





Ohio Office: 500 Market Street Suite 3 Steubenville, OH 43952 740.619.1242

CAPABILITY STATEMENT – DESIGN MANAGEMENT & DESIGN BUILD

KEY STAFF

Matthew Walerysiak, PE, CBSI **Chief Operating Officer** mwalerysiak@markosky.com

David Cutlip Vice President

dcutlip@markosky.com

Apryle M. Davis **Business Development Manager** adavis@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. has built long lasting relationships by placing importance on collaboration with our clients and team members. We know that the best ideas and client solutions come from different perspectives: internal team members, diverse technical disciplines, clients, owners, and outside experts.

Markosky has a team of professionals who are experts in their fields and have a thorough understanding of ODOT transportation engineering and environmental standards and practices. Our experts are licensed in various states and provide transportation roadway and structural design engineering services, environmental science, archaeology, historic structures, and bridge inspection services.

Established in 1999, we have extensive experience providing engineering, environmental and inspection services to public and private clients in the mid-Atlantic region.

- Bridge Design, Rehabilitation, and Replacements
- Roadway Design and Realignments
- Traffic Engineering Design
- Hydrologic and Hydraulic Analysis
- Stormwater Management / Drainage Design
- Construction Details and Specification Development

- Utility Coordination
- NEPA Environmental Clearance
- E&S/NPDES Permitting
- Roadway, Structures, & Traffic **Design Reviews**
- Utility Coordination & **Environmental Design** Management



Ohio Department of Transportation Prequalifications:

Non-complex Roadway Design **Safety Studies** Level 1.1, 1.2 & 2 Bridge Design **Level 1 Bridge Inspection Traffic Signal Design Ecological Surveys Env. Documentation Preparation - CE Regulated Materials Review History/Architectural Investigations** Archaeological Investigations **Construction Management Firm**



OHUCP

NAICS Codes:

UEI:

CAGE:

541330. 541620, 541720. 541990, 237110

EEMAGUCMLYG1



PA Statewide Rapid Bridge Replacements (P3) Client: HDR Engineering, Inc.

Services

- 26 Complete structure site design
- Bridge, roadway, traffic control, right-of-way
- 200+ APRAS Ratings
- 60+ Right-of-Way Plans

Mon/Fayette Expressway – Design Management

Client: HDR Engineering, Inc.

Design Manager - Sections 53F and 53G

Services

- Utility Coordination Management
- Environmental/Waterway Permitting Management
- ❖ E&S/NPDES Permitting Management
- Hydrologic and Hydraulic Analysis Management
- Stormwater Management / Drainage Design Management
- Right-of-Way Plan Review
- Construction Details and Specification Development
- Design Review

Services

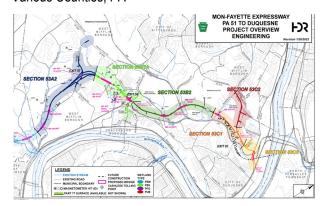
- Roadway, Structures, Traffic Design Reviews, Utility Coordination, Environmental Management
- Milepost 28-31 Total Reconstruction
- Milepost 53-57 Total Reconstruction
- Milepost 57-67 Total Reconstruction

Design Management Client: HDR Engineering, Inc.

PTC I-76 Mainline Total Reconstruction



PA Statewide Bridge Replacements – JV 565 Various Counties, PA



Mon/Fayette Expressway Allegheny County, PA



Mon/Fayette Expressway Allegheny County, PA



I-76 Trafford Bridge Westmoreland County, PA









Ohio Office: 500 Market Street Suite 3 Steubenville, OH 43952 740.619.1242

CAPABILITY STATEMENT – OHIO TRANSPORTATION

KEY STAFF

Matthew Walerysiak, PE, CBSI **Chief Operating Officer** mwalerysiak@markosky.com

David Cutlip Vice President dcutlip@markosky.com

Apryle M. Davis **Business Development Manager** adavis@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. has built long lasting relationships by placing importance on collaboration with our clients and team members. We know that the best ideas and client solutions come from different perspectives: internal team members, diverse technical disciplines, clients, owners, and outside experts.

Markosky has a team of professionals who are experts in their fields and have a thorough understanding of ODOT transportation engineering and environmental standards and practices. Our experts are licensed in various states and provide transportation roadway and structural design engineering services, environmental science, archaeology, historic structures, and bridge inspection services.

Established in 1999, we have extensive experience providing engineering, environmental and inspection services to public and private clients in the mid-Atlantic region.

- Bridge design, rehabilitation, and replacements
- Roadway design and realignments
- Traffic engineering design
- Environmental consulting, planning, permitting and design
- Construction monitoring services
- Cultural resource investigations
- Section 106 compliance

- Construction management and inspection
- Oil & gas environmental permitting
- Geomorphological surveys
- Phased archaeological investigations
- Above ground historic structures evaluations



Ohio Department of Transportation Prequalifications:

Non-complex Roadway Design **Safety Studies** Level 1.1, 1.2 & 2 Bridge Design **Level 1 Bridge Inspection Traffic Signal Design Ecological Surveys Env. Documentation Preparation - CE Regulated Materials Review History/Architectural Investigations Archaeological Investigations Construction Management Firm**



OHUCP

NAICS Codes:

541330. 541620, 541720. 541990, 237110

UEI:

EEMAGUCMLYG1

CAGE: 50GY5

740.219.1242



PA Statewide Rapid Bridge Replacements (P3) Client: HDR Engineering, Inc.

SR 28, Sections A09 / A10 / A47 / A50 Client: Michael Baker International

New Kensington Bridge Preservation Client: PennDOT District 11-0

PA 756 Roadway Safety Study Client: PennDOT District 9-0

PA Statewide Bridge Replacements – JV 565 Various Counties, PA



New Kensington Bridge Allegheny County, PA

Services

- 26 Complete structure site design
- Bridge, roadway, traffic control, right-of-way
- 200+ APRAS Ratings
- ♦ 60+ Right-of-Way Plans

Services

- Structure Design
 - Span 23 & Span 24 PE and FD
 - Span 25-27 FD Superstructure
 - 4 Soldier Pile and Lagging Walls

Services

- ❖ Prime consultant 14 span structure
- Preservation inspection
- Repair quantities and costs
- TS&L, utility coordination, public involvement

- Evaluated crash data, performed traffic counts and analysis, highway safety manual analysis, evaluated roadway geometry
- Identified environmental constraints



SR 28, Sections A09 / A10 / A47 / A50 Allegheny County, PA



PA 756 – Luther Road Franklin and Huntington Counties, PA











CAPABILITY STATEMENT – ENVIRONMENTAL SERVICES

KEY STAFF

Vice President **David Cutlip** dcutlip@markosky.com

Environmental Services

Division Manager Jason Harkcom iharkcom@markoskv.com

Environmental Sciences Department Manager Ashley Brehm abrehm@markosky.com

Environmental Engineering Department Manager Amanda Brown, PE abrown@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. provides environmental planning, permitting, design and construction monitoring services for ODOT, private clients and municipalities. We have developed excellent working relationships with federal, state and local environmental agencies, which results in efficient and consistent agency reviews.

Our Cultural Resource services include geomorphological surveys, archaeological investigations, above ground historic structures evaluations, findings of eligibility and effect and any other associated Section 106 work.

Our core Environmental services include the following:

- Surface Water Identification / Assessments and Reports
- Benthic Macroinvertebrate Surveys
- Freshwater Mussel Surveys
- Agricultural Identifications and Reports (ALCAB Experience)
- Section 4(f) Identification, Reports, Coordination and Approvals
- Wetland & Stream Mitigation, Design and Construction Inspection, Post Construction Monitoring
- Site Assessments / Hazardous Waste Investigations

- Prepare SWPPPs and NPDES Permit Packages
- Section 404/401 Stream and Wetland Permits
- Bat Habitat Assessments
- Noise Modeling and Monitoring
- Asbestos Services
- Lead Based Paint Sampling
- Air Permitting
- ❖ T&E Species Coordination
- Floodplain Development Permits
- Botanical Surveys
- Wetland Delineations

Markosky provides a "one-stop-shop" for all aspects of environmental planning, permitting, design, construction and evaluation of environmental impacts and mitigation.







OHUCP

NAICS Codes:

541330. 541620, 541720. 541990, 237110

UEI: **EEMAGUCMLYG1**

CAGE: 50GY5



SR 3015, Section 254 Watters and Washington Culverts Client: PennDOT District 10-0

Services

- Wetland Delineations and Stream Survey
- Aquatics Report
- Agency / District Coordination

Natural Gas Pipeline Routing

Client: Energy Client

Services

- Wetland Delineation
- ❖ Aquatic Resources Report
- ❖ PA DEP and NPDES Permitting
- E&S Control

SR 0422, Section 19B Margaret Road Intersection Client: PennDOT District 10-0

- Identified Environmental Features for 7 Alternative Alignments
- Environmental Impact Comparison Summary
- Environmental Resource Mapping



Watters Street Culvert Butler County, PA



Washington StreetButler County, PA



Margaret Road Intersection Armstrong County, PA



Natural Gas Pipeline Routing Franklin County, PA











OHIO CAPABILITY STATEMENT - OIL & GAS

KEY STAFF

Vice President **David Cutlip** dcutlip@markosky.com

Environmental Services Division Manager Jason Harkcom jharkcom@markosky.com

Energy Services Department Manager Joseph Vasinko, PE jvasinko@markosky.com







CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. provides pipeline and well pad design and permitting for the oil & gas industry. We specialize in environmental and roadway permitting, site design, and construction/environmental compliance inspection. Our environmental scientists, engineers, and inspectors collaborate throughout the process to develop designs that receive quick approvals while minimizing client costs and environmental impacts.

We have developed excellent working relationships with the Federal, State, and Local environmental agencies, which have resulted in a proven track record of minimal agency comments and more efficient review times. These relationships keep us abreast of everchanging environmental regulations, and create reliable, cost-effective designs for our clients.

Our core Oil & Gas services include the following:

- SWPPP Preparation
- Site and Access Road Design
- USACE Permitting
- Wetland & Stream Delineation and Assessments (ORAM, HHEI, QHEI)
- T&E Species Coordination
- Rare Plant Botanical Surveys
- Wetland & Stream Mitigation Design/Monitoring

- SPCC Plans
- Phase 1 ESAs
- Cultural Resource Investigations
- Air Permitting
- GIS Remote Sensing & Mapping Development
- Pre/Post Construction Water Sampling
- Floodplain Development Permits







OHUCP

NAICS Codes: 541330, 541620, 541720, 541990, 237110 UEI: **EEMAGUCMLYG1** CAGE:



Pipeline Relocation at Hammer Creek

Client: Energy Client

Gathering Pipeline Client: Energy Client

Temporary Waterline Environmental & Roadway Permitting Client: Energy Client

Well Pad Environmental Permitting & **Construction Inspection** Client: Energy Client

Hammer Creek Lebanon County, PA



Temporary Waterline Permitting Butler County, PA

Services

- Wetland & Stream Delineations
- Prepared and obtained GP 8/11
- Coordinated subcontractors

Services

- Stream and Wetland Delineation
- Prepared and Obtained NWP-12
- Prepared SWPPP and Phase 1 Archaeological linvestigation

Services

- ❖ Wetland & Stream Delineation
- ❖ Prepared & obtained ESCGP-2 and GP 5/8
- Obtained PennDOT HOPs and township excess maintenance use agreements
- Construction Inspections

- Wetland & Stream Delineations
- Prepared and obtained ESCGP-2
- Construction Inspections



Gathering Pipeline Guernsey County, OH



Well Pad Permitting & Inspection Butler County, PA











CAPABILITY STATEMENT – ARCHAEOLOGY

KEY STAFF

Federal Program Manager Ryan Rowles, MA, RPA rrowles@markosky.com

Cultural Resources Department Manager

Jessica Schumer-Rowles, MA, RPA jschumerrowles@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. archaeologists meet and exceed the Secretary of the Interior (SOI) Standards (36CFR§61) for their positions. We are skilled at multidisciplinary research, sound and reflexive fieldwork methodologies, and quality data analysis. Our clients can rely on our communicative management, as well as our clear and thorough reports, to streamline the Section 106 Concurrence process and accomplish any project specific goals.

Our core Archaeology services include the following:

- Phase I, II, and III Archaeological Investigations
- Resource Identification and Planning
- Determinations of Eligibility and Effect
- Archaeological Monitoring
- Geomorphological Investigations
- Geophysical Investigations (GPR, Resistivity, Magnetometer)
- Historic Grave Identification

- Curation Standards and Methods
- Consulting Party Coordination
- Avoidance Alternatives
- Agreement Documents
- Alternative Mitigation
- Historic Research
- Section 106 Training/ Seminars

Markosky's Archaeology Group is a reliable and hardworking team of professionals dedicated to streamlining our clients' Section 106 or other compliance needs, no matter the size or complexity of your project.







OHUCP

NAICS Codes:

541330. 541620, 541720. 541990, 237110

UEI:

EEMAGUCMLYG1

CAGE:



East 20th Street Bridge, City of Dover

Client: Ohio Department of Transportation

Services

- Preliminary archaeological scoping and reporting Phase II Testing of McQuilken Blacksmith Shop Site
- Historic structures evaluation
- ❖ Categorical Exclusion C2 (CEC2) in EnviroNet

Zoar Levee and Diversion Dam

Client: USACE, Huntington District

Services

- Archaeological identification investigations within the Zoar Village National Historic
- Pedestrian Survey, Geophysical Survey
- Auger borings at regularly spaced intervals
- Identified archaeological resources associated with the Separatist-era

Section 202 Flood Damage Reduction Project

Client: USACE, Huntington District

Services

- Phase I archaeological survey
 - Pedestrian Survey, Excavation of shovel test pits
- Identified one mid to late 20th century archaeological site associated with remnants of a former foundation



East 20th Street Bridge Tuscarawas County, OH



East 20th Street Bridge Tuscarawas County, OH



Zoar Levee and Diversion Dam Tuscarawas County, OH



MARKOSKY

Section 202 Flood Damage Reduction

Floyd County, KY









CAPABILITY STATEMENT – HISTORIC STRUCTURES

KEY STAFF

Federal Program Manager Ryan Rowles, MA, RPA rrowles@markosky.com

Senior Architectural Historian / Group Leader Laura Ricketts, MA Iricketts@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC.'S architectural historians are skilled at identifying, documenting, and evaluating above ground resources. We conduct historic structures investigations on scales that range from a single resource to long corridors or county-wide surveys that entail hundreds of historic structures. We understand the policies and missions of our agency clients and ensure compliance with regulations that govern the consideration of historic properties like Section 106. We work closely with the representatives of many State Historic Preservation Offices and are fluent in the standards of the National Register of Historic Places. We provide public outreach and coordination with interested parties, and we can see a project from its initial scoping through determinations of eligibility and effect to, if necessary, the successful resolution of adverse effects.

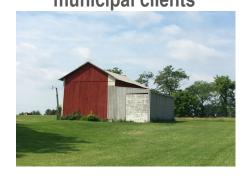
Our core Historic Structures services include the following:

- Resource Identification
- Reconnaissance Surveys
- Constraints Mapping
- Historic Contexts/Background Research
- Eligibility Studies for Individual Resources & Historic Districts
- Historic Bridge Rehabilitation (Feasibility) Analysis
- **Determination of Effects**
- Resolution of Adverse Effects

- Agreement Documents
- Consulting Party Coordination
- Public Outreach
- National Register Nominations
- Historic Structures Inventories
- Section 4(f) Documentation for Historic Properties
- FHWA-delegated Cultural Resource Professional in Historic Structures
- Creative Mitigation Measures

Markosky's historic structures group provides cultural resources compliance for federal, state, and local projects, as well as historic preservation work for private and municipal clients







OHUCP

NAICS Codes:

541330. 541620, 541720. 541990, 237110

UEI: **EEMAGUCMLYG1** CAGE:



East 20th Street Bridge, City of Dover

Client: Ohio Department of Transportation

Services

- Historic structures evaluation
- Preliminary archaeological scoping and reporting Phase II Testing of McQuilken Blacksmith Shop Site
- ❖ Categorical Exclusion C2 (CEC2) in EnviroNet

Magnolia Levee Dam Safety Modification National Register of Historic Places Evaluation

Client: USACE, Huntington District

Services

- ❖ National Register of Historic Places (NRHP) Evaluation
- ❖ Evaluation of above ground resources: Magnolia Levee, the canal, two early 20th century houses, and a late 19th century blacksmith shop, and an effects evaluation for the NRHP listed Elson-Magnolia Flour Mill

Cast Iron Bridge Rehabilitation

Client: PennDOT District 12-0

- ❖ Nation's First Cast Iron Arch Bridge (1839)
- Individual Section 4(f) Evaluation
- 5 Section 4(f) Resources Including Brownsville Commercial Historic District



East 20th Street Bridge Tuscarawas County, OH



Magnolia Levee Dam Carroll & Stark Counties, OH



Magnolia Levee Dam Carroll & Stark Counties, OH



Cast Iron Bridge Rehabilitation Fayette County, PA











CAPABILITY STATEMENT – CONSTRUCTION INSPECTION / MANAGEMENT

KEY STAFF

Vice President Michael S. Houser mhouser@markosky.com

Construction Services Division Manager Clyde E. Naugle, PMP cnaugle@markosky.com

Construction Services Department Manager Curtis Marksoky cmarkosky@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. provides transportation inspection services throughout the Commonwealth of Pennsylvania. We have provided Construction Inspection services to PennDOT, PA Turnpike Commission, and other public, private and municipal clients. Our inspection staff has extensive understanding of PennDOT's policies, regulations and procedures. They perform their duties in accordance with all applicable FHWA regulations, DOT publications and manuals, procedures, regulations and safety policies.

Our management TEAM has previous inspection experience which gives them extensive knowledge of what occurs during every project. This experience is why collaboration between management and inspectors is so important at Markosky. A constant stream of communication leads to successful projects.

Our core Construction Inspection / Management services include the following:

- Conduct Progress Meetings
- Attend Pre-Bid & Pre-Construction Meetings
- False Work Review Submittals
- Verify Project Records in Accordance with DOT Regulations
- Safety / Accident Prevention
- Monitor Noise Complaints
- Borrow Waste / Site Locations
- Air / Water Quality & Vibration Complaints
- Archaeological Monitoring During Construction
- Soils Engineering
- Sampling / Testing
- Hazardous Material Monitoring / Testing

Markosky provides Construction Services expertise in Construction Inspection and Construction Management.







OHUCP

NAICS Codes:

541330. 541620, 541720. 541990, 237110

UEI:

EEMAGUCMLYG1

CAGE:

50GY5

WWW.MARKOSKY.COM

724.238.4138

5 Part Construction Inspection Armstrong & Indiana Counties

Client: PennDOT District 10-0

Services

- Construction Inspection
 - Bridge Replacements
 - Roadway Realignments
 - Earth Moving, Drainage, Paving

Allegheny County Airport Authority Construction Inspection

Client: Energy Client

Services

- Pipeline Inspection
 - Construction Quality Assurance
 - Installation Inspection
 - 6 Well Pads

2 Bridges in Allegheny County Client: PennDOT District 11-0

Services

- Construction Inspection
 - Deck Replacement
 - Replacement of Expansion Bearings
 - Approach Roadway Work / Drainage



5 Bridges CI – Echo Bridge Armstrong County, PA



2 Bridges CI – SR 1014 over SR 28 Bridge Allegheny County, PA



Allegheny County Airport Allegheny County, PA



MARKOSKY

2 Bridges CI – Days Run Road Bridge Allegheny County, PA









CAPABILITY STATEMENT – LOCAL BRIDGES

KEY STAFF

Structures Department Manager Frank Strittmatter. PE

fstrittmatter@markosky.com

Senior Project Manager Peter Molnar, PE, CBSI pmolnar@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. offers a variety of methods that can be used for rehabilitation of the deck, superstructure and substructure. These methods include pre-manufactured superstructures, Geosynthetic Reinforced Soil (GRS) Bridge Abutments, and a host of proprietary culvert structure designs.

Markosky can develop the right solution for any bridge problem. The solution can be a complete replacement of a bridge or something less expensive, such as a bridge rehabilitation or a precast culvert. Our structural engineers collaborate with our bridge detailers and bridge inspection teams to deliver any local bridge project on time and within budget.

Our core Local Bridge services include the following:

- Quick Mobilization
- Structure Analysis
- Bridge Replacement Alternative Recommendations

Markosky knows that bridge closures and weight limits can lead to high costs for Townships. We have the expertise and technology to offer unique solutions to local bridge problems.







OHUCP

NAICS Codes:

541330, 541620, 541720, 541990, 237110

UEI: **EEMAGUCMLYG1**

CAGE: 50GY5

Prefabricated Superstructures

Client: Ligonier Township

Services

- Installation of Prefabricated Superstructures
- Design Sketches/Calculations for Span Arrangements and Substructure Details
- Demolition Limit Recommendations

Harvey Road Rhoades Farm Bridge

Client: Ligonier Township

Services

- Emergency Waterway Permit
- Emergency Structural Repair
- Design and Consultation

Hills Church Road Bridge

Client: Municipality of Murrysville

- Preliminary and Final Design
- Roadway and Structures Design
- + H&H, E&S, GP-11 Permit, MPT, Utility Coordination, Final Right-Of-Way



Prefabricated Superstructures – Mill Creek Bridge Westmoreland County, PA



Prefabricated Superstructures
Westmoreland County, PA



Harvey Road Rhoades Farm Bridge Westmoreland County, PA



Hills Church Road Bridge Westmoreland County, PA











CAPABILITY STATEMENT – ROADWAY

KEY STAFF

Chief Operating Officer Matthew Walerysiak, PE, CBSI mwalerysiak@markosky.com

Civil Engineering Division Manager Brian Watkins, PE bwatkins@markosky.com

Traffic Department Manager Jonathon Balko, PE jbalko@markosky.com

Roadway Department Manager Shane Ritenour, PMP sritenour@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. consistently meets design challenges on roadway projects by taking a collaborative approach to finding design solutions. Our engineering professionals incorporate the expertise of our environmental, structures, and construction departments to deliver comprehensive solutions to roadway designs.

Markosky provides design expertise for roadway reconstruction and realignments, traffic signal and intersection improvements, toll facilities, limited access highways, and major interstate highways. Our team approach allows us to place importance on public safety, functionality of design, scheduling constraints, and service our clients' needs.

Our core Roadway services include the following:

- Roadway Design
- Pavement Design & Restoration
- Traffic Control Development Including Signal Design
- Hydrologic & Hydraulic Studies
- Erosion & Sedimentation Control/Permiting
- Highway Lighting Design
- Utility Coordination

- Public Involvement
- Drainage Design
- Stormwater Management
- Right of Way Development
- Design Management
- Highway Occupancy Permits
- Signing, Pavement Marking & Delineation

Markosky has a diverse team of engineers, designers and technicians committed to designing roadways with improved functionality and safety for the traveling public.







OHUCP

NAICS Codes:

541330. 541620, 541720. 541990, 237110

UEI:

EEMAGUCMLYG1

CAGE:



PA Route 980 Realignment & Pedestrian Bridge

Client: PennDOT District 12-0

Services

- ❖ Roadway & Structure Design
- Traffic Analysis
- Utility Coordination, H&H, E&S, Permitting
- Final Contract Documents
- Construction Consultation & Public Involvement

PA 453 I-99 to Beastons Road

Client: PennDOT District 9-0

4.4 miles of Pavement Preservation, Widening and

Slope Stabilization

Services

- Retaining Wall Design
- Contour Grading and Drainage
- Signing and Pavement Marking
- Maintenance and Protection of Traffic

Donohoe Road / Georges Station Intersection

Client: PennDOT District 12-0

- Intersection Design
- Alternative Analysis (Roundabout vs Signalized)
- Roundabout Design
- Maintenance and Protection of Traffic
- Signing and Pavement Markings
- Stormwater Management / Drainage Design
- Highway Lighting Design



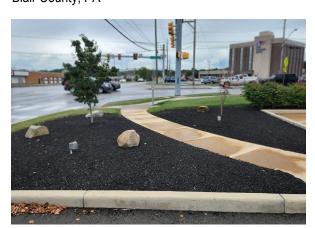
PA 980 Realignment & Pedestrian Bridge Washington County, PA



PA 453 I-99 to Beastons Road Blair County, PA



Signing Southern Beltway
Allegheny & Washington Counties, PA



State Street Sidewalk Improvements Mercer County, PA











CAPABILITY STATEMENT – TRAFFIC ENGINEERING

KEY STAFF

Chief Operating Officer Matthew Walerysiak, PE, CBSI mwalerysiak@markosky.com

Traffic Department Manager Jonathon Balko, PE ibalko@markosky.com

Senior Project Manager Dorothy Boring, PE, PTOE dboring@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, Inc. Traffic Department has experience leading traffic-focused projects from inception through design and construction as well as providing support on transportation projects. We also have experience with engineering and planning studies encompassing site-specific, corridor, and regional locations.

Our dedicated professionals provide design solutions that focus on safe and efficient operations for all methods of transportation including bicycles and pedestrians. We have partnered with state, municipal, and local governments as well as private entities and other engineering consulting firms to deliver successful projects while meeting budgetary constraints.

Our core Traffic Engineering services include the following:

Traffic Study & Analysis

- Traffic Data Collection
- Speed, Safety & Pedestrian Studies
- Traffic Impact Assessments & Studies
- Traffic Signal Warrant Analysis
- Capacity, Queuing & Workzone Analysis
- Evaluation of Corridors

Traffic Engineering Design

- Traffic Signal
- Signing
- Pavement Marking & Delineation
- Traffic Control During Construction
- Pedestrian Facilities
- Flashing Warning Devices

Markosky's traffic engineering project experience ranges from engineering studies to low-cost operational/safety improvements to full design.







OHUCP

NAICS Codes:

541330, 541620, 541720, 541990, 237110

UEI: EEMAGUCMLYG1 CAGE:

LYG1 50GY5

Greensburg Signal Upgrades - CMAQ

Client: PennDOT District 12-0

Route 58 Corridor Safety Study

Client: PennDOT District 1-0

Route 756 Roadway Safety Study

Client: PennDOT District 9-0



Greensburg Signal Upgrades - CMAQ Westmoreland County, PA



Route 756 Roadway Safety Study Cambria County, PA

Services

- Coordination Plans
- Traffic Analysis & Design
- Signal Replacements & Modifications
- ❖ ADA Pedestrian Facilities
- Utility Coordination

Services

- Crash Data Evaluation
- Traffic Data Collection & Analysis
- Roadway Geometry Evaluation
- Environmental Constraints Identification
- Conceptual Improvement Plans

- Crash Data Evaluation
- Traffic Data Collection & Analysis
- Roadway Geometry Evaluation
- Environmental Constraints Identification
- Conceptual Improvement Plans



Route 58 Corridor Safety Study Mercer County, PA



Route 756 Roadway Safety Study Cambria County, PA











CAPABILITY STATEMENT – STRUCTURES

KEY STAFF

Structures Department Manager

Frank Strittmatter, PE fstrittmatter@markosky.com

Senior Project Manager Peter Molnar, PE, CBSI pmolnar@markosky.com

Senior Project Manager Bryan Dietrich, PE, CBSI bdietrich@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, INC. provides bridge rehabilitation, bridge replacements, culvert designs, sign structures, and retaining wall designs on largescale highway projects to local municipal stream crossings. We understand that each project or client may require a different approach and we are agile and experienced enough to provide the appropriate level of detail required for each bridge.

Markosky's engineering professionals have the expertise to provide innovative, costeffective, sustainable engineering solutions specifically tailored to meet the needs of our clients. Early identification of the optimum structure arrangement and type make the design process more efficient. We have completed projects using conventional design methods, ABC techniques, design-bid-build, and design-build methods.

Our core Structures services include the following:

- Conventional & Accelerated Designs
- Composite Steel Rolled Beam & Plate
 Soldier Pile & Lagging Walls Girder Bridges
- Prestressed Concrete Bridges
- Integral Abutment Designs
- Shallow & Deep Foundation Systems
- Reinforced Concrete Retaining Walls
- Hydraulic Analysis of Structures

- MSE Retaining Walls & Abutments
- Precast & Cast-in-Place Concrete Culverts
- Pedestrian & Timber Bridges
- Load Rating & Structural Analysis Including APRAS Loading & 3D Modeling

Markosky's Structural designs range from simple to complex structures requiring 2D grid analysis and 3D finite element analysis.







OHUCP

NAICS Codes:

541330, 541620, 541720, 541990, 237110

EEMAGUCMLYG1

CAGE: 50GY5



WWW.MARKOSKY.COM 724.238.4138

New Kensington Bridge Preservation

14 Span Bridge over Allegheny River & Norfolk Southern

Client: PennDOT District 11-0

Services

- Inspection Services
- Traffic Control, Utility Coordination
- Public & Railroad Coordination
- Final Plans & Specifications
- Load Rating Updates / 3D Analysis
- Final Bid-Package Submission

East Busway over North Braddock Avenue

Superstructure Replacement & Substructure Rehabilitation using ABC

Client: Port Authority of Allegheny County

Services

- Developed Accelerated Bridge Construction Cost Study
- Reviewed Constructability Issues & Developed Preliminary Design
- Structure Design for ABC Construction
- Technical Provisions / Reviewed RFI's

Reidsburg Bridge No. 1 Replacement

Slewed Single Span with Integral Abutments over Reids Run using Phased Construction

Client: PennDOT District 10-0

- ❖ TS&L Development
- Evaluation of Crane Placement
- Foundation Submission Report & Final Plans
- Coordination with Utility Relocations, Hydraulics & Traffic Control



New Kensington Bridge Allegheny County, PA



East Busway over North Braddock Allegheny County, PA



Reidsburg Bridge Clarion County, PA



Reidsburg Bridge Clarion County, PA











CAPABILITY STATEMENT – BRIDGE INSPECTION

KEY STAFF

Structures Department Manager Frank Strittmatter, PE

fstrittmatter@markosky.com

Project Engineer / Team Leader Edward Kapelewski, PE, CBSI, NCTI ekapelewski@markosky.com

Senior Project Manager Bryan Dietrich, PE, CBSI bdietrich@markosky.com

CORE COMPETENCIES & SERVICES

THE MARKOSKY ENGINEERING GROUP, Inc. provides the highest quality of inspection services from an elite staff. Our team was formed around the best and most experienced inspectors. We have certified inspectors who have completed bridge safety inspections in accordance with NBIS, AASHTO, and FHWA standards. Our inspectors are certified in accordance with NBIS requirements. All are experienced with structure design and rehabilitation, and several are licensed Professional Engineers or Engineers in Training. This experience gives our staff a wealth of expertise on each assignment, and gives us the flexibility to assign inspection duties as needed to meet the demands of any inspection project.

Markosky is a competent, consistent, and reliable consultant that delivers quality inspections 100% of the time. We place great emphasis on safety procedures, the quality of our services, and the satisfaction of our clients.

- Initial Inventory & Inspections
- Routine NBIS Inspections
- Interim (Special) Inspections
- Damage Inspections
- ❖ In Depth Inspections
- Fatique & Fracture Critical Inspections
- Highway / Rail Transit Structures

- Culverts
- Sign Structures
- Retaining Walls
- Tunnels
- Bridge Load Rating
- Critical Deficiency Meeting

Markosky's inspection team cannot be matched when it comes to quality of work or experience. We have completed over 1,000 bridge inspections as a firm.







OHUCP

NAICS Codes:

541330. 541620, 541720. 541990, 237110

UEI:

EEMAGUCMLYG1

CAGE:

Statewide Biennial Bridge Inspection Contract

Client: Pennsylvania Turnpike Commission

NBIS Bridge Inspections 2017-2021 – Groups 1,2, and 3

Client: PennDOT District 11-0

NBIS Bridge Inspection of FCB and non-FCB for approximately 48 State Bridges – E02380

Client: PennDOT District 11-0

NBIS Bridge Inspections for Allegheny County Owned Bridges – E04563

Client: PennDOT District 11-0

SR 65 Over Spruce Run Allegheny County, PA



Highland Park Bridge Allegheny County, PA

Notable Structures and Services

- 100 Mainline & Overhead Bridges; Culverts; Retaining Walls
- 78 High Mast Light Poles
- Emergency Inspections of Bridges & Toll Plazas

Notable Structures and Services

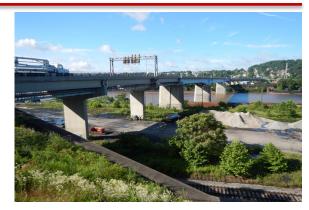
- Inspection & Report Preparation
- NBIS and Rehab Inspections
- New Kensington Bridge; Clairton-Glassport Bridge; & Veterans Bridge and Approaches

Notable Structures and Services

- 5 year NBIS and Fracture Critical Inspections
- Highland Park Bridge & Ramps; Beaver Rochester Bridge; and Mon City Bridge

Notable Structures and Services

- South 10th Street Suspension Bridge, including updates to Complex Bridge Inspection Plans
- ❖ Homeville Viaduct



Clairton-Glassport Bridge Allegheny County, PA



South 10th Street Bridge Allegheny County, PA

