Marsia A. Geldert-Murphey, PE*

Senior Associate, GBA
2024 ASCE Global President

Marsia serves as the Senior Associate for GBA's Illinois Operations. Her 30+ years of experience includes the management and supervision of many high-profile environmental, geotechnical, and transportation projects throughout the Midwest. She has managed, conducted, directed, and supervised geotechnical reports, NEPA documents, project development reports, engineering design, construction engineering, material testing, eminent domain proceedings, public involvement plans, and maintenance and operation plans. Also, she has served as quality assurance officer for numerous multidisciplinary projects involving federal funds.

She started her exemplary career and spent 8 years with the Illinois Department of Transportation (IDOT) in Collinsville where she focused on construction and geotechnical engineering. She served on the field team that supervised the construction of the Clark Bridge, a cable-stayed structure in Alton. Marsia then entered private practice and was elevated to vice president and the first female partner of a 200-person Midwest engineering consulting firm. She then co-founded a 100% women-owned engineering firm, providing contracting, geotechnical, and civil engineering services to clients in both public and private sectors. Through hard work, two acquisitions, and company growth the firm grew from a company of two employees to 45 in five years providing services in multiple facets of the engineering and construction industry. Some of the projects Marsia helped manage include the Illinois Approach to the Stan Musial Veterans Bridge over the Mississippi River, I-270 bridge over the Chain of Rocks canal, Illinois High Speed Rail, Murray Baker Bridge Shortening of a cantilever truss, and the I-64 Rieder Road Interchange at Scott Air Force Base. After a brief sabbatical, where she authored a memoir, she opened her own engineering firm serving as president and CEO, which subsequently was acquired by another firm.

Representative NOTABLE Project Experience

Lebanon Road over CSX Railroad for Madison County, Illinois – Principal-in-Charge The project included Phase I and II engineering services for the proposed reconstruction of a segment of Lebanon Road extending from Clay School Road to approximately 1.2 miles east (approximately 6,250 ft.) on relocated alignment. The work in this segment involves the closure of two underpass structures that currently carry the CSX Railroad over existing Lebanon Road and Lockmann Road along with the construction of a new six-span (100', 120', 120', 120', 100') composite plate girder structure carrying Relocated Lebanon Road over the CSX Railroad. Extensive railroad coordination with CSX and Illinois Commerce Commission. Engineering efforts were phased out. Phase I involves alternative analysis, environmental studies, selection of a preferred alternative, drainage analysis, preparation of a Type Size and Location (TS&L) Drawing for the proposed structure carrying Relocated Lebanon Road over the CSX Railroad, development of preliminary plans, determination of construction limits, and development of the proposed right-of-way and easement design. Phase 2 involved preparation of the Preliminary Bridge Design and Hydraulic Reports, final structure plans, final roadway plans, bid documents, utility relocations, environmental clearances, permits, right-of-way/easement plats and legal descriptions and property acquisitions. Construction Cost $17.3M, estimated to open to traffic in November 2025.

US 30 Corridor Study, Whiteside County, Illinois – Subconsultant Principal-in-Charge. The team provided public involvement support, following IDOT's Context Sensitive Solutions (CSS) guidelines, and GIS mapping for an environmental impact statement (EIS). The study area is approximately 24 miles long and 10 miles wide. This project was a comprehensive study of the traffic, safety, and environment to develop alternatives for the improvement of existing US 30. The EIS record of decision was signed on June 12, 2017. Design Approval (DA) was obtained on May 18, 2018. Funding for design and construction is not currently included in the Department's FY 2019-2024.

Years of Experience
34

Education
MS, Civil Engineering, Missouri University of Science & Technology, Rolla, Missouri, 1997

BS, Civil Engineering, South Dakota State University, Brookings, South Dakota, 1992

Certifications
NEPA & the Transportation Decision- Making Process, NHI Course 142005

Context Sensitive Solutions, NHI Course #142050

Registration
*Professional Engineer: Missouri – Illinois – Texas – Kansas – Indiana – Iowa – Nebraska – Arizona - Wyoming

Industry Associations
American Society of Civil Engineers, 2024 Global President

Southwestern Illinois Leadership Council, Board Member

Society of Women Engineers, Member

Illinois Association of County Engineers, Associate Member

Southwestern Illinois Council of Mayors, Associate Member

American Council of Engineering Companies, Member

FAI 64 at Rieder Road Interchange, O'Fallon for St. Clair County, Illinois – Principal in Charge responsible for the Phase I geotechnical, environmental, and public involvement services that included preparation of an Access Justification Report (AJR) for the proposed interchange access onto I-64 at Rieder Road. Project included public meetings; newsletters; and presentations to county, state, and federal representatives. The interchange opened to traffic in September 2017.

Governors Parkway, Edwardsville, Illinois – Project Manager and Primary Author for the Roadway and Structural Geotechnical Report and the Environmental Lead and Primary Author for the Environmental Impact Statement Re-evaluation for a 4-mile corridor of new highway construction. Facilitated and led all public involvement activities that included public involvement meetings and a hearing. The project was opened to traffic in July 2008.

Relocated Route 3 (FAP 14), Sauget to Venice, Illinois – Primary Author for the preliminary environmental site assessment (PESA) for Relocated Route 3 from Sauget to Venice, approximately 8 miles of multi-lane highway on new alignment to replace existing two-lane highway. The proposed corridor crosses a heavy industrial and commercial use area; the study area included two superfund sites. The first phase of this improvement was constructed as part of the Stan Musial Bridge project and was completed in 2014.

Columbia Crossing Interchange, Columbia, Illinois – Environmental Lead and Primary Author for an environmental assessment for an interstate access justification report and interchange design at I-255 and Fish Lake Road. Project involved a Phase III cultural resource mitigation plan, as well as addressing wetland and water resource impacts. Facilitated and led all public involvement activities that included two public meetings. The project has not been constructed pending funding.

I-270 Bridge Replacement over the Chain of Rocks Canal, Madison County, Illinois – Principal in Charge of the subconsultant team providing geotechnical and geometric design support. Served as the Primary Author of the Structural Geotechnical Report for the bridge replacement of the existing 12-span twin truss structure with a 5-span structure. The project was studied and designed in a condensed 24-month schedule. Due to span lengths, design seismic and lateral loads, the structure geotechnical report recommended rock-socketed drilled shaft foundations. The project required extensive coordination with the USACE where a proposed pier was constructed adjacent to the existing levee. Our geotechnical analysis included embankment construction adjacent to existing levees, retaining wall construction, seepage analysis and deep foundation recommendations. The bridge opened to traffic in 2014. The new bridge represents the largest steel plate I-girder bridge in Illinois. Cost $104M opened to traffic in 2014.

City of Eufaula Municipal Airport (FAA: F08 ICAO: KF08), Eufaula, Oklahoma – Primary Author of the airport's DBE program and goals. The airport is a member of the Oklahoma Unified DBE Certification Program and the DBE program, and goals must be updated to show good faith effort of the implementation of the DOT/FAA DBE Program. Conducted a market study of area contractors, five years of bid tabs, and the capital improvement program (CIP) to establish goals. Prepared and managed public participation for program and goal setting through airport website, social media and public hearing was held via a webinar presentation and response to comments regarding the program on behalf of the DBE Liaison Officer (DBELO) and airport. Furnished data for year-end reporting data into DBE Office Online Reporting (DOOR) System on sponsor's behalf. Project Year: 2017

I-70 Tri-Level Connection for Stan Musial Veterans Memorial Bridge, East St. Louis, Illinois – Subconsultant Principal in Charge for members of team providing superstructure design for Illinois approach and Project Engineer responsible for seismic design aspects of structural geotechnical aspects of Illinois approach. Quality Assurance and Quality Control review of the main span structural geotechnical report for the design of the bridge, currently the third longest cable-stayed structure in the United States. Construction cost $695M and opened to traffic on February 9, 2014.

St. Louis Loop Trolley, University City, Missouri – Public Involvement Facilitator who assisted in the preparation of the environmental assessment and provided public involvement support. Provided GIS mapping of complete inventory of environmental features along the project corridor and evaluated impacts of the proposed construction. Assisted with both the Stakeholder Working Group and Citizen Advisory Group meetings. The loop trolley opened for passenger service in November 2018.

Gateway Connector, Madison and St. Clair Counties, Illinois – Project Engineer in support of the public involvement, cultural resources, and geotechnical services and content of a Corridor Protection Report for a 42-mile-long corridor. The corridor protection was filed in 2005. Led the final design of a 2-mile segment completed in 2024 and currently under construction. Construction costs $20M.

Periodic Levee Inspection, Missouri & Illinois – Principal in Charge and Program Manager under contract to the US Army Corps of Engineers (USACE), conducted more than 400 miles of periodic inspections for 26 levee systems along the Mississippi, Illinois, Big Muddy, and Kaskaskia Rivers. These systems included 200 drainage structures, 400 closure structures, 50 pump stations, and several flood walls. The periodic inspections were conducted utilizing a Geographic Information System (GIS)/ Global Positioning System (GPS)-based levee inspection system tablet. These inspections are part of a nationwide effort to inventory federal program levees and to assess their conditions and capabilities. The project received outstanding and excellent ratings by the USACE for each category rated and the project was completed three months ahead of schedule. The project and accompanying reports were completed in 2011.

Lower Illinois River Regional Crossing Study (Florence Bridge), Scott, Pike, Calhoun and Greene Counties, Illinois – Project Engineer responsible for leading the Context Sensitive Solutions (CSS) public involvement approach for the study. The Florence Bridge provides linkage between regional employment centers including Winchester, Pittsfield, and Jacksonville. Due to the bridge's importance for both highway and river traffic, IDOT designated the project as a Context Sensitive Solutions (CSS) study. Marsia led the CSS facilitating the Citizen's Advisory Group (CAG) meetings and providing technical writing services for a feasibility study exploring potential measures to maintain access, reduce operations costs, reduce maintenance costs, and improve safety for current and future users of the Florence Bridge crossing. The overall study area included Scott, Pike, Calhoun, and Greene Counties between I-72 and IL Route 108. Marsia supervised the preparation of meeting materials for CAG and public meetings; recorded meeting minutes, updates, and newsletters for the study website; worked with IDOT staff to evaluate crossing alternatives; and presented findings to the public. During the study five alternatives were proposed. The study focused on potential measures to maintain access, reduce operations and maintenance costs, and improve safety for current and future users of the Florence Bridge crossing. The feasibility study was completed in 2012.

IL 162/157 Intersection Realignment Study, Glen Carbon for IDOT, District 8 – Project Manager for the crash analysis and Project Engineer for Context Sensitive Solutions (CSS) guideline compliance and participated in and supported the public involvement efforts following IDOT's CSS guidelines. The project entailed Phase I services to realign the existing offset IL Route 162/157 intersection. Several intersection improvement options were analyzed and presented through the CSS process at stakeholder meetings, community advisory groups, and public information meetings. The project is included in the 2025 highway program for construction.

Merchants Bridge Rehabilitation, St. Louis, Missouri & Venice, Illinois – Geotechnical engineering Quality Assurance and Control Engineer for the structural geotechnical analysis for the bridge foundation design. Dating back to 1890, the Merchants Bridge serves six Class I railroads and Amtrak to cross the Mississippi River at St. Louis and is one of the nation's primary east-west rail corridors serving the nation's second largest rail hub by car interchange volume and third largest by gross tonnage. Final design of the three new 520-foot truss spans will include strengthening of the existing masonry foundations to withstand seismic and barge collision events, as well as a combination of float-in, lifting spans with strand-jacks, and lateral slide-into-place. The bridge is owned by the Terminal Railroad Association of St. Louis (TRRA) with rail connections to Amtrak's St. Louis Station, six Class I freight railroads (BNSF Railway Company (BNSF), CSX Transportation, Inc. (CSX), Illinois Central Railroad Company (CN), Kansas City Southern Railway Co., Norfolk Southern Railway Co. (NS), and Union Pacific Railroad Co. (UP) and five short line carriers. Construction cost $222M, opened to rail traffic 2023.

Lenzburg Road Bridge, Washington County, Illinois – Project manager for team that conducted a value engineering review of a proposed new bridge to carry a one-million-pound generator and four transformers over a local bridge to the Prairie State Energy Campus. Our team recommended temporary bents for the existing 3-span bridge; the temporary columns were founded on a micro pile system. This system yielded substantial savings in cost and time over the construction of a new bridge. We coordinated permitting with the US Army Corp of Engineers, prepared foundation and structural plans and specifications and prepared the bid documents. Provided construction engineering and material testing during installation. The project was completed two weeks ahead of schedule. All five transports traveled over the bridge on schedule. After all the transport was completed, the temporary support system was removed, and the bridge returned to its original state. The 1,600-megawatt base load, coal-fired, electrical power station, and coal mine went online in 2012.

Chicago to Quad-Cities Passenger Rail: Iowa Interstate Corridor, Wyanet to Rock Island, Illinois – Principal-in-Charge of the subconsultant team supporting the preparation of the Environmental Assessment for passenger rail service between Chicago and Iowa City, through the Quad Cities (Rock Island, Moline, and East Moline, Illinois; and Davenport and Bettendorf, Iowa), a distance of 219.5 miles. The project purpose was to increase regional mobility, reduce roadway congestion, meet future travel demands, and provide an affordable alternative mode of transportation for the communities served. Our team was responsible for the waterways, wetlands, and floodplains and threatened and endangered species studies. The finding of no significant impact (FONSI) was issued to the Federal Railway Administration in August 2010. In December 2023, the Federal Railroad Administration accepted an application by IDOT to enter the Chicago–Moline route into its Corridor Identification and Development Program. The project received a $500,000 grant in 2023 toward service planning and prioritizes the route for future federal funding.

North Main Street Water Main Relocation & Sewer Rehabilitation, Edwardsville, Illinois – Principal Engineer who oversaw the design for relocation of approximately 3,000 feet of 8- and 12-inch water main and rehabilitation of 4,000 feet of 12-, 15-, and 30-inch sanitary sewer. The right-of-way working room was constrained by existing underground utilities and buildings located at the edge of right-of-way. Developed one plan set, specifications, IEPA, and IDOT permitting for the water main projects. Developed a second set of plans for the sewer rehabilitation.

Interurban 2010 Small Main Replacement Design – Belleville, Granite City and East St. Louis, Illinois – Principal Engineer who oversaw the completion of design for 23,660 feet of 8-inch and 2,000 feet of 12-inch main replacement at 20 different locations in Belleville, Granite City, and East St. Louis, IL. Design services included surveying, design main replacement, and permit acquisition. Permits included IEPA, IHPA, IDOT and Railroad.

Interurban Main Relocation for New Mississippi River Bridge, East St. Louis, Illinois – Principal in Charge who oversaw the completion of hydraulic analysis and design for 3,700 feet of 8-inch main relocation due to the New Mississippi River Bridge in East St. Louis, IL. Hydraulic analysis was conducted to determine the appropriate size of transmission main to compensate for transmission mains that were to be abandoned. Design services included surveying, easement acquisition, design main relocation, construction observation, collection of GIS points during construction, and preparation of as-built drawings. Permits included IEPA, IHPA and IDOT.

Lewis and Clark Confluence Tower, Hartford, Illinois – Principal geotechnical responsible for the deep foundation design for a 180-foot-tall tower with two legs joined by a viewing platform on the Illinois bank of the Mississippi River at the confluence of it and the Missouri River. Construction cost $5M and opened for visitors in 2010.

Bissell Point Ash Basin Floor Replacement - MSD Project No. 12493 – Project Manager for the Geotechnical Engineering exploration and recommendations for Bissell Point Wastewater Treatment Plant Ash Basin Floor Replacement recommendations. Two ash basins were constructed in 1871 as part of the original Bissell Point WWTF, located adjacent to the west bank of the Mississippi River. The goal of this study was to characterize and evaluate the south basin floor and subgrade using nondestructive ground penetrating radar survey and limited subsurface exploration and provide geotechnical engineering recommendations to replace or repair the ash basin floor and extend the service life of the basins.

IL Route 163 over Powdermill Creek, Centreville, Illinois – Analyzed and designed earth retaining structures and reinforced roadway embankments, including the first permanently installed geosynthetic wrapped-face wall for IDOT. Constructed in 1996 and last inspected in 2023 and continues to serve its purpose effectively providing support and stability.

MSD – Flood Protection Assessment, St. Louis, Missouri – Primary author and field inspector for the geotechnical assessment of 23 pump stations along the Mississippi Riverfront in St. Louis. The project required a 50-year life cycle vulnerability assessment of each pump station to ensure functionality in the event of a 52-foot Mississippi River stage that has a frequency of recurrence once every 800 years. The project required coordination with the USACE St. Louis District.

IL Route 3, Chester, Illinois – Following a severe storm IL Route 3 experienced a significant road washout, resulting in abrupt closure of a vital transportation corridor and posed a safety risk. Served as primary design and construction engineer for a rapid construction process to

expedite the restoration of road and restore traffic. Earthen berm design and geosynthetic subgrade reinforcement through landslide failure zone was constructed, working around the clock. The road was restored to its former functionality 4 days after the washout.

Water Treatment Plant Expansion, Peoria, Illinois – Primary author of geotechnical report for improvements to Peoria Main Station Water Treatment Facility (WTF) by Illinois American Water Company (IAWC). Four concrete structures and an aerial electrical loop around the facility, a subconsultant to Donohue Associates. The project received the 2018 ACEC Illinois Merit Award.

Peoria Sanitary District Levee, Peoria, Illinois – Principal Engineer in charge of team logging soil borings, utility coordination, and graphic presentation for geotechnical investigations of levee system protecting Peoria Sanitary District's main plant adjacent to the Illinois River.

Warrenton Wastewater Treatment Plant Headworks and Force Main Upgrades, Warrenton, Missouri – Primary author of geotechnical report for Warrenton Wastewater Treatment Plant (WWTP) Headworks and Water Street Lift Station and the East Interceptor sewer and force main upgrades. The proposed Water Street Lift Station is proposed to pump into a new 16-inch force main pipe, which will transmit wastewater to the East Interceptor Sewer. The force main will include a crossing of Highway M and the adjacent Norfolk Southern Railroad. The proposed East Interceptor Sewer pipe is a 24-inch and 21-inch pipe and will include a crossing of I-70 and State Highway AA. Construction cost $5M and construction completed in 2024.

SW Illinois Levees, Madison, St. Clair and Monroe Counties, Illinois – On August 15, 2007, FEMA had announced its intention to de-accredit the 65-mile Metro East Sanitary District levee system protecting Illinois communities in Madison, St. Clair, and Monroe counties. Principal Engineer in charge of team logging testing borings. Project involved managing geotechnical samples that were environmentally impacted. Supervised excavation of over 100 test pits to identify clay layers to evaluate for properties necessary for levee construction work. Worked as a sub-consultant for URS Corporation. In 2022 the levee system received re-accreditation by FEMA to a 100-year-flood standard of flood protection.

South County Connector Environmental Impact Study, St. Louis County, Missouri – Principal Engineer in charge of subconsultant team responsible for wetland studies, GIS base mapping, and public involvement participation following the CSS approach for the public involvement. The project involved a study to look at improving connectivity between St. Louis County and South St. Louis City; improve access to I-44, I-55, I-64 and I-170; and improve safety throughout the transportation network from the Maplewood area to Shrewsbury. Project planning was put on hold in 2014 due to funding uncertainty.

PTB 890-166 High Speed Rail, Chicago to East St. Louis for IDOT, District 8 – Principal-in-Charge for a subconsultant [DBE] member of the PMC team. The key service areas assigned to the firm were environmental and administrative (inter- and intra-agency, and consultant coordination/negotiation). The CHISTL HSR project team consisted of various members that included IDOT, the Federal Railroad Administration (FRA), the Union Pacific Railroad (UPRR), local governmental agencies, and multiple consulting engineering firms. Construction cost $1.6B, track station upgrades were completed in 2023 that increased speeds from 79 mph to 110 mph between Chicago and St. Louis.

Project Connect Initiative, I-64 Access Modifications at Jefferson Avenue for St. Louis Development Corporation – Project Manager responsible for the NEPA Process and Documentation for the AJR. Lochmueller prepared an area-wide traffic study that identified how much traffic would be generated by the proposed National Geospatial-Intelligence Agency development, assessed the ability of motorists to safely/efficiently enter and exit north St. Louis from the regional roadway network, and determined the transportation infrastructure needed to accommodate both near and long-term growth. In addition to evaluations of the local street network and all forms of mobility and access, the traffic study also informed the preparation of a detailed analysis of access needs along the I-64/US40 corridor through Downtown and Downtown West. This included identification and facilitation of the Federal Highway Administration (FHWA) and Missouri Department of Transportation (MoDOT) process to implement improvements to the I-64/US40 and N. Jefferson Avenue interchange. That process, termed the Access Justification Report (AJR), required ongoing coordination with the Streets Department, Board of Public Service, MoDOT and FHWA, received Conceptual Approval 2018.

Additional Transportation Design and Planning Experience:

- TR68 Bridge Replacement over Little Creek for Crawford County, IL
- Belle Fourche Municipal Airport, (FAA: EFC ICAO: KEFC), Belle Fourche, SD
- Lee's Summit Municipal Airport Expansion, Lee's Summit, MO
- South County Connector, St. Louis County, MO
- US 30 Corridor from IL 47 to Duggan Road, Kane County, IL
- IL Route 15 Over IL Route 13 and ICGRR (CN), Belleville, IL
- IL Route 255 from IL 140 to Seminary Road, Madison County, IL
- I-64 widening from IL 157 to Green Mount Road, St. Clair County, IL
- Islands of Waterside Development, Marissa, IL
- Farmington Road Bridge Study, Peoria, IL

Geotechnical Services

- Red Shirt Landfill, Pine Ridge Indian Reservation, Shannon County, SD
- Forest Park Streetscape Wells and Government Drive, St. Louis, MO
- MSD Diebold/Celtic Bank, St. Louis, MO
- MSD Fieldcrest and Fournier Drive, St. Louis, MO
- MSD Malus & Green Park Storm Sewer, St. Louis County, Missouri
- MSD Sky Crest-Maple Grove Channel, Hardwick Court Channel Improvements, and Temple Israel Bank Stabilization, St. Louis, MO
- IL Route 158 structure over Norfolk Southern Railroad, St. Clair County, IL
- Chain-of-Rocks Road for the extension of I-255 in Madison County, Illinois
- Signal Hill Bike Trail – Safe Routes to School, Belleville, IL
- IL 336 (Northeast Quadrant) Macomb Bypass from US 67 to US 136, McDonough County, IL
- IL 336 NE Quadrant of the Macomb Bypass from US 67, north of Spring Lake Road to US 136, Macomb, IL
- Keisel Above-Ground Storage Tank, St. Louis, MO
- IL Route 40 Bridge Replacement over the Rock River, Sterling-Rock Falls, IL
- IL 89 over BNSF Dual Tracks and Crow Creek, LaRose, IL
- IL 13 over BNSF Railroad and Marathon Avenue, Marion, IL
- Lenzburg Road Bridge-Heavy Haul, St. Clair County, IL
- Indiana Avenue Connector, Alton, IL
- IL 15 over the Wabash River, Mt. Carmel IL and Gibson County, IN
- Ace Grease Storage Pit, Millstadt, IL
- IL 267 over Taylor Creek, Greene County, IL
- IL 9 Over Little Creek, McDonough County, IL

- IL 94 over Ellison Creek, Henderson County, IL
- US 34 over Walnut Creek, Knox County, IL
- IL 158 at Seibert Road, St. Clair County, IL
- IL Route 4 over East Fork of Silver Creek, St. Jacob, IL
- I-74 over Henderson Creek, Knox County, IL
- IL Route 1 over Sugar Creek, Crawford County, IL
- I-74 over I-155, Tazewell County, IL
- IL 336 from W. of Eden Rd. to I-474, Peoria, IL
- IL 336 Over East Fork LaMoine River, McDonough County, IL
- I-57 & IL 13 Interchange & IL 13 from W. of Halfway Rd. to Carbon St., Marion, IL
- St. Francisville Bridge over Wabash River Overflow, St. Francisville, IL
- IL 89 over All Forks Creek, Putnam County, IL
- IL 97 from west of intersection with IL 4 to IL 97/125 intersection, Sangamon County, IL
- CH-9 over I-74, Knox County, IL
- Mississippi River Bridge Access Road, Brooklyn, IL
- Maryville Manor Skilled Nursing Facility, Maryville, IL
- IL Route 26 over Coffee Creek, Putnam County
- IL 40 over Rock River, Sterling and Rock Falls, Whiteside County, IL
- Joe Glik Park Lake and Dam Reconstruction, Edwardsville, IL
- IL 29 from Cedar Hills Drive to IL 6 , Peoria, IL
- American Water Locations (3), Joplin, MO
- IL 159 South of Beltline Rd. to just north of Morrison Ave., Collinsville, IL
- IL 13 from Briggs Road to West of Division St., Williamson County, IL
- Marion Power Plant Expansion, Marion, IL
- IL Power Towers, Decatur, IL
- Mill Hill Road over Canteen Creek, Collinsville, IL
- Eastport Plaza Drive over Schoolhouse Branch, Collinsville, IL
- Madison County Transit Trail over IL Route 162, Maryville, IL
- Frank Scott Parkway Extension, St. Clair County, IL
- City Vision Billboard, East St. Louis. IL
- St. Joseph's Hospital, St. Charles, MO
- Southern Illinois University at Edwardsville WWTP Expansion

- Caseyville Water Tower, Caseyville, IL
- O'Fallon Pump Station and Water Storage, O'Fallon, IL
- Owens Corning Tank Farm, Granite City, IL
- First Security State Bank, Sikeston, MO
- PET Dairy Tank Foundations, O'Fallon, IL
- Edwardsville WWTP, Edwardsville, IL
- Maeystown Road Relocation, Maeystown, IL
- Walmart Construction, Salem, IL
- Grossman Iron and Steel, St. Louis, MO
- Mulberry Street Bridge Replacement, Collinsville, IL
- Louis and Clark Nelson Campus, Edwardsville, IL
- Bass Pro, St. Charles, MO
- Ramsey State Park, Fayette County IL
- Gateway Grizzly's Stadium, Sauget, IL
- Ogles Creek Park Improvements, O'Fallon, IL
- Gateway Commerce Interchange, Madison County, IL
- Greenmount Road/I-64 Interchange, Illinois – Authored the Geotechnical Report.
- Relocated Illinois Route 3 and New Mississippi River Bridge, Illinois –Authored the Geotechnical Feasibility Reports.
- FAP Route 310, Section 60-13, three miles of new highway extending IL Route 255 from IL Route 140, Madison County, Illinois – Authored geotechnical reports
- IL Route 158 east of Scott AFB – Established and supervised drilling program for evaluation of mine subsidence at a three-span bridge. Also designed and developed equipment to safely drill through methane-filled mine voids. Mine grouting design for bridge repair.
- IL Route 3, Chester, Illinois – Installed and monitored inclinometers along Route 3 to monitor slope movement and retaining wall integrity. Inclinometers were installed through overburden and shale layer.
- I-64 widening from IL 157 to Green Mount Road, St. Clair County, IL – Prepared geotechnical report
- Route 3 Widening in Godfrey, Illinois – Prepared Project Report and participated in public involvement
- MetroLink Expansion Lines 2-4 from French Village to Mascoutah, Illinois – Prepared geotechnical reports
- Martin Luther King Bridge approach ramp, Missouri/Illinois – Developed plan utilizing groundwater pumps, grouting and vibration monitoring to protect 90-inch-diameter underground storage pipes during pile driving activities for the Martin Luther King Bridge ramp reconstruction in East St. Louis.
- Wabash River Bridge, Mount Carmel, Illinois – Foundation Design for 20-span bridge replacement over the Wabash River.
- IL Route 159, Fairview Heights to Edwardsville, Illinois – Project Manager for construction monitoring and inspection.

Environmental Planning:

- Belle Fourche Airport, Belle Fourche, SD

- St. Louis Loop Trolley, University City, MO
- High Speed Rail, Chicago to East St. Louis, IL
- Chicago to Quad-Cities Passenger Rail: Iowa Interstate Corridor, Wyanet to Rock Island, IL
- Lee's Summit Municipal Airport Expansion, Lee's Summit, MO
- Lower Illinois River Regional Crossing Study (Florence Bridge), Scott, Pike, Calhoun and Greene Counties, IL
- Coal Gasification Plant, Jefferson County, IL
- US 30 Corridor from IL 47 to Duggan Road , Kane County, IL
- IL Route 15 Over IL Route 13 and ICGRR (CN), Belleville, IL
- IL Route 163 over Powdermill Creek, Centreville, IL
- IL Route 255 from IL 140 to Seminary Road, Madison County, IL
- I-64 widening from IL 157 to Green Mount Road, St. Clair County, IL
- Islands of Waterside Development, Marissa, IL
- Sky Crest-Maple Grove Channel, St. Louis, MO
- Hardwick Court Channel Improvements, St. Louis, MO
- Temple Israel Bank Stabilization, St. Louis, MO
- Farmington Road Bridge Study, Peoria, IL

Construction Engineering

- Clark Bridge over the Mississippi River, Alton, IL
- I-74 Murray Baker Bridge Reconstruction over the Illinois River, Peoria, IL
- I-55 from I-39 to Veterans Parkway Interchange - Normal, IL
- FAP 310 (US 67) from Godfrey Wye to the Madison/Jersey County Line
- Various Construction Projects throughout IDOT District 4, Tazewell, Peoria and McDonough Counties, IL
- Poplar Street Bridge carrying I-55/70/64 over the Mississippi River Tudor and Piggott Ramp Reconstruction, East St. Louis, IL
- FAI 55/70/64 Poplar Street Bridge Approach, East St. Louis, IL – Project Manager and Team Leader for FAI 55/70/64 Poplar Street Complex Tudor/Piggott & Route 3 Ramps Project, East St. Louis, IL. The project included construction engineering and material testing services for the rehabilitation of four ramps in the Poplar Street Bridge complex.
- Falling Springs Road Reconstruction, Cahokia, IL
- Ameren Portage de Sioux Power Plant, West Alton, MO
- Casino Queen Geopier Installation East St. Louis, IL
- County Highway 12, Washington County, IL
- IL 8 from Sunrise Avenue to Summit Drive – East Peoria, IL
- Relocated IL 3 and the Proposed Interchange @ Relocated IL 3 and Relocated I-70, East St. Louis, IL
- IL Route 255 from IL 140 to Fosterberg Road, Madison County, IL
- IL Route 159, Fairview Heights to Edwardsville, Illinois – Project Manager for construction monitoring and inspection.

- I-64 Ramp Construction at IL Route 159, Fairview Heights, Illinois – Provided field supervision for the construction of a temporary MSE wall and permanent soldier pile tie-back wall.

Design Plans:

- Private Development, Beach, ND
- US 50 Widening, O'Fallon, IL
- Shade Lohmann Bridge, Peoria, IL
- New Poag Road, Edwardsville, IL
- IL 29 (FAP 318) along Illinois River, East Peoria, IL
- IL Route 26 over Coffee Creek, Putnam County, IL
- East Riverfront Interlocking Design, East St. Louis, IL
- Fourth Street Reconstruction, Edwardsville, IL
- North Main Street Streetscape, Edwardsville, IL

HONORS

South Dakota State University – Distinguished Engineer Award, 2025

University of Missouri Science and Technology – degree of Doctor of Civil Engineering Honoris Causa, 2024

ASCE Society - Edmund Friedman Professional Recognition Award, 2016

ASCE St. Louis Section – Professional Recognition Award, 2015

St. Louis Most Influential Businesswomen, St. Louis Business Journal, 2010

Smart Women, Smart Money Women on the Rise Award, Illinois Treasurer's Office, 2010

ASCE St. Louis Section - Young Engineer of the Year, 1997

KEY SKILLS

- **Transportation Planning and Engineering**
- **Public Policy**
- **Strategic Planning and Execution**
- **Operations Management**
- **Business Development**
- **Sustainable Infrastructure Design**
- **Risk Management and Mitigation**
- **Public Speaking and Thought Leadership**

PRESENTATIONS/PODCASTS/WEBINARS/MEDIA

June 7, 2020, Host Ben Walpole – ASCE Plot Points -
https://plotpoints.asce.org/e/episode-120-marsia-geldert-murphey-on-the-near-death-experience-that-only-made-her-stronger/

October 8, 2020, Host Kari Sebern - The Unboxing Project – Breaking down stereotypes in STEM.
https://podcasts.apple.com/us/podcast/the-unboxing-project/id1527569353
June 23, 2022, Host Anthony Fasano – The Civil Engineering Podcast.
https://engineeringmanagementinstitute.org/tcep-213-women-in-engineering-one-womans-journey-to-engineering-success/
August 16, 2022, Americans for Transportation Mobility
https://www.fasterbettersafer.org/2022/08/atm-podcast-iija-equals-big-infrastructure-boost-for-missouri/
September 18,2022, COPRI Ports and Harbors Convention Welcome Speech, Honolulu, HI
September 23, 2022, Expanding your Horizons, & future of Civil Engineering professions presentation, 500 7th & 8th grade girls Rolla, MO
November 5, 2022, SIUE Civil Engineering Dept 50th Anniversary Keynote Presentation, Edwardsville, IL
November 9, 2022, South Dakota State University Student Chapter Presentation, Brookings, SD
January 18 -19, 2023, MRLC Regions 3, 6 and 7, Denver, CO
February 10, 2023, Strategies for Creating Inclusive Classrooms Webinar: EiE Museum of Science Boston
October 17-18, 2023, ASCE Board Meeting, Chicago, IL
October 18-21, 2023, ASCE Annual Convention Presidential Inauguration Speech, Chicago, IL
October 23-24, 2023, United Engineering Foundation Board Meeting, Kansas City, MO
October 30-31, 2023, University of UT Student Chapter, Salt Lake City, UT
November 1, 2023, NJ Institute of Technology, Newark, NJ
November 2, 2023, City College New York, New York, NY
November 6-7, 2023, Southern Illinois University, Edwardsville, IL
November 16-19, 2023, ASCE Inspire 2023 Welcome Address, Arlington, VA
November 29, 2023, SD State Student Chapter, Brookings, SD
November 30, 2023, SD Mines Student Chapter, Rapid City, SD
December 4, 2023, Penn State, State College, PA
December 7, 2023, Lehigh Valley Annual Holiday Social Keynote, Bethlehem, PA
December 7, 2023, ASCE Board Meeting, Virtual
January 9, 2024, St. Louis Section Keynote, St. Louis, MO
January 12-14, 2024, MRLC Regions 3, 6 and 7, Kansas City, MO
January 25, 2024, ASCE Board Meeting, Miami, FL
January 26-27, 2024, MRLC Regions 1, 2, 4 and 5, Miami, FL
January 29, 2024, KY Roadshow Press Conference with Governor Beshear for the Mountain Parkway Expansion Project, Frankfort, KY
February 7-10, 2024, MRLC Regions 8 and 9, Seattle, WA
February 16-23, 2024, International Conference on Sustainable Design and Innovation 2024 Keynote, Riyadh, Saudi Arabia
February 28-March 1, 2024, ASCE Fly-in Welcome, Washington, DC
March 1-2, 2024, ASCE Board Meeting, Washington, DC
March 6, 2024, University of Missouri Student Chapter Keynote and Panel Discussion, Columbia, MO
March 14, 2024, Career Booster Pi Day Webinar, Virtual
March 20-23, 2024, Construction Institute and Construction Research Council Joint Conference Keynote, Des Moines, IA
March 26, 2024, Kansas Section Dinner Keynote, Lawrence, KS
March 26, 2024, CNN Live Interview – Francis Scott Key Bridge Collapse
March 28, 2024, Fox News Interview – Francis Scott Key Bridge Collapse
March 28, 2024, ABC News Live Interview - Francis Scott Key Bridge Collapse
April 6, 2024, Carolinas Student Symposium Awards Dinner Keynote, Charlotte, NC
January 23, 2025, NPR Marketplace Interview regarding impacts of President Trump EO on sur, NPR Marketplace
March 26, 2025, ASCE Releases 2025 Infrastructure Report Card interview with Madison Perales, KETV 7 in Omaha, Nebraska
May 12, 2025, ASCE 2025 Infrastructure Report Card Congressional Briefing, Rayburn House Transportation Committee, Washington DC
June 6, 2025, South Carolina Engineering Conference & Tradeshow, Lunch Keynote Speaker, Myrtle Beach, SC
June 13, 2025, Utah State Civil Engineering Annual Meeting, Lunch Keynote Speaker, The Madison, Ogden, Utah
June 23, 2025, International Women in Engineering Day hosted by ASCE & WTS, Event Keynote Speaker, Houston, TX

Publications/ARTICLES

September 19, 2019	**Revolving loan fund would help mitigate disasters** **By Marsia Geldert-Murphey**	**STL Post-Dispatch**
March 2022	**Cross, Yield or Burn: Navigating the Bridges of Life by Marsia Geldert-Murphey**	**Navigating the Bridges of Life Book**
March 8, 2022	**Saluting S&T engineering alumnae** **By Nancy Bowles**	**Missouri S&T Site**
April 8, 2022	**St. Louis engineering exec: Why it's important for St. Louis to embrace supply chain diversity** **By Maddy Simpson**	**STL Business Journal**
June 8, 2022	**Glen Carbon woman chosen to lead American Society of Civil Engineers**	**Illinois Business Journal**
June 16, 2022	**Geldert-Murphey Elected 2024 President of American Society of Civil Engineers**	**Construction Digest**
July 8, 2022	**ASCE presidency new chapter in engineer's extraordinary life** **By Dennis Grubaugh**	**Illinois Business Journal**
July 19, 2022	**St. Louis Public Schools asks voters for more money as schools crumble nationwide** **By Kate Grumke**	**STL Public Radio**
August 3, 2022	**Get to know your new ASCE president-elect: Marsia Geldert-Murphey** **By Ben Walpole**	**ASCE Site**
2025	**International Journal of Natural Disasters, Accidents and Civil Infrastructure: Climate Change How ASCE is helping our communities to Adapt** **By Marsia Geldert-Murphey**	**Currently Under Review**
January 2025	**3:24 p.m. CST, January 28, 2025** **Infrastructure and transportation officials want more clarification over federal funding freeze** **From CNN's Alexandra Skores**	**CNN**