklin exit to Greenwood Main St. exit. The scope of the project included pavement removal, replacement of all the storm drainage system, 700,000 tons of asphalt paving, 40,000 cubic yards of earthwork and multiple bridge replacements.
- **Reference:** *James Colonis, INDOT Construction Director, [jcolonis@indot.IN.gov](mailto:jcolonis@indot.IN.gov), 317-650-3041*

### 5. R-41536 I-69 Design Build Section 6 Contract 5 Walsh/Milestone JV, INDOT

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- **Construction Cost:** \$205M
- **Role:** Senior Estimator
- **Project Description:** Milestone's portion of this project included all the asphalt and concrete paving on the entire project. Milestone was also responsible for building 2.8 miles of the southern portion of this project on I-69 from County Line Road to Southport Road. This work included nearly one million cubic yards of earthwork, constructing eight bridges and the construction of the new County Line Road Interchange which included two roundabouts. Major work items included nearly 1,000,000 cubic yards of earthwork, 420,000 tons of asphalt paving and 520,000 square yards of concrete paving.
- **Reference:** *Chad Nierman, District Area Engineer, [d30nier@indot.in.gov](mailto:d30nier@indot.in.gov), 317-694-8292*

### 6. Indianapolis International Airport, Indianapolis Airport Authority

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- **Construction Cost:** \$356M
- **Role:** Senior Estimator
- **Project Description(s):** Over the past 13 years, Milestone has bid 18 projects for the Indianapolis Airport Authority, totaling \$356M. 13 of those projects were awarded to Milestone as prime contractor totaling \$258M. The projects were mostly runway and taxiway rehabilitations or reconstructions. The scope of the projects included, pavement removal, mass earthwork, drainage improvements, asphalt paving and concrete paving.
- **Reference:** *Tony McMichael, Director, Airside Development, [tmcmichael@ind.com](mailto:tmcmichael@ind.com), 317-946-9276*



## SCOTT CARRICO, PSP

**FIRM:** Overall Consulting

**ROLE:** Project Scheduler

**YEARS OF EXPERIENCE:** 15 Years Total, 5 with Overall Consulting



### EXPERIENCE

Scott is a Planning and Scheduling Professional (PSP) specializing in CPM scheduling, location-base scheduling, baseline development, resource, and cost loading, pull planning, delay analysis, claims analysis, and schedule mitigation. He has a proven track record for managing all phases of the construction lifecycle, working for various general contractors and construction management consultancies. Scott has developed and taught various general contractors Primavera P6 basic and advanced level courses from the mid-size to the largest vertical construction companies throughout San Diego and Los Angeles Counties.

With deep knowledge of the Critical Path Method (CPM), Scott excels in delay analysis and risk mitigation, helping teams overcome challenges and keep projects on track. His skills in resource loading, leveling, and integrating cost and schedule considerations ensure efficient allocation of labor, equipment, and materials. Scott also demonstrates strong leadership by fostering cross-functional team collaboration and communicating clearly with stakeholders to align project goals. His ability to provide detailed documentation and reporting offers executive teams clear insights into project risks, status, and forecasts, making him a vital asset to any project team.

### RELEVANT EXPERIENCE/REFERENCES

#### 1. Indiana University Downtown Hospital in Indianapolis, Wilhelm Gilbane JV

- **Construction Cost:** \$2B
- **Role:** Principal Scheduler
- **Project Description:** As the Principal Scheduler Scott's roles and responsibilities include reviewing bid package schedules and collaborating with the executive team and the owner to develop the baseline schedule. Scott also creates work plans and short-term fragnets for major deliveries, assess schedule impacts, and formulate mitigation strategies. Additionally, Scott reviews trade partner schedules for accuracy and drive process improvement through problem-solving, leading the implementation of standards for scheduling best practices.

The project schedule encompasses over 20,000 resource-loaded activities for a total project value exceeding \$2 billion. The project, slated for construction in 2027, is being delivered through a progressive design build approach. The final design package was completed in September 2024, with construction having commenced in March 2022. Supplemental designs continue to be developed based on evolving owner requirements.

- **Reference:** Aaron Perry, Gilbane Vice President, [aperry@gilbaneco.com](mailto:aperry@gilbaneco.com), 312-216-9738

#### 2. South Shore Line Double Track Project, Walsh Herzog JV

- **Construction Cost:** \$650M
- **Role:** Senior Scheduler
- **Project Description:** Scott played a critical role collaborating with clients during the proposal phase, as well as working closely with the project team to develop the baseline schedule and managing ongoing monthly

updates and re-sequencing efforts. The schedule was resource-loaded with manpower, equipment, and costs. The project involved significant improvements to the South Shore Line, covering approximately 25 miles through Lake, Porter, and La Porte Counties and the communities of Gary, Portage, Ogden Dunes, Dune Acres, Beverly Shores, Pines, and Michigan City in Indiana. The project's key focus was to add a second track to the existing single-track route and relocate the street-running tracks along 10th and 11th Streets in Michigan City.

The project scope included a wide range of complex construction activities, such as adding a second track, reconfiguring platforms at five stations, constructing four new bridges, separating vehicular traffic from two miles of rail line, eliminating 21 at-grade roadway crossings, and adding 1,475 additional parking spaces. These enhancements were critical to improving service reliability and passenger safety. The project also involved installing a new overhead catenary power system, further enhancing the infrastructure for future growth and modernization.

- **Reference:** *Marc Arena, Walsh/Herzog JV Project Executive, [marena@walshgroup.com](mailto:marena@walshgroup.com), 219-661-2462*

### 3. SR-163 High Friction Surface Treatments (HFST) Project, California DOT

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- **Construction Cost:** \$60M
- **Role:** Senior Scheduler
- **Project Description:** From 2014-2015, Scott developed the baseline schedule, updated resource- and cost-loaded schedules, and tracked production rates using Primavera P6. Scott's duties included analyzing delay fragnets and adjusting the sequence of production activities to accommodate closures and delays. The project covered 9 miles of State Route 163 through San Diego and involved over 15 exits and five major interstate interchanges spanning an eight-lane freeway.
- **Reference:** *Don Rote, BuildingPoint Pacific Segment Manager, 510-618-2550*

### 4. Other CPM Scheduling experience

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- USACE Fort Huachua Garden Canyon Road, Sierra Vista, AZ, 2015
- Metro Gold Line, Los Angeles County, CA, 2018
- Brightline 4A, Orlando, FL, 2018
- Oklahome Modern Streetcar, Oklahoma, OK, 2018
- Crenshaw-LAX Corridor, Los Angeles, CA, 2018-2019
- NCTD PTC Implementation, San Diego, CA, 2018-2019
- LACMTA Blue Line, Los Angeles, CA, 2018-2020
- City of Los Angeles Sixth Street Viaduct Replacement, Los Angeles, CA, 2018-2020
- Cotton Belt Rail Line, Carrollton, TX, 2019-2020
- California High Speed Rail, Fresno, CA, 2019-2020
- NICTD West Lake Corridor, Muster, IN, 2019-2020
- Redlands Passenger Rail Project, San Bernardino and Redlands, CA, 2019-2020
- NICTD Double Track Replacement, Crown Point, IN, 2022-Present

## BRIAN PIERSON, PE

**FIRM:** United Consulting

**ROLE:** Design Manager

**YEARS OF EXPERIENCE:** 21 Years with United Consulting



### EXPERIENCE

During his over two decades with United Consulting, Brian has worked on all aspects of projects including planning and funding, permitting, environmental, public involvement, land acquisition, utility coordination, design and plan submissions, and even construction inspection. For the last 11 years, Brian has been a Team Leader in the Transportation Department, overseeing a group of engineers working on a wide variety of both INDOT and Local Public Agency projects involving multi-use paths, local roads, interstates, interchanges, roundabouts, and site development. His skills and experience enable him to manage all aspects of a project with a clear understanding of how all the moving pieces interact. This versatility makes him an excellent asset to any endeavor.

As Design Manager, Brian's best skills will be on display. Organization and communication, along with an established knowledge of INDOT's design standards and processes, are crucial to keeping a project of this magnitude on track. Working with multiple parties while providing a single point of contact, Brian is the person you can count on to quickly get the answers you need and provide relevant information to make informed engineering decisions.

### RELEVANT EXPERIENCE/REFERENCES

#### 1. I-65 Southeast Indiana Design Build, Bartholomew & Jackson Counties, INDOT

- **Construction Cost:** \$143M
- **Role:** Design Manager
- **Project Description:** This project consisted of 14-miles of added travel lanes and interstate reconstruction between Columbus and Seymour. As the design manager for this work, Brian oversaw and coordinated all elements of design providing a single point of contact between multiple engineering firms, task leads, the construction manager, and the INDOT project manager. Brian submitted and tracked all witness and hold points associated with the design and was responsible for providing Released For Construction plan sets.

During this project, Brian saw firsthand how a public-private agreement can not only maximize the owner's budget, but also be used to resolve complex issues promptly and maintain a pre-determined schedule. Understanding the contractual requirements are just as important as understanding the design standards for this type of project delivery. Brian and his team also had the flexibility to make design choices and discuss construction methods directly with the contractor that resulted in reducing the originally permitted 17.5 acres of environmental wetland impacts to 14.3 acres, preserving over 3 full acres of wildlife habitat.

- **Reference:** *Greg Prince, INDOT Project Manager, [gprince@indot.in.gov](mailto:gprince@indot.in.gov), 812-528-6549*

#### 2. I-69 Section 6.4/6.5 – County Line Road Interchange, Johnson & Marion Counties, INDOT

- **Construction Cost:** \$3M
- **Role:** Lead Designer
- **Project Description:** Working as part of a multi-firm design team, Brian was the lead designer for the County

Line Road interchange, including construction of I-69 from Fairview Road to Wicker Road. This portion of work was originally included in Section 6.4 of the I-69 Finish Line project, but was moved into Section 6.5 for budget and scheduling reasons. The result was a change in United Consulting's scope from preparing 30% Plans to preparing 90% Plans with only a few months extension! Brian and his team rose to the challenge when INDOT recognized this opportunity to utilize different delivery methods within multiple design build contracts to push progress on the I-69 Finish Line forward.

- **Reference:** *Chad Nierman, Greenfield District Area Engineer, [d30onier@indot.in.gov](mailto:d30onier@indot.in.gov), 317-694-8292*

### 3. River Ridge Gateway & Heavy Haul Route, River Ridge Development Authority

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- **Construction Cost:** \$15M
- **Role:** Lead Civil Engineer
- **Project Description:** The River Ridge Development Authority is responsible for the creation of economic revenue for 6,000 acres of real estate in southeast Indiana. The infrastructure and transportation improvements made throughout this now-shuttered Indiana Army Ammunition Plant are designed to bring in manufacturing, distribution, and industrial companies from around the world.

Brian and his team have worked on several projects on behalf of the RRDA, including multiple phases of the 2019 Gateway project. The project is located less than ½ mile from I-265 and serves as the welcome center for the entire site as well as a central business district. Substantial infrastructure improvements were required, including significant new roadway alignments for smaller, local-access roads like River Ridge Parkway and Patrol Road, as well as the main thoroughfare for truck traffic known as International Drive, or the Heavy Haul Route to locals.

- **Reference:** *Marc Hildenbrand, RRDA Chief Director Engineering & Operations, [marc@riverridgecc.com](mailto:marc@riverridgecc.com), 812-725-9974*

### 4. SR 37 Through Noblesville, City of Noblesville

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- **Construction Cost:** \$276 M
- **Role:** Design Manager
- **Project Description:** Brian led the scoping and preliminary design efforts for the SR 37 corridor from Greenfield Avenue to SR 32/38/Conner Street. Starting from square one, the design team prepared traffic forecasting and traffic operation and safety reports, documented existing conditions, analyzed and screened various design alternatives, provided detailed technical memos, and started the process to amend the previously approved Environmental Assessment document covering the corridor as far south as 126th Street. Brian worked closely with both the City of Noblesville engineering department and various INDOT experts to ensure all preliminary work done would meet INDOT standards and allow for federal highway funding to be utilized.
- **References:** *Alison Krupski, Noblesville City Engineer, [akrupski@noblesville.in.gov](mailto:akrupski@noblesville.in.gov), 317-776-6330 and Jennifer Beck, INDOT Project Manager, [jbeck@indot.in.gov](mailto:jbeck@indot.in.gov), 765-745-8276*



# SR 32 Progressive Design Build Project



**Milestone**



**UNITED**  
Consulting



## 4.2.2.4 Project Understanding and Approach

## PROJECT UNDERSTANDING AND APPROACH

*Checks (✓) indicate ways Milestone and United Consulting will accomplish project goals.*

### PROJECT MANAGEMENT

#### Project Management

Milestone and United Consulting are excited to bring our management and design teams to the Progressive Design Build (PDB) delivery process. Our team is eager to be INDOT's partner and to see this PDB project succeed for all parties. We will prioritize understanding the roles of all key personnel and stakeholders to ensure everyone is engaged with relevant pieces of the preconstruction process. Project manager Justin Patterson will be engaged in all aspects of preconstruction activities including being present at all meetings and involved with all stakeholders. Justin will verify the right people and resources are involved so that key personnel are engaged from the beginning. Meetings will be in person and have a virtual option for those needing flexibility. Key personnel will prioritize attending meetings in person.

#### Collaboration

In collaboration with the Department, we will hold an initial kickoff meeting and workshop with key personnel and support staff to develop alignment and coordination. Following the kickoff meeting, our key personnel will maintain weekly or biweekly coordination meetings where progress reports will be reviewed. Through these regular meetings we will track progress on our preconstruction Critical Path Method (CPM) schedule and review where the project may be differing from planned milestones. *The CPM schedule is a critical piece in keeping our teams on track to have SR 32 open to traffic by October 1, 2026 (✓).* We will hold biweekly CPM schedule reviews. Other meetings include design partnering workshops and over the shoulder reviews.

#### Innovation

Through our engagement with the Department, we will help identify risks, innovative concepts, and value engineering opportunities. We understand flexibility and collaboration is required between stakeholders and ongoing economic development.

Through collaboration and engagement, we will bring innovation and outside the box thinking to ensure project goals are met. Milestone has been engaged in large scale economic development projects in the LEAP district and has brought innovation to ensure all stakeholder goals are taken into consideration, risk is minimized, project budgets maximized, and critical dates are met. This requires a deep understanding of the schedules critical path and how unexpected hurdles affect it. We will be proactive and innovative with material delays, environmental impacts, right-of-way delays, community concerns, and utilities while staying within the Guaranteed Maximum Price (GMP) and meeting the required schedule. Innovation with phasing and maintenance of traffic will create value to the safety of workers, the safety of the travelling public, and to both the GMP and schedule. We understand the importance of cooperation and collaboration to help all these pieces come together.

#### Importance of GMP and ICE

To establish a GMP in an efficient manner we will start early and keep it updated throughout each phase of design. Our interactions with the Independent Cost Estimator (ICE) will be open and transparent. We will include the ICE in all applicable meetings and hold meetings with the ICE at each phase of the design. *The goal is to establish an agreed upon GMP affording the opportunity to manage and construct the project maximizing the project budget and providing the best value to the Department (✓).*

## SCHEDULE

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Milestone and United Consulting have brought on a dedicated expert to develop a living CPM schedule to include right-of-way acquisition, utility relocation, permitting, geotechnical investigations, design, lead time for materials, construction schedule, anticipated INDOT weather days, and any available float to the critical path. Including these items within the CPM schedule will show the impact to the Critical Path for changes, delays, unforeseen conditions, additional scope, etc. Seeing these impacts throughout the entire PDB process, our team will be able to show the Department the effects to the schedule and quickly resolve challenges to minimize delays and costs.

We understand this project must accommodate economic development in the area which will continue for approximately two years of design and construction. *Ongoing development will require flexibility during all phases of the project to achieve the desired final product without negatively impacting stakeholders or the public during the project delivery process (✓).* The relationships built during the collaborative PDB process will allow Milestone and United Consulting to identify challenges, get costs associated with the challenges, determine schedule impacts, and work through ideas to keep the project moving forward efficiently.

The CPM schedule will be updated monthly, allowing all parties to understand where the project is, and promote discussions if the project is running ahead, on track, or behind. The schedule will show if the project is falling behind and alert appropriate team members to strategize acceleration options. Acceleration will be achieved with additional resources, more efficient planning, and changing focus from certain points of the project that have float to points that are behind.

The construction portion of the schedule will be derived from activity quantities, sequencing and productions established during the cost estimating process. The critical path will be created to achieve the completion date of October 1, 2026.

## RISK MANAGEMENT

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The team environment and the collaboration between the designer, contractor, INDOT, stakeholders, and independent cost estimator is an important part of accomplishing the project goals. *One of the key benefits of the progressive design build process is including the construction team in the process to help identify and mitigate risk which could affect constructability, schedule and price (✓).*

Our process involves creating risk management workshops. As the design develops, risks will become more efficiently identified due to all partners being involved from the beginning. Risks identified in other workshops will be brought to the risk workshops. The goal will be to identify every risk we can.

Once risks are identified, a risk register will be created for accountability and tracking purposes. The risk register will be used to prioritize risk items and begin the process of eliminating or mitigating risks. The risk register will be a living document utilized throughout the project. A champion will be assigned to each risk item to drive the process and ensure each risk is thoroughly vetted.

Milestone and United Consulting will begin the process of eliminating or mitigating identified risk. Elimination will be the first goal followed by mitigation. Innovative design and construction methods will be employed to eliminate or mitigate risk. As an example, waterway permitting will be a risk to efficiently get bridge construction started. We eliminate this risk by acquiring the permits early and ensuring every item of work is included in the permit, so no revisions or resubmittals are required before work can begin. Utilizing single span bridges could eliminate impacts entirely.

Mitigation will be the second goal. If risk cannot be eliminated, we will find ways to reduce the risk. An example is the environmental document. Environmental impacts create schedule delays. *If we can demonstrate our intent to minimize impacts to the natural and build environment (✓)*, the environmental process will be completed quicker and allow more time for land acquisition and utility relocations. Relocating utilities ahead of construction reduces another risk item.

A well-documented and thoroughly vetted risk register will do three things. It will minimize construction cost associated with unknown risk. The ideal scenario would be no change orders during construction because everything was uncovered during design. *Minimizing the construction cost will lead to the second benefit, which is stretching INDOT's dollar that much farther. Effectively managing identified risks will result in reduced construction costs and maximize the use of the project budget. (✓)*. The third benefit will be ensuring the project meets the completion date. Every item of risk identified, eliminated, or mitigated will have a positive impact on the overall project schedule and critical dates are met.

Risk items that have not been eliminated, will then move into risk allocation and pricing. Each risk item will be classified as a department, contractor, or a provisional risk. The assignment of the risk will be with the party best equipped to manage that risk, without inflating construction costs and reducing the project's exposure to delays, cost overruns, and design related issues.

After allocation, each item of risk can be priced, again through collaboration. A budget can be set for the risk item and payment mechanisms can be determined should the risk be realized. The appropriate costs from the risk register will be incorporated into the pricing agreement.

## **PRECONSTRUCTION PHASE QUALITY MANAGEMENT PLAN**

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Our preconstruction phase Quality Management Plan (QMP) consists of four things: organization, quality control, continuous feedback, and refinement.

### **Organization**

We will work with INDOT's desired file sharing platform to create a folder structure that is easily used by all parties and allows quick and easy access to all documents. Tracking spreadsheets will be created to monitor the status of all submissions for each required construction package. Other submissions that we will track include deviation requests, Requests for Information (RFIs), field design changes, notice of design changes, technical memorandums, and shop drawings. Each package submitted for review will also include a separate comment resolution spreadsheet to address any issues and ensure items are not missed leading up to approved Released for Construction files.

### **Quality Control**

Each item of work and all deliverables will be produced by a designated qualified staff member and checked by an independent qualified staff member based on experience. This process is simple and straight forward, allowing it to easily be followed. This process ensures draft deliverables or working information is vetted by at least two qualified individuals before moving on to next steps. This process is the basis of United Consulting's corporate QC Plan which has demonstrated success for over a decade.

Working in conjunction with Department oversight during the preconstruction process is another way to ensure a high-quality design before moving into construction. Whether this comes in the form of Witness and Hold Points specific to the project or general review and approval submittal methods, our design team welcomes the feedback created by this process. Design standards often allow for more than one solution. Open discussions during design will ensure the final product meets or exceeds the expectations of all parties.



## Continuous Feedback

The constant process of doing and checking naturally creates a continuous feedback loop. For the progressive design build process, this feedback loop is broadened to include all partners and stakeholders through regularly scheduled meetings and documented review comments. Participation by all partners through the PDB process gives everyone ownership of the final product. Work is created and checked and provided to all appropriate partners for discussion and deliberation. The deliberation step is where risk will be identified, innovations will be created, and constructability will be reviewed. Work will then go back into production for implementation where it will be checked again and brought back to the larger group for additional discussion and deliberation. Combined with solid organization and tracking, each item is refined. *Continuous feedback maximizes efficiency of decision making and optimizes schedule by involving partners early and often (✓).*

## Refinement

Through a series of discussions, over-the-shoulder meetings, and formal submissions, the design, constructability, costs, and schedule will be refined. The continuous feedback loop allows critical challenges to be vetted early, allowing for refinement as the project moves forward.

A great example of refinement relates to minimizing impacts to the natural environment. The environmental documents for these types of projects are set-up with a very large footprint to allow for flexibility during design. However, the regulatory agencies require that every effort be made to reduce the size of the original footprint before issuing any corresponding permits impacting wetlands and waterways. *United Consulting's previous project experience on the I-65 Southeast Indiana Design Build project was able to reduce over three acres of wetland impacts by listening to feedback from the environmental experts and being flexible with design elements without sacrificing project budget or safety (✓).*

## COST ESTIMATING

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### Preliminary and Final Pricing Package Plan

Milestone's approach to establishing preliminary and final pricing packages will be developed early in the design process. Preliminary pricing packages will be identified and developed along with the design schedule. As the design schedule is being developed, Milestone will work closely with the Department to identify schedule constraints that require early work packages to maintain the overall project schedule and budget. Items such as permitting and long-lead time materials will be identified and included in early work packages.

### Pricing and Subcontracting Plan

#### 1. Open-Book Pricing Process

Milestone is committed to providing a collaborative, open book estimating approach that fosters communication, accountability and trust throughout the estimating process. *Along with the steps listed below, this process will maximize the project budget to provide the best value to the Department (✓).*

Early in the preconstruction phase, Milestone will initiate estimating workshops with INDOT and the Independent Cost Estimator. These workshops will be utilized to discuss and develop pricing packages, a pay item list, and estimate format that will be used as the design and pricing packages progress.

#### 2. Cost Model Structure

Milestone will develop a cost model that will be submitted for review and comment at least 30 days prior to the first Pricing Milestone Estimate (PME #1). Detailed open-book cost estimates will be provided at 30%, 60%, and 90% design along with detailed breakdown of quantities and scope of work for assumptions and clarifications. The PME package will be generated using HCSS HeavyBid software. Pricing packages will include scope of work, pay item list, quantity takeoffs, crew size, production, labor rates, equipment rates,

material costs, subcontractor, and trucking cost. Indirect costs such as bonds, taxes, and insurance will be included for review.

- The cost associated with each item in the risk register will be included in the PME. In adherence to the open-book model, copies of all quotes from subcontractors, material suppliers, and haulers will be provided.
- Prior to submitting the PME, Milestone will schedule a meeting with the Department and ICE to reconcile quantities and cost.
- The agreed to cost model structure will be the basis for all future project estimates.

### **3. Subcontracting Approach**

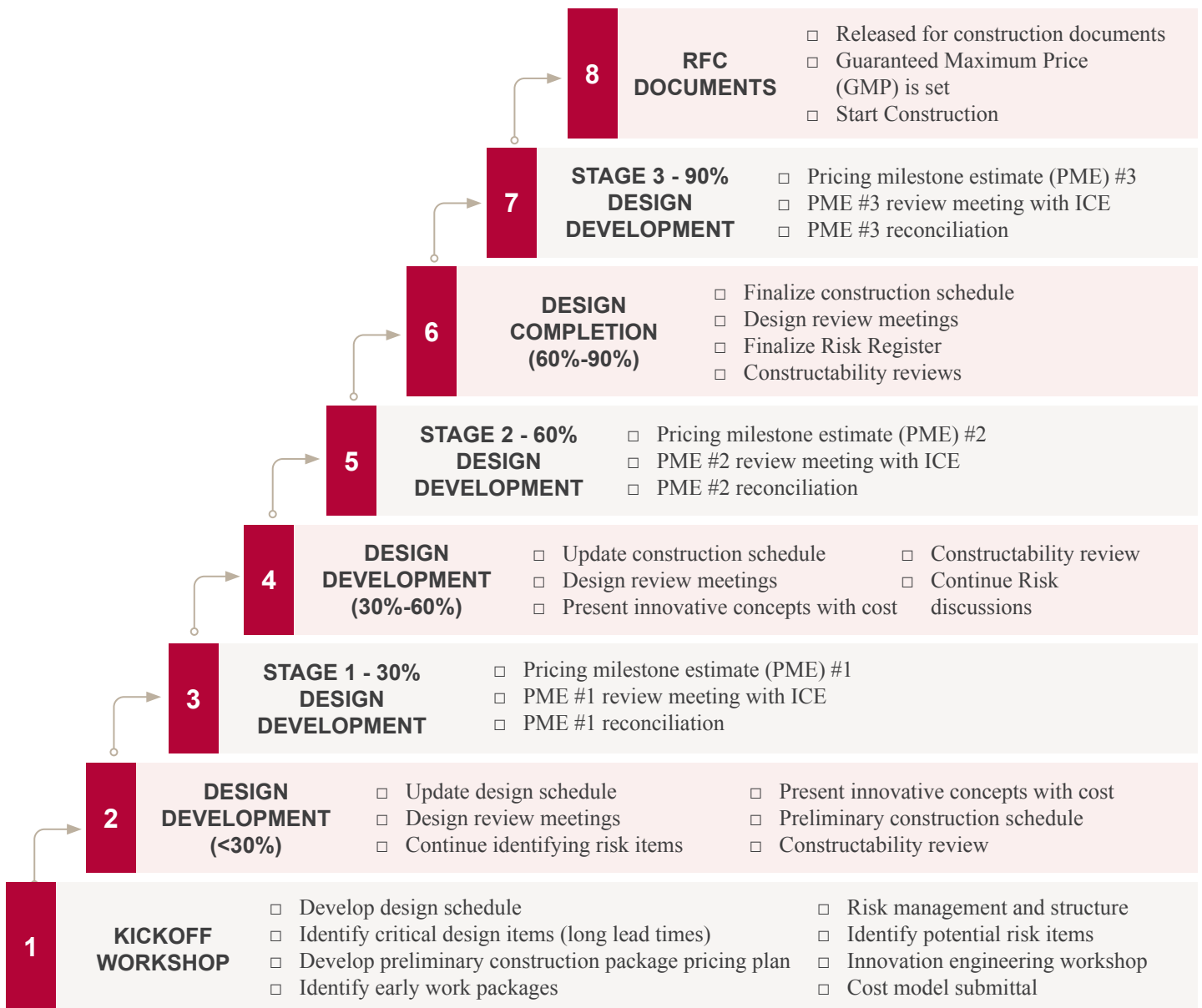
Milestone has a longstanding, successful relationship with many of the subcontractors that will be solicited for this project. Once the pricing packages have been developed, we will immediately begin formalizing the scope of work for each package. Invitations to quote for each package will be sent to subcontractors. Our goal would be to receive at least three quotes for each package, when possible. Milestone will ensure competitive solicitation for this project, giving the Department a high degree of certainty that subcontractor pricing is competitive, fair, and aligned with current market pricing. Quotes received will be reviewed by Milestone and the ICE for completeness ensuring we are comparing similar scopes of work. Subcontractor selection will be based on reliability, quality, and competitiveness.

Milestone routinely self-performs major scopes of work required for this Project such as earthwork, storm sewer, and bridge work. In alignment with the project goals to maximize use of the Project budget to provide the best value to the Department, Milestone will consider inviting other earthwork and utility contractors to submit quotes. Quotes received will be evaluated to our self-performed cost determining if it is more cost effective self-performing or subcontracting the work.

### **4. DBE**

Milestone will ensure that DBE subcontractors, suppliers, and haulers will have an equitable opportunity to participate in the performance of design, supply, and construction contracts for the project. Milestone will comply with the DBE Performance Requirements and is committed to meeting or exceeding the Project's DBE goal. This will be accomplished through a variety of methods, as well as through established relationships between Milestone and DBE companies doing business in the local area. Milestone has been involved in multiple signature projects where the department has established overall DBE participation goals. Our success in meeting DBE goals on past projects illustrates our commitment to the design and implementation of the DBE program and the importance of meeting the project goals.

## Pricing and Subcontracting Plan



## CONSTRUCTION MANAGEMENT

The Milestone and United Consulting team construction management approach for this project will be managed as a partnership. A partnership between our team, INDOT, and the appropriate stakeholders. Everyone has a voice, area of expertise, and the same project goals as outlined in the project documents. The project goals will be met with clear lines of communication and building relationships as an important part of the project delivery. Building trust between each team member will be a priority.

One key to delivering a successful project is consistency in management. For the Milestone and United Consulting team, Justin Patterson will be the single point of contact for the project throughout design and construction. Justin will ensure the project goals are being met. Ron Nagle, our construction manager, will also be involved in the project beginning in the design phase. As the project progresses from design to construction, consistency in our management team will be key for success. Decisions made and discussed during the design process will transition to construction. The same management meetings, scheduling meetings, cost meetings, and risk management meetings will continue through construction.

Early public involvement with local stakeholders such as, City of Lebanon, Boone County, schools, emergency services, and land developers will be a priority throughout design and construction. With these relationships in place, the coordination and planning process will be smooth and will result in maintaining positive relationships with key stakeholders, resulting in a successful project for INDOT and the local community. *Once again realizing the benefits of progressive design-build project delivery (✓).*

## **Project Controls**

The Milestone team will establish and monitor robust project controls, including:

- User-friendly, cloud-based file sharing system to collectively store and share all project related documents.
- Heavy Job will be utilized to document all construction related activities on a daily basis.
- CPM Master schedule
- Risk Register will be maintained to monitor project cost
- Quality Control Management Plan
- Meeting structure to facilitate collaboration between all key stakeholders

Implementing these project controls will provide current and accurate project information to the project team.

## **Project Closeout**

Milestone's document control process will be utilized throughout the project. As the project progresses, documentation required at project closeout will be updated and maintained. Milestone's team will remain engaged during project closeout. This will ensure closing out the project will be smooth and successful.

## **Schedule Management During Construction**

The project schedule is a critical part of any construction project. As a key member of our project team, Scott Carico with Overall Consulting, will be our Primavera P6 expert. The schedule that was developed during design will be updated and utilized during construction. Scott will work closely with our management team to manage the project schedule. Our team will provide timely reporting, contract conformance, transparent and clear planning, accurate forecasting, change management, and proper time evaluation. The schedule will include key performance indicators, durations, logic, and resources on a weekly basis in order to provide weekly schedule updates with INDOT and other team members. As part of the weekly review process, our team will create customized schedules, Excel documents, and charts to identify risks, track progress, identify impacts, and mitigate potential delays. Three-week lookahead schedules will be provided at the weekly meetings. The Project team will focus its efforts on critical items to make sure the project is completed within the contractual timeframe.

## **Cost Control**

A key element of cost control during construction will be utilizing the Risk Register that was established during the preconstruction phase. Identified risks along with estimated cost impacts, will have been agreed upon prior to construction. The Milestone and United Consulting team, will help INDOT manage the scope and potential cost impacts of these risks. Monitoring these risk items during construction, will allow a more accurate forecast of the overall project cost. This is one of the key benefits of the PDB process.

## **Risk Management During Construction**

In collaboration with the Department and our Management Team, the risk register developed during design will continue to be updated and maintained during construction. The risk management workshops that are utilized during design will continue throughout construction. Identified risk items will be assessed at each of those meetings. Identifying and resolving potential risk items early, will allow our team to proactively plan and manage the risk before it becomes a problem for the project. This proactive approach, will have a significant positive



impact on the project by reducing construction costs and allow our team to schedule and plan around the risk, avoiding potential schedule delays. Managing the risk provides opportunities for innovation.

### **Construction Quality Control**

Milestone's Construction Quality Control Plan will fully comply with the contract documents for construction and materials, ensuring a high-quality final product. Drawing on years of quality control experience, we will implement best practices and refined procedures to meet all project standards. Clear responsibilities and well-defined roles ensure comprehensive compliance throughout all project phases and areas of QA/QC.

Milestone is committed to comprehensive testing, inspection, and monitoring of construction activities, led by the Construction Quality Manager Barry Pratt. Weekly project meetings are a platform for discussing construction materials, constructability issues, traffic flow patterns, and other critical aspects of the project. This ensures seamless integration of design and construction, contributing to a safe and quality project.

Our skilled technicians record test sample details for onsite QC/ QA testing. Lab results are thoroughly documented in corresponding reports, providing timely feedback to the project team and INDOT.

To ensure consistent and accessible reporting, our Quality Control technicians maintain an electronic diary documenting daily activities, including weather conditions, material production details, sample acquisition, completion times, locations, test results, and noteworthy events. All lab tests are documented in reports, aligning with INDOT-approved formats, and stored electronically for each material.

### **Safety Management**

Safety is the responsibility of every person at Milestone and all subcontractors are required to meet our safety standards. The project design and work plan along with the proper construction operations will be implemented and executed in order to protect the construction staff, owner's representatives, and the traveling public.

Our goal each year is zero recordable accidents. Milestone spends the off season reviewing every incident from the year before to help achieve zero accidents. We have safety committees that consist of our field staff so that we can acquire input at every level. Safety will be our main focus on this project.

Our crews start off each day with our flex and stretch program to get their bodies ready for the day's work activities. During this time the Superintendent will discuss the tasks of the day along with hazards which may be associated with the tasks. The crews will also complete a JHA (Jobsite Hazard Analysis) form daily going over various aspects of safety at the jobsite. The jobsite will be visited by our Milestone Safety Representatives on a routine basis to ensure all practices and procedures are being followed along with performing random site and crew safety audits. Milestone's safety representatives assist the on-site personnel in recognizing any potential hazards that may have been overlooked.

### **Subcontractors, DBE, and EEO monitoring**

Milestone views each subcontractor as a valuable team member and that will be key in providing a successful, quality project. When possible, Milestone will utilize experienced, local contractors to perform the work. This will provide cost savings to the project allowing the Department to maximize use of the project budget.

We will consistently monitor EEO practices through interviews and certified payrolls utilizing our own EEO officer. We are committed to the DBE program. Several of the subcontractors we choose will be DBE firms. We strive to exceed the goals put forth by INDOT on each project and consistently track our progress. We encourage the use of DBE firms through right-sizing biddable packages and extensive networking.