



**Missouri's  
Local  
Program**  
*for community  
development*

## COVER SHEET

(This must accompany your firm's letter of interest and does not count in the page limit)

Firm's Full Legal  
Name:

Modjeski and Masters, Inc.

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Firm Contact Name:

Jerilyn Hassard

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Contact Email  
Address:

JMHassard@modjeski.com

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Firm's Mailing Address:

333 South 18th Street, Suite 100

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St. Louis, MO 63103

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Work Category:

- Roadway Design
- Trails & Sidewalks
- Construction Inspection
- Traffic Engineering & TEAP
- Structures
- Environmental
- Historic Preservation
- Multimodal Planning / Systems and Facilities Design
- Transportation Planning – **NEW CATEGORY**

Modjeski and Masters, Inc. (M&M) is interested in providing **On-Call Professional Engineering Services for Bridge Design** in all Missouri DOT (MoDOT) Districts for Missouri's Local Program. M&M possesses the expertise, qualifications, and capacity required for successful contract management. We are familiar with MoDOT policies and preferences and are well-versed in bridge design, replacement, and rehabilitation, including structural design, bridge/culvert hydraulic design, plan development, cost estimating, and job special provision preparation.

### PREQUALIFICATION

M&M is listed on MoDOT's Approved Consultant Prequalification List. Our current Financial Prequalification, E-Verify, LPA Training, Bridge Forms, and Bridge QC/QA Plan are on-file with MoDOT.

### GENERAL EXPERIENCE OF THE FIRM

**Ranked #15 on the 2025 Engineering News-Record Top 25 Bridge Design Firms list**, M&M is a 100% employee-owned firm and a nationwide leader in the design, rehabilitation, and inspection of all bridge types. Founded in 1893, M&M has built a legacy of technical excellence and innovation, serving state transportation departments, including MoDOT, as well as port and turnpike authorities and railroads across the country.

M&M's MidAmerica office has consistently delivered quality design services on time and under budget since 1995. This reputation for excellence has fostered long-standing partnerships with agencies such as MoDOT, Metro, and the Terminal Railroad Association of St. Louis. These relationships have led to successive contracts, including on-call agreements with these same agencies, covering assignments that vary in size, complexity, and timing.

**MORE THAN**

# 275 DEDICATED EMPLOYEES

**55** PROJECT MANAGERS

**22** NBIS BRIDGE INSPECTORS



**99** STRUCTURAL ENGINEERS

**5** CONSTRUCTION INSPECTORS

**100%**  
EMPLOYEE OWNED

**24** ELECTRICAL & MECHANICAL ENGINEERS

**24** CADD TECHNICIANS

**10** CIVIL / TRANSPORTATION ENGINEERS

**36** OTHER STAFF

### PAST PERFORMANCE

Our firm has recently completed structural design of multiple bridges for MoDOT utilizing our MoDOT key personnel. A detailed sample of these projects and other recent bridge design work is below:



**Route 114 over Drainage Ditch No. 5, Stoddard County, Missouri** | M&M is providing preliminary and final bridge and roadway design for the replacement of Bridge J0740 carrying Route 114 over Drainage Ditch No. 5. The project includes structural alternative evaluations, HEC-RAS hydraulic analysis, realignment of adjacent field entrances, roadway approach design, and MOT/detour development. Additional services include coordination with the Drainage District to provide additional channel reshaping, utility coordination, environmental/RES submittals, geotechnical investigation, and preparation of final PS&E. The proposed structure consists of a single precast prestressed concrete spread box beam span on integral end bents supported by closed-ended cast-in-place piles.

**Missouri DOT**

Donna Philpot, 573.258.0544  
donna.philpot@modot.mo.gov

Jerilyn Hassard – Project Manager

Rachel Mertz – QC/QA Hydraulics

Yuen Siow – Lead Structural Engineer

Andrew Langendorf – Structural/

Hydraulics

Prajwal Baral – Structural/Hydraulics

Chris Buckel – Field Services



**Route 114E over Dexter Creek, Stoddard County, Missouri** | M&M provided preliminary and final roadway and bridge design services for the replacement of Bridge K0031 carrying Route 114E over Dexter Creek. The project included structural alternative evaluations, HEC-RAS hydraulic and scour analysis, drainage design, bridge and roadway plans, ROW plans, environmental/RES submittals, geotechnical investigation, FAA coordination, and cost and workday estimates for the replacement of the curved, elevated structure. Proposed alignment options were provided to the District to evaluate the required grade raise to meet the nearby UPRR vertical clearance requirements. The proposed alignment was tied into the existing alignment as quickly as possible to minimize the ROW impacts. Cross slopes were adjusted throughout the project limits for safety concerns on the low-speed route. The new structure is a single span precast prestressed concrete NU girder structure supported by integral end bents on H-piles.

**Missouri DOT**

Donna Philpot, 573.258.0544  
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Jerilyn Hassard – Project Manager

Rachel Mertz – QC/QA Hydraulics

Yuen Siow – Lead Structural Engineer

Andrew Langendorf – Structural/Hydraulics



**Missouri DOT**

Donna Philpot, 573.258.0544  
 donna.philpot@modot.mo.gov

**Route 114 over Little River Drainage Ditch, Stoddard County, Missouri** | M&M is providing preliminary and final design services for the rehabilitation of this five-span, steel multi-beam bridge. M&M is preparing final PS&E for the rehabilitation, including deck replacement with a composite slab, bearing replacement, and conversion of the end bents to an integral configuration. New barrier and approach guardrail will be installed to meet current standards, and slope protection improvements will be provided at End Bent 1.

Jerilyn Hassard – Project Manager      Prajwal Baral – Structural  
 Yuen Siow – Lead Structural Engineer      Andrew Langendorf – Structural



**Missouri DOT**

Donna Philpot, 573.258.0544  
 donna.philpot@modot.mo.gov

**Route D over Byrd Creek, Jackson, Missouri** | M&M provided preliminary and final roadway and bridge design services, including structural alternative evaluations, HEC-RAS hydraulic and scour analysis, bridge and roadway plans, ROW plans, environmental/RES submittals, geotechnical investigation, and preparation of final PS&E. A proposed alignment was generated to match into the existing alignment as quickly as possible, while considering the existing field alignment deviation from the original alignment. A legacy alignment was created to tie the original plans to the existing/field conditions and proposed alignment. The new structure is a three-span precast prestressed concrete NU girder superstructure supported on concrete bent caps supported by columns/drilled shafts and integral end bents on H-piles.

Jerilyn Hassard – Project Manager      Andrew Langendorf – Structural/Hydraulics  
 Rachel Mertz – QC/QA Hydraulics      Yuen Siow – Lead Structural Engineer



**Bi-State Development (Metro)**

Tim Nittler, 314.982.1400  
 tfnittler@metrostlouis.org

**Union Station Tunnel Rehabilitation, St. Louis, Missouri** | The tunnel consists of three segments: the first is composed of steel members, the second is a concrete ceiling slab supported on concrete columns, and the third is a two-cell reinforced concrete box culvert. M&M developed load capacity ratings for various steel members throughout the alignment due to section loss noted during the annual inspections. M&M also provided design and construction services to install repairs to the steel portion of the tunnel through five different repair contracts. Repairs included shoring of the north and south abutments, shoring of the NE Bay Room, steel column encasements, partial deck replacement in one bay, and various steel girder and column repairs. Construction services included review of RFIs and shop drawings, as well as on-site construction oversight. M&M collaborated with the Owner to take advantage of available funding.

Aaron Kober - Project Manager      Yuen Siow - Lead Structural Engineer  
 Chris Buckel - Field Services



**City of Columbia/COLT**

C. Johannngmeier, 573.874.2489  
 christian.johanningmeier@como.gov

**US Highway 63 Overpass, Columbia, Missouri** | This project involved the relocation of a rail line to a previous alignment which overpasses US 63 in Columbia. M&M designed the overpass structure with two 85-ft. through plate girder main spans and four deck girder approach spans. M&M also provided construction support and inspection services. We met the compressed 6-month design schedule, providing plans in time for the project to be eligible for unexpected federal funds that were made available through the American Recovery and Reinvestment Act. This LPA project included MoDOT coordination.

Yuen Siow - Structural      Aaron Kober - Lead Structural Engineer  
 Jerilyn Hassard - QC/QA      Chris Buckel - Field Services

### QUALIFICATIONS OF PERSONNEL

M&M recognizes that on-call assignments can arise at any time and involve a wide range of tasks. To address this unpredictability, we have designated two Project Managers who are highly experienced in working with MoDOT and managing on-call contracts. Each brings more than 25 years of bridge design expertise, including leadership and hands-on roles on previous MoDOT contracts and task order-based assignments. Supported by a local pool of bridge, hydraulics, and roadway engineers, we can quickly assemble a tailored design team for any assignment. Our proven, redundancy-focused approach has consistently proven successful on M&M's prior on-call contracts.

<b>QC/QA MANAGER</b>	<b>PROJECT MANAGERS</b>
 <b>Jerilyn Hassard, PE</b>	 <b>Aaron Kober, PE</b>  <b>Rachel Mertz, PE</b>
<b>DESIGN SERVICES</b>	
 <b>Yuen Siow, PE</b> <i>Lead Structural Engineer</i>  <b>Chris Buckel, PE</b> <i>Field Services (NDT)</i>	<b>Andrew Langendorf, PE</b> <b>Jonathan Davis, PE</b> <b>Prajwal Baral, EIT</b> <i>Structural and Hydraulics Engineers</i>



### Jerilyn Hassard, PE | QC/QA Manager

Jerilyn, Vice President and MidAmerica Regional Director, has 29 years of experience in bridge design, rehabilitation, and evaluation. A licensed Missouri PE (#2002003174), she has managed preliminary and final design projects ranging from simple structure replacements to complex, new bridge design. Jerilyn has overseen MoDOT Bridge Bundle Contracts in the SE District, managed similar task work order-based contracts, and is intimately familiar with MoDOT's policies, preferences, and procedures.



### Aaron Kober, PE | Project Manager

Aaron, a proven Project Manager, brings 28 years of experience in bridge engineering for local, state, and municipal clients. A licensed Missouri PE (#2008028539), LPA Project Certified through MoDOT, and a certified Bridge Inspection Team Leader, he specializes in load rating, design, rehabilitation, and inspection of highway, railroad, and pedestrian structures. He has assisted with the management of the MoDOT Bridge Bundle Contracts in the SE District and provided QA for statewide load rating projects using AASHTOWare Bridge Rating.



### Rachel Mertz, PE | Project Manager

Rachel, Senior Project Manager and MidAmerica Assistant Regional Director, has 27 years of transportation engineering experience. A licensed Missouri PE (#2013042648), she manages bridge projects involving design, rehabilitation, load rating, inspection, and analysis. Her expertise includes hydraulic modeling and AASHTOWare Bridge Rating. Rachel was the Project Manager for the Route A Bridge Replacement Over Indian Creek in Perry County. She currently oversees MoDOT's Load Rating contracts for routine and large/unusual structures and serves as QC/QA Hydraulic Reviewer for Bridge Bundle projects in the SE District, including Route D over Byrd Creek and Route 114 over Dexter Creek.



### Yuen Siow, PE | Lead Structural Engineer

Yuen, Technical Manager for M&M's MidAmerica Region, has 26 years of structural engineering experience in inspection, load rating, design, and rehabilitation of highway, railroad, tunnel, and pedestrian structures. He serves as Lead Structural Engineer for MoDOT's Load Rating of Large and Unusual Structures and has contributed to Bridge Bundle projects in the SE District, including deck and abutment design for Route D over Byrd Creek and pier/I-girder review for Route 114 over Dexter Creek and UPRR.

## FAMILIARITY/CAPABILITY

M&M has extensive experience providing bridge design services to MoDOT and is fully familiar with MoDOT design standards and guidelines. Our team members have successfully delivered numerous bridge projects across the state, working closely with MoDOT officials to meet project requirements and expectations. With decades of combined experience managing task order-based contracts, we bring proven capability to execute on-call assignments efficiently and effectively.

M&M has a proven record of delivering federally-funded transportation projects that comply with all applicable federal laws and regulations. M&M has successfully completed numerous Locally Administered Federal Aid Projects and has extensive experience working with FHWA standards, guidelines, and compliance requirements.



## ACCESSIBILITY

M&M's robust project management and QC/QA program enables us to manage multiple concurrent projects without compromising technical quality or responsiveness. Our local staff ensures immediate access for coordination, field reviews, and stakeholder communication throughout the life of each project. With multiple Project Managers proposed, we will absorb project demands and coordinate deliverables seamlessly, providing Missouri's Local Agency with timely, accurate, and fully compliant design packages.



### The strongest measure of capability and accessibility is client satisfaction.

*The final design phase went very smoothly and [M&M] met the deadlines. [M&M] turned in a good set of final plans. [M&M] was easy to work with and very responsive throughout the project!"* —Michele Atkinson, MoDOT (Route A over Indian Creek)

*... without [M&M's] willingness and ability to rapidly accelerate their design efforts, the [US 63 Bridge project] would have not been funded or constructed."* —Christian Johanningmeier, City of Columbia, MO (US 63 Overpass)

**Modjeski and Masters, Inc. (M&M)**, a 100% employee-owned company, is a recognized leader in the design, inspection, and rehabilitation of all types of bridges, highways, and tunnels. Ranked **#15 on the 2025 ENR Top 25 Bridge Design Firms** list and celebrating **130+ years of continuous operation**, M&M offers integrated in-house expertise in structural, electrical, mechanical, highway, and construction engineering, all under a unified management approach.

## M&M's MidAmerica leadership brings proven expertise tailored to meet MoDOT's needs.



### Jerilyn Hassard, PE, SE

Vice President, MidAmerica Regional Director, and **MoDOT's Direct Contact**

**P:** 618.659.9102 | **E:** JMHassard@modjeski.com

- 29 years of transportation engineering experience
- Licensed in Missouri
- NBIS Program Manager
- Corridor management, including lighting and roadway design expertise
- Public involvement and context sensitive solutions
- Award-winning Project Manager



### Rachel Mertz, PE, SE

Senior Project Manager, MidAmerica Assistant Regional Director

- 27 years of transportation engineering experience
- Licensed in Missouri
- NBIS Program Manager
- Load capacity rating expert, including AASHTOWare BrR specialist
- Hydraulic and scour analysis and design expertise
- Extensive rehabilitation experience



### Aaron Kober, PE, SE

Project Manager

- 28 years of transportation engineering experience
- Licensed in Missouri
- NBIS Team Leader
- CM/GC and Resident Engineer experience
- Railroad coordination specialist
- LPA Federal Basic Training and LPA experience



...without M&M's willingness and ability to rapidly accelerate their design efforts, the bridge would not have been funded or constructed."

—City of Columbia, MO

Every step of the development and implementation of the project was under a tight schedule, and M&M met or improved upon the schedule deadlines..."

—Illinois DOT

## MISSOURI LOCATIONS



## AWARDS

### Iowa DOT I-74 Mississippi River Bridge

- 2023 ACEC Illinois Grand Conceptor & Honor Award
- 2022 Roads & Bridges Magazine Top 10 Bridges
- 2022 NCSEA Outstanding Project – Bridge/Transportation
- 2022 NSBA Prize Bridge Award – Major Span
- 2022 ABCD Outstanding New Long Span Bridge

### Illinois DOT Martin Luther King Bridge Approach

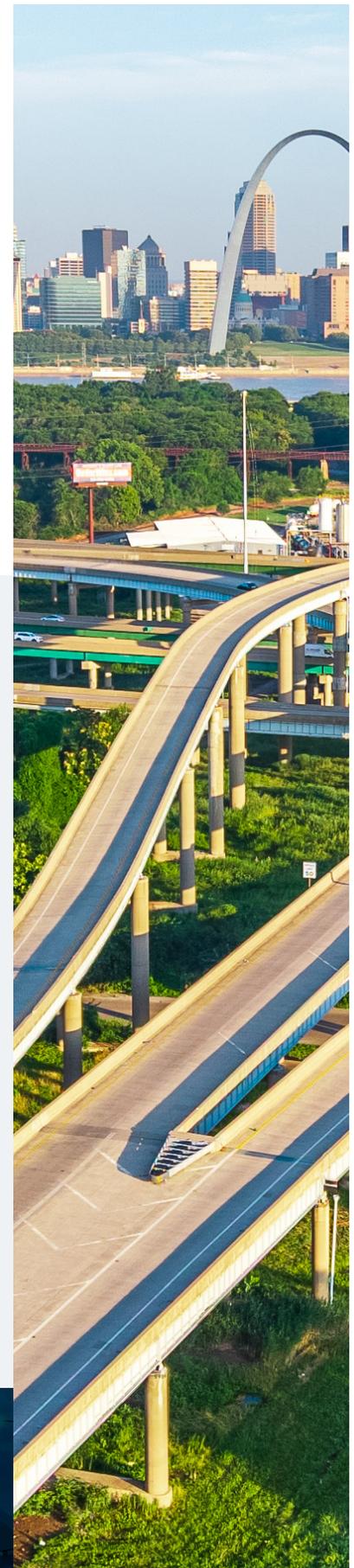
- 2022 ACEC Illinois Honor Award
- 2022 ACEC Illinois Judges Choice Award - Structural Systems
- 2019 WTS St. Louis Innovation in Transportation

### Illinois DOT Legal Loads Parametric Evaluation

- 2018 ACEC Illinois Special Achievement Award

M&M’s comprehensive, in-house capabilities allow us to support the entire life cycle of transportation infrastructure— from initial research and conceptual studies, through design, construction, maintenance, demolition, and replacement.

- New and rehabilitation bridge design
- Roadway, highway, interchange, and corridor design
- ADA compliance and safe systems design
- Inspection services
- Field instrumentation and NDT
- Load capacity evaluations
- WIM traffic studies
- Maintenance and protection of traffic
- Vessel collision investigation
- Scour analysis
- Erection analysis and design of temporary works
- Lighting design
- Mechanical engineering
- Electrical engineering
- Bridge security and vulnerability analyses
- Hydraulic and scour analyses
- Fatigue and seismic evaluations
- Emergency response and forensic studies
- Bridge engineering research, code, and course development



M&M is a recognized leader in lifecycle transportation engineering services for all structure types. Our expertise spans the full lifecycle of bridge and highway support – from research and conceptual studies to design, construction engineering, field services, and rehabilitation. We are deeply rooted in the communities we serve, while maintaining a nationwide reach.



## Route D over Byrd Creek

### *Cape Girardeau County, MO*

M&M provided preliminary design services for the replacement of the existing five-span structure on MO Route D over Byrd Creek. These services included hydraulic and scour analysis, preliminary roadway plans, a bridge memorandum, and initial cost and workday estimates. M&M delivered final roadway and bridge design, along with limited construction support services.



## Route 114E over Dexter Creek and UPRR

### *Dexter, MO*

M&M provided preliminary design services, including hydraulic and scour analysis, drainage design, preliminary roadway plans, ROW plans, UPRR coordination, bridge memorandum, and preliminary cost and workday estimates for the replacement of these two curved, elevated, structures. The proposed alignment was tied into the existing alignment as quickly as possible to minimize the ROW impacts. Drainage was designed to flow away from the UPRR ROW and cross slopes were adjusted throughout the project limits for safety concerns on the low-speed route. M&M provided final roadway and bridge design and is delivering limited construction support services.



## Route A over Indian Creek Bridge

### *Perry County, MO*

M&M provided preliminary engineering, final design, and construction support services for the replacement of the Route A Bridge over Indian Creek. The scope included hydraulic and scour analysis, along with a detailed substructure investigation and cost comparison to determine the optimal foundation solution. The new structure consists of a four-span precast, prestressed concrete spread box beam superstructure supported by pile bent caps and integral end bents.



## MLK Bridge Approach Complex

### *East St. Louis, IL*

M&M provided Phase I, II, and III engineering services for the replacement of the original east approach structure to the MLK Bridge. The project also included miscellaneous repairs and highway improvements to six additional structures within the approach complex. These elements were added late in the schedule to maximize project value. M&M's scope also included highway lighting and MSE wall design.



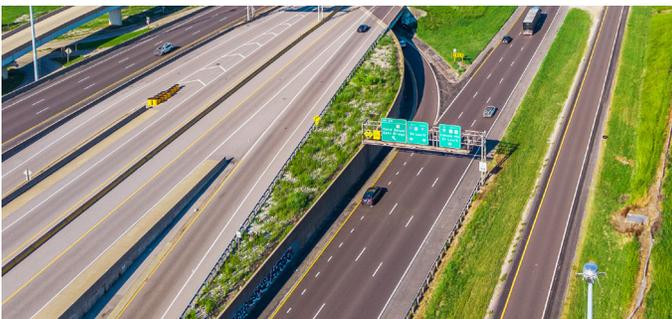
## Lighting Design

M&M delivers comprehensive electrical system design and inspection services for a wide range of transportation lighting projects. Our experienced team has worked on lighting solutions for roadways, streetscapes, tunnels, bridges, and plazas, as well as traffic control and monitoring and facility interior and exterior lighting.



## ADA Compliance and Bicycle/Pedestrian Design

M&M partners with clients to improve facilities and ensure compliance with ADA and PROWAG standards. Typical projects enhance safe access to businesses, restaurants, schools, and residences. Our experience includes implementing ADA transition plan upgrades in high-pedestrian areas, such as sidewalks, curb ramps, signing and pavement markings, and street crossing improvements



## Highway, Roadway, and Corridor Design

M&M has developed expertise in the planning and design of roadways, corridors, and major expressways. From the complex urban interchanges to rural roadways, our comprehensive roadway-related services include geometric design of highways and streets, traffic/safety studies and signal design, roadway lighting, hydrologic and hydraulic analyses/scour, drainage/E&S/PCSM design, ADA pedestrian/bicycle design, and maintenance and protection of traffic.



## Maintenance and Protection of Traffic

M&M has prepared numerous Maintenance and Protection of Traffic plans for the construction of various roadway projects. We are very familiar with Federal regulations and follow these mandates when preparing the plans to ensure the safety of all motorists and workers in the construction area.



## Design Visualization

M&M's visualization services help clients, stakeholders, and the public see the "big picture" before, during, and after project completion. Our in-house 3D capabilities include:

- ◆ High-Quality Photo-realistic Renderings
- ◆ Flyby and Drive Thru Animations
- ◆ Computer Generated Details and Animations

Every visualization is developed by trained engineers using accurate, engineered designs and details.