PSC-AE ISID Billing Rate
Rev 12/05/2022

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET

This contract authorizes the professional services contractor to provide professional services.
(Authority: Public Act 431 of 1984, as amended)

CONTRACT FOR PROFESSIONAL SERVICES: Indefinite Scope – Indefinite Delivery Billing Rate – Not to Exceed

THIS CONTRACT, authorized this 17th day of March in the year two-thousand and twenty-three (2023), by the Director, Department of Technology, Management and Budget, BETWEEN the STATE OF MICHIGAN acting through the STATE FACILITIES ADMINISTRATION, DESIGN AND CONSTRUCTION DIVISION of the DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET, 3111 West St. Joseph Street, Lansing, Michigan, hereinafter called the Department, and

Wade Trim, Inc.
4241 Old 27 South, Suite 1
Gaylord, MI 49735

the Prime Professional Services Contractor, hereinafter called the Professional,

WHEREAS the Department proposes securing professional services FOR THE FOLLOWING PROJECT:

Indefinite-Scope, Indefinite-Delivery Contract No. 00997
Department of Technology, Management and Budget
State Facilities Administration, Design and Construction Division
Professional Architectural and Engineering Indefinite-Scope, Indefinite Delivery Contract (ISID) for Minor Projects -
Various State Departments and Facilities
Various Site Locations, Michigan

Provide professional services, technical staff, and support personnel for ISID minor projects on an as-needed basis at various State/Client Agencies within various locations as defined by the State of Michigan. These various ISID minor projects may include projects where the construction costs are between fifteen-thousand dollars ($15,000) and five-hundred-thousand dollars ($500,000) for this Contract.

This Contract is for professional design services for an unspecified number of ISID projects. The scope of work for each assigned project will be defined at the time the project is awarded by the State to the Professional firm.

The professional services required for each of these assigned projects requested by the Department may include any or all the Tasks included in the Phase 100 – Study through the Phase 700 – Construction text of the Department's Standard Professional Services Contract.

The Professional firm's services shall be performed in strict accordance with this Professional Services Contract and follow the Department's approved and attached Project/Program Statement.

This Contract does not warrant or imply to the Professional design firm entitlement to perform any specific percentage (%) amount of compensation, work, or projects during the life of this four (4) year Contract.

This Contract will remain in effect for four (4) years from the date of this Contract award but may be unilaterally terminated by the State of Michigan at any time, for cause or its convenience, by written notification of the State, to the Professional. Furthermore, this Contract may be extended for one (1) additional year, at the sole option and discretion of the State upon the Department providing written notice to the Professional prior to the expiration of the original four (4) year Contract period. Any such time extension shall be subject to the terms and conditions of this Contract, including, but not limited to, the existing hourly billing rates included in this Contract for the Professional, their Consultant, and their employees or agents.

Please note that for this Professional Services Contract your permanent assigned ISID Contract No., as noted on page 1 of this contract, must be provided on all Project correspondence and documents.

The Professional is not to provide any professional services or incur expenses until individual ISID Projects are assigned to this Contract. (See Article 2 – Compensation and the Project/Program Statement attached to this Contract.)

NOW THEREFORE, the Department and the Professional in consideration of the covenants of this Contract agree as follows:

I. The Professional shall provide the services for the assigned Project in the study, design, and construction administration, Phase and Task sequence provided in this Professional Services Contract and to the extent authorized by the Department of Technology, Management and Budget State Facilities Administration (SFA), Design and Construction Division (DCD) [Department] and be solely responsible for such professional services. The Professional's services shall be performed in strict accordance with this Professional Services Contract and follow the Project/Program Statement.

II. The State of Michigan shall compensate the Professional for providing their professional architectural and/or engineering study, design, and construction administration services for the Project in accordance with the conditions of this Professional Services Contract.

IN WITNESS, WHEREOF, each of the parties has caused this Professional Services Contract to be executed in blue ink, a scanned digital signature is also acceptable, by its duly authorized representatives on the dates shown beside their respective signatures, with the Contract to be effective upon the date on which the Professional received an electronic copy executed by the authorized State of Michigan representative(s) by electronic mail.

FOR THE PROFESSIONAL

WADE TRIM, INC.
Firm Name

CV0020249
SIGMA Vendor ID Number

Paul Repasky
Signature

3/28/2023
Date

SENIOR PROJECT MANAGER
Title

FOR THE STATE OF MICHIGAN:

Adam Plank
Director, DTMB | SFA | Design and Construction

March 30, 2023
Date

WHEREAS this Professional Services Contract constitutes the entire agreement as to the Project between the parties, any Contract Modification of this Contract and the Department's approved and attached Project/Program Statement scope of work requirements must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the State may require. No Contract Modification may be entered into to compensate the Professional for correcting, or for responding to claims or litigation for, the Professional firm's final design Contract Documents/architectural and engineering design errors, omissions, or neglect on the part of the Professional**.**

ARTICLE I
PROFESSIONAL SERVICES SCOPE OF WORK

The Professional shall provide all professional services, technical staff, and support personnel necessary to achieve the Project as described in its Project/Program Statement, in the best interest of the State, and be within the Professional's fee(s) herein authorized by the State. Assigned project services shall comprise, without exception, every professional discipline and expertise necessary to meet all the requirements as described in the Project/Program Statement and be in accordance with the accepted industry standards for professional practice and services. The Professional's services include attendance at all Project related meetings and conferences. Professional services for the assigned projects under this contract shall be provided in the Phase/Task sequence shown below and shall be rendered in accordance with the Professional's proposed and approved Project Study, Design, and Proposed Construction Schedule. The Professional's study, design and proposed construction schedule shall be detailed, undated, and time sequence related for all Phase/Task services appropriate for the Project. The Professional shall field-check and verify the accuracy of all study/drawing and any data furnished by the Department, the State/Client Agency or any other Project related source. The Professional shall not employ or consult with any firms in completing the Professional's obligations herein who it anticipates will be a construction Bidder for the Project or any part thereof, unless specifically authorized, in writing, by the Department. The Professional acknowledges that the Department is the first interpreter of the Professional's performance under this Contract.

The Professional acknowledges by signing this Professional Services Contract having a clear understanding of the requested Project and of the professional study, design and construction administration services required by the Department to provide it, and further agrees that the terms and conditions of this Professional Services Contract provide adequate professional fee(s) for the Professional to provide the requested Project scope of work requirements for each assigned project. No increase in fee to the Professional will be allowed unless there is a material change made to the Project as described in its Project/Program Statement and the change in scope to the Project/Program Statement is accepted and approved in writing, by the Project Director and the Professional. Professional services shall not be performed, and no Project expenses shall be incurred by the Professional prior to the issuance of a written and signed Professional Services Contract and a Contract Order authorizing the Professional to start the Project work. Compensation for Department directed changes to the Project will be provided to the Professional by a Contract Modification and/or Contract Change Order signed by the Department and the Professional. The preparation of Bulletins and Contract Change Orders resulting from increases in the Project scope of work or previously unknown on-site field conditions will be compensated to the Professional, as approved by the Project Director, on an hourly billing rate basis in accordance with this article. This compensation shall not exceed seven and half percent (7.5%) of the Construction Contractor's quotation for the Bulletin or Contract Change Order or an amount mutually agreed upon by the Professional and the Project Director.

The Professional shall immediately inform the Department whenever it is indicated that the Professional's authorized not-to-exceed Budget for any of the assigned Projects may be exceeded.

The Professional shall make recommendations to the Department for revisions to bring the Project Cost back to the Professional's original authorized Budget amount. Any revision to the Project must be accepted and approved by the Department in writing.

The professional services may also include participation in legislative presentations as described in the "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" and as the legislature or the Department may prescribe.

No substitution of any "Key Principal Personnel/Employee" essential for the successful completion of the Project and identified in the Professional's Organizational Chart will be allowed by the Professional for this Contract without the prior written consent from the Project Director. Before any "Key Principal Personnel/Employee" substitution takes place, the Professional shall submit a written request to the Project Director, and this substitution request shall include the following information: (1) A request in writing for a No Cost Contract Modification; (2) Detailed written justification for this substitution; (3) The Professional's qualifications of any proposed "Key Principal Personnel/Employee" replacement; and (4) A written statement from the Professional assuring the Department that the Project scope of work will not be adversely affected by this substitution. This request to modify their Professional Services Contract must be accepted and approved in writing by the Project Director and the Director of the Department. The Department will designate an individual to serve as the Project Director for the Project scope of work who shall be fully acquainted with the Project/Program Statement and have the authority to render Project decisions and furnish information promptly. Except in connection with issues under the Article XII - Contract Claims and Disputes text, the Project Director will exercise general management and administration for the Professional's services in so far as they affect the interest of the State. The Professional shall indemnify, defend, and hold harmless the State against exposure to claims arising from delays, negligence, or delinquencies by the Professional for the professional services of this Contract.

During the construction administration services of the Project, the Professional shall be required to complete and submit, the on-site Inspection record form titled "DTMB-0452, The Professional's Inspection Record" for all on-site Inspection visits to the Project site. The Professional's Inspection Record shall be completed and signed by the Professional and submitted monthly, with the original document sent to the Project Director and copies sent to the State/Client Agency and Construction Contractor. The Professional's Inspection Record shall accompany the Professional's monthly submitted payment request.

The "DTMB-0460, Project Procedures" documents package containing Department forms for use during construction administration shall be used by the Professional in the administration of this Contract. All professional services will be consistent with the Department's current "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" unless otherwise approved in writing by the Department.

The professional services required for each Phase of this Contract shall be performed by the Prime Professional and their Consultants in accordance with service descriptions in this article. The following service descriptions outlined in this Contract represents the Department's standard of care method for describing the Professional's responsibilities for providing the professional services of this Contract, but by inclusion, or omission, do not limit or exclude any regular or normal professional services necessary to accomplish the Project and be in accordance with the approved Project Budget and the industries accepted practice and standards for professional services. However, all the services outlined in this Contract may or may not be applicable to the Project/Program Statement and will require the Professional to identify only the services that are applicable for the Project at hand. The Professional shall determine and coordinate the interface of the services required for the Project at hand and be responsible for identifying any additional services necessary to successfully complete their Project.

Soil Erosion and Sedimentation Control in the State of Michigan is regulated under the 1994 Public Act 451, as amended – The Natural Resources and Environmental Protection Act, Part 91 – Soil Erosion and Sedimentation Control. Soil Erosion and Sedimentation Control associated with this Contract will be monitored and enforced by the Department.

The professional services may also include participation in legislative presentations as described in the "Major Project Design Manual for Professional Services Contractors and State/Client Agencies" and as the legislature or the Department may prescribe.

The following professional services, if they become necessary and essential for completing the Project, will be individually rendered by the Professional, only upon specific written authorization by the Department and the Project Director to the Professional and for the purpose and to the extent so authorized.

Should litigation occur because of this Project, only if through no fault of the Professional, the Professional firm shall be compensated by the Department on an actual hourly billing rate basis at the rate set forth in this Contract by a Contract Modification and/or Contract Change Order, if required to assist the Department of Attorney General, State Affairs Division in providing the professional services necessary during litigation.

LITIGATION: The Professional shall provide all information, presentations, depositions, testimony as "expert witness", and similar or related services, on behalf of the Department, as may be required in relation to the professional services of the study, design, and construction of this Project.

ACCOUNTING: The Professional shall provide all specialized categorizations and distributions of the costs of study, design and construction services, construction costs, and operational costs, as may be required according to purpose specific parameters.

PUBLIC AWARENESS: The Professional shall provide all design and construction related services to assist in and make presentations of the professional services of the study, design, construction, and operational aspects of the Projects as may be required for public meetings, hearings, and similar informational activities.

PHASE 100 - STUDY PHASE

Provide a complete and comprehensive architectural and/or engineering study consistent with the Project/Program Statement, with itemized construction cost estimates.

Task 101 COORDINATION: Meet with the Project Team and define all areas of investigation. Establish Project Team responsibilities and lines of communications. Review the status of the study efforts with the Project Team at such frequency and times as may be required to achieve the Project objectives.

Present study documents to the State/Client Agency and the Department for their review at the 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications.

Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation, or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 102 RESEARCH: Gather and/or develop all data to evaluate and clarify the Project. Research existing data, analyze and refine the concepts of the Project/Program Statement. Through discussions with the Project Team, by interrogation and necessary counsel, establish, in requisite detail, the information required to complete the Study incorporating functional and operations needs of the State/Client Agency's respective program(s), as well as operational factors, maintenance, and other support features. Identify all additional research, studies, and analysis necessary to express such objectives and requirements in terms of a fully operable facility or system which will acceptably serve its intended use.

Task 103 ANALYSIS: Analyze data, information and research gathered. Create draft recommendations or results of the study and research. Upon completion of all on-site field investigation activities prepare a complete architectural and/or engineering study report. If appropriate, provide itemized construction cost estimates. The analysis will correlate, describe, and record research findings and information for the Project Team's understanding and acceptance. Transcribe and consolidate all existing data, studies, and the research analysis of Task 102 into a draft study report. Submit one (1) electronic copy in indexed PDF format of the draft study report to the Project Team at 50 percent and 90 percent completion review intervals and solicit review comments.

Task 110 STUDY REPORT: Incorporate the study review comments as directed by the Department into the final study report. Prepare and attend presentations to the Project Team and others for Study acceptance. The final report shall use the following outline and contain such detail as required for the Project Team's understanding and acceptance.

- Management Summary
- Problem
- Research Findings, Discussion and Details
- Conclusion
- Recommendation

Provide one reproducible original and an electronic copy suitable for legible reproduction. One study report presentation shall be considered basic services for this Task. Any additional study report presentations requested by the Department will be considered extra professional services and the additional study costs will be paid to the Professional by the Department with a Contract Change Order.

PHASE 200 - PROGRAM

Amplify the Project/Program Statement and, if available, final Study Report, to embody the physical, functional, and programmatic relationships required to achieve the Project objectives. The resultant program analysis, when accepted and approved by the Department, shall create the general scope of work of the Project. Such acceptance does not limit subsequent inclusion of minor, but essential, programmatic or design details whose necessity and arrangement may best become apparent during subsequent Phases of the Project's evolution.

Task 201 COORDINATION: Meet with the Project Team and establish lines of communication, authority, and responsibility. Establish a method for the Department and the State/Client Agency to formally sign off on data input, the program analysis, and appropriate elements of the resultant design.

Present proposed program analysis documents to the Project Team for review at the 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications.

Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation, or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 202 PROGRAMMING: Identify and develop data to evaluate and clarify the proposed Project. Through discussions with the Project Team, by interrogation and necessary counsel, establish, in requisite detail, the functional and operational needs of the State/Client Agency's respective program(s), as well as operational factors, maintenance and other support features. Allocation of spaces shall be in accordance with the State of Michigan's current "Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies and Professional Service Contractors" and be consistent with the Project/Program Statement and Project Budget. Provide all additional research, studies, and program analysis necessary identify the objectives and requirements for a fully operable Project acceptably serving its intended use.

Task 203 DEVELOPMENT: Transcribe and consolidate all data, studies, and the analysis of Task 202 into a program analysis summarizing the complete program for the project, including spaces, physical features, systems, functions, capacities, relationships, and interactions required by the proposed Project. Revise the proposed program as required to achieve the Project objectives and incorporate review comments by the Project Team.

Obtain approval and sign-off of space allocations from the Project Director before providing the space allocations to the State/Client Agency for approval and sign-off of the complete program.

Task 209 PROJECT COST ESTIMATE: Provide an itemized cost estimate of the proposed Project program. Verify in writing that the Project Budget is adequate to achieve the proposed Project. Revise the program analysis documents as necessary to provide an acceptable program analysis design within the Department's authorized Project Budget.

Task 210 PROGRAM ANALYSIS REPORT: Prepare a draft program analysis report containing the program, cost estimate, signoffs and backup data and information. Submit one (1) electronic copy in indexed PDF format of the draft study report to the Project Team at 50 percent and 90 percent completion review intervals and solicit review comments. Incorporate review comments as directed by the Department into the proposed final program analysis report. Provide one reproducible original and an electronic copy suitable for legible reproduction. One program analysis report presentation shall be considered basic services for this Task. Any additional program analysis report presentations requested by the Department will be considered extra professional services and the additional study costs will be paid to the Professional by the Department with a Contract Change Order.

PHASE 300 - SCHEMATIC DESIGN

Prepare progressive schematic design deliverables consistent with the Project/Program Statement, and approved program (if applicable). Diagrammatically depict the area(s) and relationship of the Project functions. Establish the design basis for and show principal building design elements and locations of the various structural, mechanical, heating, ventilating, and air conditioning (HVAC), electrical and other systems as necessary to completely achieve the Project. The Professional shall obtain Professional Consultant firms for civil/site survey, site geotechnical investigation analysis and soil testing as the Professional deems necessary to achieve a viable and economic Project design. Revise design as necessary to obtain approval from the Department and the State/Client Agency.

Task 301 COORDINATION: Meet with the Project Team to establish a physical size and arrangement of the Project and its principal systems. Include technical, human, and physical environment requirements consistent with the Project program as well as the functional interrelationships between spaces or systems. Determine any Project requirements as necessary to accommodate artwork.

Where the Project involves work in an existing building, site, and/or utility system, identify and locate by scaled graphic diagram, any building and/or site utility areas that may have potential hazardous material contamination and may require testing, abatement and/or removal by the Department, prior to the renovation and/or during the new construction work of the Project.

Identify and define, in writing, the impact of the proposed Project schematic design on the existing building or facility operations.

Assist the Department in determining and resolving any Project requirements for maintaining the current operation of the existing building facility spaces or systems and site utility areas, including as a minimum, the impact of hazardous waste removal, and the associated necessary demolition and repair of the adjoining work.

Hazardous material testing and removal will be performed by the Department by separate Contract using other professional firms. See Task 512 - Hazardous Materials, for text defining the Professional's responsibility for assisting the Department with these materials.

Progressively review, with the Project Team, the development of the schematic design documents and assist in obtaining data and providing timely decisions. Present proposed schematic design documents for review to the State/Client Agency and the Department at 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications. Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation, or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 302 CONSTRUCTION CODE AND DESIGN REVIEWS: Identify, list, and define for the Department, in writing, the impact of all applicable construction codes, rules, regulations, environmental requirements, design reviews, and permitting procedures current as of the start of this schematic design Phase that will apply to the design of the proposed Project. Review with the Project Team the principal impacts on Project planning and incorporate these into the schematic design report and the Project cost/proposed construction schedule of Task 309.

Task 303 CIVIL/SITE STAGING INVESTIGATION: The Professional shall retain a civil/site survey Consultant and a site geotechnical testing Consultant and coordinate their proposed architectural and/or engineering services and prepare the site staging investigation survey instructions program(s) required to establish and execute a complete schematic site design appropriate to the Project/Program Statement. Analyze site staging investigation results and incorporate into the schematic site design. Coordinate a site-specific testing program to identify and/or confirm the Project site underground conditions and accurately specify contractual requirements. This includes, but is not limited to, access, traffic control, demolition, Soil Erosion and Sedimentation Control, engineered fill, utilities, removal of obstructions/contaminations, borrow and spoil areas, bracing, shoring, waterproofing, dewatering, dredging, and similar work.

Provide the Department with copies of all site investigation geotechnical test reports. Review conclusions and, upon request, explain their influence on the Project schematic design. Define the impact of the Project on adjacent buildings.

Task 304 STRUCTURAL: Research, survey, define, and render all existing structural systems appropriate to the proposed Project. Show facility layout, applicable area floor loadings and basic elevations. Outline any existing principal structural system members and render and show the proposed structural system schematic design for renovations and additions.

Task 305 MECHANICAL/HVAC/PLUMBING/UTILITIES: Research survey, define and render the schematic design basis for all proposed mechanical, plumbing systems, and utility systems appropriate to the Project. This includes but is not limited to all plumbing, HVAC, and other mechanical systems, equipment, and their respective loads. Define and render the schematic design capacities, sources, flows, and functions of all existing and/or proposed utility systems, including but not limited to steam, water, fuel, storm and sanitary sewers, and fire protection. Field-check and verify accessibility and space for all equipment on the proposed schematic design drawings. Confirm, in writing, to the Department, the availability of utility capacities at current or proposed connections. Contact applicable utilities for information on connections, connection permit requirements, fees, and schedules.

Task 306 ELECTRICAL: Research, survey, define and render the schematic design basis for all proposed electrical systems appropriate to the Project. This may include, but is not limited to utility service systems, primary and secondary distribution systems, building control systems, security systems, elevators, fire alarms, television, data, communications, and similar systems. Define sources, equipment capacities, and loads, including those for open office workstation/partitioning systems. Field-check and verify accessibility and space for all equipment on the proposed schematic design drawings. Confirm, in writing, to the Department, the availability of utility capacities at current or proposed connections. Contact applicable utilities for information on connections, connection permit requirements, required easements, transformers, fees, and schedules.

Task 307 ARCHITECTURAL/ENGINEERING: Research, survey, define, and render the existing and proposed schematic design architectural and/or engineering building area layout appropriate to the Project/Program Statement. Show proposed applicable area/room space, finish treatment, uses, interrelationships, and principal building sections, elevations, and dimensions. Show principal building fire protection spaces and features. Consider sustainability in material, equipment, systems, and general design selections, provide LEED checklist, as applicable.

Task 308 DRAFTING: Prepare and render proposed schematic design documents appropriate to the Project, on sheet size approved by the Project Director. Include all principal building/site utility systems.

Coordinate the Project schematic design with all architectural and/or engineering design disciplines for completeness, accuracy and consistency, and conflict avoidance. The Professional shall field-check and verify the accuracy of all existing and proposed architectural and/or engineering drawings and any data furnished by the Department, the State/Client Agency or any other Project related source.

Task 309 PROJECT COST/PROPOSED CONSTRUCTION SCHEDULE: Evaluate the proposed schematic design against the estimated Project cost and design/construction schedule. Revise schematic design as required to produce a design within the Department's approved Budget. Prepare and submit a Project Budget based on the approved schematic design. Apply critical target dates to the Professional's Project Study, Design and Proposed Construction Schedule and submit to the Department for their review and approval.

Task 310 SCHEMATIC DESIGN REVIEW: Prepare, reproduce, submit, and make presentations and revisions of the schematic design planning documents. Present proposed documents for the Project Team review at the 50 percent and 90 percent completion intervals and solicit review comments. Revise proposed schematic design documents, as necessary, to incorporate all requested design review comments. Obtain Department approval and sign-off prior to State/Client Agency sign-off, when requested by Project Director. Where legislative review is required, provide an additional one (1) electronic copy in PDF format of the Department approved proposed schematic design documents to the Department for distribution to the Joint Capital Outlay Subcommittee, in the format of the "Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies, and Professional Service Contractors".

Provide one (1) schematic design presentation to the Project Team for this Task. Any additional schematic design presentations requested by the Department will be considered extra professional services and the additional schematic design costs will be paid to the Professional by the Department with a Contract Change Order.

If Contract Services conclude with this Phase, provide bond prints and an indexed PDF of architectural and/or engineering drawings of the final approved schematic design, suitable for legible reproduction.

PHASE 400 - PRELIMINARY DESIGN

Prepare progressive preliminary design documents to develop the Project based on the Project/Program Statement, and the approved schematic design and program, if applicable. Refine the schematic design documents as necessary to produce an acceptable preliminary design. The preliminary design and outline draft specification shall be complete and detailed enough to define the size, function, arrangements, spaces, location and operations of equipment, and materials comprising the principal design details of structures and systems.

The proposed preliminary design documents and outline draft specifications shall clearly depict the Professional's proposed design intent of the Project's systems, materials, equipment, utilities, site improvements, and other elements through single-line diagrams, system layout drawings and developed plans and design details. The preliminary design thus achieved must constitute the complete basis for further detail into final design drawings.

Prepare in bar chart format, the proposed Project construction schedule. Prepare a complete estimated Project cost statement based on prevailing or predictable factors for the proposed construction bidding period. The Department's written acceptance of the estimated project cost statement will establish the authorized Budget for the Project. The Professional shall apply the means and methods necessary to achieve the proposed preliminary design within the authorized Budget for the Project.

Task 401 COORDINATION: Meet with the Project Team to review the Project/Program Statement, approved schematic design documents (if applicable), and refine the Project. Assist the Project Team to progressively review the proposed preliminary design, develop input, and provide timely decisions.

Where the Project involves work in an existing building, site, and/or utility system, identify and locate by scaled graphic diagram, any building and/or site utility areas that may have potential hazardous material contamination and may require testing, abatement, and/or removal by the Department, prior to the renovation and/or during the new construction work of the Project. Identify and define, in writing, the impact of the proposed Project schematic design on the existing building or facility operations. Assist the Department in determining and resolving any Project requirements for maintaining the current operation of the existing building facility spaces or systems and site utility areas, including as a minimum, the impact of hazardous waste removal, and the associated necessary demolition and repair of the adjoining work.

Hazardous material testing and removal will be performed by the Department by separate Contract using other professional firms. See Task 512 - Hazardous Materials, for text defining the Professional's responsibility for assisting the Department with these materials.

Progressively review, with the Project Team, the development of the preliminary design documents and assist in obtaining data and providing timely decisions. Incorporate design refinements consistent with the proposed Project scope. Establish equipment and/or materials to be furnished by the State. Present proposed preliminary design documents for review to the State/Client Agency and the Department at 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications.

Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation, or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 402 SPECIFICATIONS: Prepare proposed preliminary design outline draft specifications for Divisions 00 through 49, in the current version of the Master Format Outline by the Construction Specifications Institute (C.S.I.), as appropriate for the defined Project. Outline specifications will address sustainable design in materials selection.

Task 403 CIVIL/SITE STAGING DESIGN/INVESTIGATION: If the Professional did not obtain a site-specific geotechnical testing program for this Project and advise the Department during the Schematic Design Phase, they shall retain a civil/site survey Consultant and a geotechnical testing Consultant and coordinate their proposed architectural and/or engineering services to prepare and provide a preliminary geotechnical site investigation and site staging design as directly related to the Project.

Coordinate a site-specific testing program to identify and/or confirm the Project site underground conditions and to accurately specify the proposed construction contractual requirements. This includes, but is not limited to access, traffic control, demolition, Soil Erosion and Sedimentation Control, engineered fill, utilities, removal of obstructions/contaminations, borrow and spoil areas, bracing, shoring, waterproofing, dewatering, dredging, and similar work. Determine and prepare a list of required civil/site drawings as related to the Project. Illustrate and coordinate any off-site work necessary for a completely functioning Project. Revise as required.

Task 404 STRUCTURAL: Prepare structural calculations appropriate to the proposed Project and size major components. Prepare preliminary structural plans, sections, elevations, and details drawings, as applicable for the defined scope of work. Determine and prepare a list of required preliminary structural drawings as related to the proposed Project. Revise as required.

Task 405 MECHANICAL/HVAC/PLUMBING/UTILITIES: Identify existing mechanical/heating, ventilating, and air conditioning equipment, plumbing systems, and utility systems.

Calculate heat loss, heat gain, and other demands for all spaces. Determine ventilation requirements. Calculate total loads, identify, and size new equipment. Identify and/or calculate total utility loads. Include the needs of any existing building or system that is a part of, or interfaces with the Project, as well as those of the Project.

Provide basic engineering design appropriate for all principal building components, utility systems and building systems, and all pre-engineered equipment suitable and appropriate for the proposed Project. Field-check and verify clearances for all proposed equipment and systems proposed. Prepare preliminary HVAC, plumbing, and utility drawings. Determine and prepare a list of required preliminary design drawings as related to the proposed Project. Review current, mechanical, plumbing and utility system codes and incorporate applicable requirements. Revise as required. Secure in writing, the approval of capacities and connections for the Project from the appropriate utilities/suppliers.

Task 406 ELECTRICAL: Identify existing equipment and systems. Prepare load calculations, including electric loads for fixed, and movable, equipment, as appropriate to the defined Project. Determine electric service requirements and size major transformer and service equipment. Provide single line diagrams of primary service and distribution systems. Develop and outline basic equipment and distribution systems for lighting, power, building control, elevators, fire, security, television, data, communications, and other specialized systems of the Project. Coordinate design to incorporate design requirements for any open office workstation/partitioning systems.

Field-check and verify clearances for all proposed equipment and design systems proposed. Prepare preliminary electrical drawings. Determine and prepare a list of required preliminary design electrical drawings as related to the proposed Project. Review current electrical codes and incorporate all applicable requirements. Revise as required. Secure in writing, the approval of capacities and connections for the Project from the appropriate utility/suppliers.

Task 407 ARCHITECTURAL/ENGINEERING: Prepare preliminary architectural and/or engineering drawings, appropriate to the proposed Project, to detail and define the Project. Coordinate design to incorporate design requirements for any open office workstation/partitioning systems. Determine and prepare a list of required preliminary design architectural and/or engineering drawings. Drawings will include plans, elevations, sections, and critical construction details in order that an accurate and detailed construction estimate can be provided. Depict sustainable design criteria and energy efficient design features of the Project, provide LEED Checklist, and provide summary calculations to demonstrate applicable compliance with the State of Michigan's current Energy Code requirements. Revise as required.

Task 408 DRAFTING: Prepare and render the preliminary design architectural and/or engineering documents on sheet size approved by Project Director. Coordinate the preliminary design with related architectural and/or engineering design disciplines for completeness, accuracy and consistency and conflict avoidance. Prepare drawings using applicable State of Michigan standards as defined in the Department's "Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies, and Professional Service Contractors" and DTMB DCD "Design and Construction Standards for Office Construction and Tenant Fit out" for all Project design disciplines.

The Professional shall field-check and verify the accuracy of all existing and proposed drawings and any data furnished by the Department, the State/Client Agency, or any other Project related source.

Task 409 COST ESTIMATE AND CONSTRUCTION SCHEDULE: Prepare an itemized Project construction cost estimate based on prevailing or reasonably predictable factors for the proposed bidding period. Recommend construction strategies, methods, and phasing. Identify long-lead items and any State of Michigan-furnished materials, equipment, systems, and furnishings, with procurement deadlines consistent with the proposed schedule and phasing. Prepare in bar chart format a detailed schedule of the design and proposed bidding and construction schedule, incorporating the information listed above.

Task 410 PRELIMINARY DESIGN REVIEW: Prepare, reproduce, submit, and make presentations and revisions of the schematic design planning documents. Present proposed documents for the Project Team review at the 50 percent and 90 percent completion intervals and solicit review comments. Revise proposed preliminary design documents, as necessary, to incorporate all requested design review comments.

With the 50 percent review, provide design criteria and calculations of principal architectural, mechanical, plumbing, and electrical engineering systems demonstrating basic compliance with the State of Michigan's current Energy Code requirements.

For each review, present proposed preliminary design documents first to the State/Client Agency for programmatic design conformance review, then present to the Department for review, determination of required revisions, and acceptance. Revise proposed preliminary design documents, as necessary, to incorporate all requested design review comments required for the Department’s written acceptance of the proposed Project preliminary design.

Where legislative review is required, provide an additional one (1) electronic copy in PDF format of the approved proposed preliminary design documents to the Department for distribution to the Joint Capital Outlay Subcommittee, in the format of the “Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies, and Professional Service Contractors”. Provide one (1) schematic design presentation to the Project Team for this Task. Any additional schematic design presentations requested by the Department will be considered extra professional services and the additional preliminary design costs will be paid to the Professional by the Department with a Contract Change Order. If Contract Services conclude with this Phase, provide bond prints, electronic CAD, and indexed PDF of architectural and/or engineering drawings of the final approved schematic design and outline specifications suitable for legible reproduction.

PHASE 500 - FINAL DESIGN

Prepare for progressive, periodic review, Final Design Documents which shall revise, refine, amplify, and depict, in detail, the Project as described and required by the Project/Program Statement and any approved preliminary design. Final Design Documents shall be prepared in Phases/Bid packages appropriate to the Project, schedule, and funding.

The proposed Final Design Documents shall document a complete and constructible Project. Final Design Documents shall incorporate and comply with all current, applicable regulations, ordinances, construction codes and statutes, and must have accomplished all reviews by appropriate federal, State or any local authorities having jurisdiction before presentation to the Department for acceptance and advertisement for bidding. Where design approvals are required, the Professional shall acquire and provide them. The Final Design Documents shall be without ambiguity and must be so complete that no significant design decision is left to the discretion of any Bidder, manufacturer, or supplier. The Final Design Documents will not define, quantify, or in any other way represent any work as being assignable to, or to be performed by, any Consultant or sub-consultant, except for fire suppression systems or other specialized system(s) if it is specifically authorized, in writing, by the department.

Bidding Documents shall consist of, but are not limited to, the Final Design Documents, including final architectural and/or engineering drawings and specifications, special, general, and supplemental conditions of the Construction Contract, and modifications, if any, to MICHSPEC or DCSpec documents provided by the Department. Such standard documents may consist of, but are not limited to, the project advertisement, the Instructions to Bidders, the proposal forms, general, supplemental, and any special conditions of the Construction Contract, and the standard form of agreement between the Department and the Construction Contractor. The Professional may not substitute any other special, general, and supplemental conditions for the Construction Contract or other standard documents provided by the Department. The Professional may not revise, other than the fillable portions of the general conditions, or use any additional general condition requirements unless the revisions or requirements are accepted and approved by the Department in writing.

In addition to the requirements herein, the professional services for this Project shall include, but are not limited to, those set forth in the current version of MICHSPEC or the current DCSPEC as adopted and modified by the State of Michigan and incorporated into the Construction Contract, plus such other Department standard documents and general conditions as may be part of the Construction Contract.

The Contract Documents shall consist of the Bidding Documents and all Addenda and attachments necessary to provide a complete Construction Contract for the Project.

Task 501 COORDINATION: Review approved preliminary design drawings with the Project Team and solicit revisions. Incorporate any revisions and design refinements.

Present proposed final design documents to the State/Client Agency and the Department for their review at the 50 percent and 90 percent completion intervals and at such other times as the Department deems necessary to completely develop and monitor the Project.

Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications. Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation, or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting.

Task 502 SPECIFICATIONS: Prepare final design specifications in the format defined below and with Phasing as appropriate for the Project. Include a schedule of all required submittals, a construction material testing schedule, and all other necessary schedules. Specifications shall be coordinated with the final design architectural and/or engineering drawings and shall be prepared in the current version of the Master Format Outline by the Construction Specifications Institute (C.S.I.). The final design architectural and/or engineering specifications shall clearly define the Project design and construction requirements indicating the type and quality of materials, products, and workmanship.

Sustainable Design shall be used wherever possible by the Professional in their Project design. The United States Green Building Council's (USGBC) LEED Green Building Rating System will be used as a convenient and industry accepted standard of reporting and measurement of the materials and design strategies used in the Project, but the USGBC certificate will not be required. Sustainable Design is defined in this Contract as the Professional's use of Project design resources with no negative impact to the natural ecosystems, an emphasis on overall energy efficiency, recycling, reduction of waste, and achieving a net enhancement of the Project.

Performance specifications shall be used when feasible. If not, the Professional shall name at least three (3) acceptable materials, products or systems and the specifications shall contain an "or equal" clause. Whenever possible, recycled materials and/or Michigan-manufactured products shall be named and given first preference. Proprietary specifications or allowances may be permitted with the Department's acceptance and written approval, but only for special, unavoidable conditions. Provide Project specifications to the Department for procurement of items to be pre-purchased through existing State contracts or separate bids.

Task 503 CIVIL/SITE STAGING DESIGN: If the Professional did not obtain a site-specific geotechnical testing program for this Project and advise the Department during the Schematic Design Phase, they shall retain a civil/site survey Consultant and a geotechnical testing Consultant and coordinate their proposed architectural and/or engineering services to prepare and provide a preliminary geotechnical site investigation and site staging design as directly related to the Project. Coordinate a site-specific testing program to identify and/or confirm the Project site underground conditions and to accurately specify the proposed construction contractual requirements. This includes, but is not limited to access, traffic control, demolition, Soil Erosion and Sedimentation Control, engineered fill, utilities, removal of obstructions/contaminations, borrow and spoil areas, bracing, shoring, waterproofing, dewatering, dredging, and similar work. Determine and prepare a list of required civil/site drawings as related to the Project. Illustrate and coordinate any off-site work necessary for a completely functioning Project. Revise as required.

Soil Erosion and Sedimentation Control shall be implemented in accordance with the current edition of the Department's compliance manual and 1994 PA 451, as amended – The Natural Resources Environmental Protection Act, Part 91 – Soil Erosion and Sedimentation Control. Submit final civil/site design drawings depicting Soil Erosion and Sedimentation Control measures to the Department's Soil Erosion and Sedimentation Control Program for review in accordance with 1994 PA 451, as amended. For DTMB managed projects, coordinate review submission with Project Director as plan review is completed within the Design and Construction Division.

Task 504 STRUCTURAL: Prepare and render complete structural final design documents.

Task 505 MECHANICAL/HVAC/PLUMBING/UTILITIES: Prepare and render complete mechanical, plumbing, and utility system final design documents.

Task 506 ELECTRICAL: Prepare and render complete electrical system final design documents.

Task 507 ARCHITECTURAL/ENGINEERING: Prepare and render complete architectural and/or engineering final design documents. Assist the Department in the determination of and specification of furnishings, colors, and finish selections. Provide material finish and color board for final acceptance as required for the defined Project.

Task 508 DRAFTING: Prepare complete final design architectural and/or engineering drawings for Bidding Documents on sheet size approved by Project Director using applicable State of Michigan standards as defined in the "Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies and Professional Services Contractors." The Professional shall field-check and verify the accuracy of all existing and proposed drawings and any data furnished by the Department, the State/Client Agency or any other Project related source.

The Project Bidding Documents derived from the Final Design drawings shall be made available and converted, if necessary, to the AutoCAD computer drafting system. Bidding Documents shall be provided electronically in pdf format to the Department for advertisement by the Department.

Provide one electronic copy of signed and sealed documents in addition to paper review and approval sets of the Contract Documents. The signed and sealed print sets are the controlling Contract Documents for this Project. The software name and release number used to produce the Design Contract drawings will be clearly identified on the electronic media.

Task 509 CHECKING CONTRACT DOCUMENTS: Check and coordinate all proposed Bidding and Contract Documents for completeness and accuracy. Prepare Bidding and Contract Documents that will protect the Department from unexpected construction cost increases, schedule delays or claims for reason of defective or incomplete rendering of the Professional's design, or for any delinquency by the Professional for performance of the professional design services under this Contract. Check the adequacy of all spaces and clearances.

Cross-check and coordinate the requirements of all proposed final design drawings between the architectural and/or engineering design disciplines for completeness, accuracy, and consistency, and conflict avoidance. Similarly, cross-check and coordinate all proposed final design drawings against the Project specifications. Mark each drawing with the name of the checker and with the written signature approval of the appropriate Professional "Key Principal Personnel/Employee."

Task 510 CONSTRUCTION CODES AND PERMITS: The Professional's Contract Documents shall comply with the State of Michigan Construction Code, 1972 PA 230, as amended, the State of Michigan Energy Code, the Americans with Disabilities Act (ADA) Accessibility Guide requirements, the State of Michigan Barrier-Free Access Code requirements, and all Project related construction code requirements in effect at the time of award of this Contract. Assist the Department in obtaining approval of the Project and its design by appropriate governmental regulating and/or code enforcement authorities.

Project Bidding Documents may not be advertised until plan review approval is obtained.

Except as otherwise provided for in this Contract, code compliance and plan review approval(s) shall be performed by the, the Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, Plan Review Division, and the Bureau of Fire Services. Code compliance and plan review approval fees shall be paid by the Professional as a reimbursable expense, unless otherwise provided for. Submit all modeling, testing, design data, and appropriate drawings and applications for all permits, tests, and approvals, which the Department is required to secure as a prerequisite authorization for the Project's approval.

Submit Soil Erosion and Sedimentation Control plans/drawings to the Department's Soil Erosion and Sedimentation Control Program as the enforcing authority for this Project, no later than at the 90 percent final design stage.

Provide energy efficient design features and summary calculations to demonstrate Project compliance with the State of Michigan Sustainability requirements. Submit documents for review in a timely manner allowing appropriate time for review/permitting processes by respective authorities, such that the Project schedule is not unnecessarily delayed. Assist the State/Client Agency to secure any appropriate construction code waivers.

Incorporate all required modifications into the Bidding Documents. Follow through to ensure issuance of the construction codes and permits approvals. Secure all required design approvals before submitting the final design documents to the Project Team for the final design document review of Task 515. Any approval secured in initial plan review and permitting does not relieve the Professional from complying with code official's construction field inspections enforcement requirements.

Task 511 CONSTRUCTION TESTING PROGRAM: Coordinate Project on-site survey and appropriate research to identify site specific abnormal construction conditions. Coordinate site specific geotechnical testing program of areas, consistent with the design and siting requirements. Identify and confirm the site underground conditions sufficiently to accurately specify the construction contractual requirements. Establish the required construction quality control and materials testing program. Define and specify the types of Project construction tests required, the approximate quantities to be tested and the projected cost thereof. Prepare quality control and material testing services program Bidding Documents for the construction quality control and material testing services. Testing services shall be estimated and identified as an authorized reimbursable expense item in this Contract.

Task 512 HAZARDOUS MATERIALS: Where the Project involves work in an existing building and/or utility system, assist the Department to determine the scope of potential hazardous materials contamination that may require testing, abatement and/or removal by the Department, prior to the renovation and/or during the new construction work of the Project. Hazardous materials testing and removal for this Project will be performed by the Department by separate Contract unless specifically noted in the project scope. Coordinate the professional design services of this Contract with any hazardous material removal services required to implement this Project. Include for the Department's use, architectural and/or engineering drawings and specifications for all restoration work necessary following completion of the removal/abatement Project. Revise the final design drawings, specifications, and schedule, if necessary, to reflect the impact of the hazardous material removal/abatement on the existing State/Client Agency facility operations.

Task 513 DESIGN AND CONSTRUCTION BUDGET: The Professional shall be responsible for all costs incurred by it, necessitated by for rebidding a Project if it is over Budget due to their design. Submit in writing the itemized estimate of the construction costs with each final design review. Include all construction Bid packaging and Phasing. Determine the amount and adequacy of any construction contingency. Upon submittal of the 90 percent complete final design documents, confirm an accurate itemized construction cost estimate in writing to the Department. Confirm that the total Project construction cost is estimated to be within the Project Budget.

Notify the Department in writing if it becomes evident during the final design phase that the Project cannot be constructed within the Professional's estimated construction Budget. Unless the Department determines the problem to be outside the control or responsibility of the Professional, the Professional shall revise their final design drawings and specifications to produce a complete design for the Project within the Professional's original estimated construction Budget cost and will otherwise be responsible for any costs incurred by the Department in rebidding the Project.

Assist the Department to rebid the Project in accordance with the Task 516 construction bidding/contracting procedures.

Task 514 CONSTRUCTION SCHEDULE: Determine the appropriate proposed construction schedule to be part of the Construction Contract. Consider all principal influencing factors, including, but not limited to, current and projected material delivery times, local labor contract periods, and other historical principal causes of delays.

Task 515 FINAL DESIGN BIDDING DOCUMENTS REVIEW: Provide complete final design documents review. When the final design is 50 percent complete, submit the final design documents to the Project team for their review. If the final design appears to exceed the Project Budget, review with the Department all cost reduction design options. Incorporate at 90 percent completion, all required design modifications applicable to the Project, and resubmit to the Project Director. Confirm in writing that the requirements of Tasks 509 and 510 have been met.

Submit 100 percent complete sets of Bidding Documents to the Project Team for their final review. Submit final design documents to the State/Client Agency and the Department for their final design review and revise as necessary to incorporate all review comments required for Department written acceptance of the Bidding Documents. Provide adequate time (minimum of 14 calendar days) for the reviews and implementation of any comments or modifications.

Task 516 CONSTRUCTION BIDDING AND CONTRACTING: Assist the Department in the construction bidding and contracting process. The State of Michigan will advertise for bids and issue construction documents on-line and award and hold the Construction Contract.

Prepare (maximum of 6mb electronic PDF files) and distribute Bidding Documents to the Project Director as required to accommodate predetermined construction Bid packages and/or Phases. Conduct pre-bid meetings and issue pre-bid meeting minutes and bidder's lists. Issue Addenda to the Project Director as required for posting. Include in each Addendum complete specifications for the Project if such specifications are not part of the Bidding Documents.

The Professional will be compensated by the Department with a Contract Change Order for providing the professional services necessary to rebid the Project for reason of defaulted or disqualified construction Bidder(s) or unacceptable price range as required by the design and construction Budget text of Task 513.

The Professional's construction bidding and contracting procedure services for Task 516 are not complete until: (1) The responsive, responsible, best value construction Bidder's Bid has been selected and accepted by the Department; and (2) The responsive, responsible, best value construction Bidder's Construction Contract has been executed. The PSC is to also incorporate any State required preferences with their review and recommendation.

Construction Bid Evaluation and Recommendation of Construction Contract Awards: Review and evaluate the submitted construction Bids. Provide the Department with a written recommendation for the apparent lowest responsive, responsible, best value construction Bidder for the Project Construction Contract award(s) within five (5) business days of the date of the Department's construction Bid opening. Exempt from recommendation any firm that in the Professional's opinion is unqualified for the Project (documentation required) or that the Professional has a business association with on this Project, and any firm, that the Professional has used in preparation of the Contract Documents or for any estimating work related to the Project.

The Professional shall conduct pre-contract meetings with responsive, responsible best value construction Bidder(s) to review the following items: (1) Understanding of the design intent of the Contract Documents; and (2) To advise and assist the Construction Contractor(s) in understanding the requirements of the Department's standard form of Construction Contract Documents, Project scope of work, and its Construction Contract award procedures.

Unless otherwise designated in the Department's Notice of Intent to Award letter to the recommended Construction Contractor within fifteen (15) calendar days from the date that the Notice of Intent to Award letter was mailed to the Construction Contractor, the Construction Contractor recommended for the award of the Construction Contract shall (a) Fill out and execute the Department's, current version of MICHSPEC standard form documents Section 00500, Contract Agreement and the Section 00800, Supplementary Conditions, electronically; (b) Execute Section 00610, Performance Bond, and the Section 00620, Payment Bond (and attach to each bond a separate, certified copy of

Power of Attorney); and (c) Return to the Department, the Construction Contractor's executed Section 00500, Contract Agreement, Section 00610, Performance Bond, and Section 00620, Payment Bond forms, evidence of Certificates of Insurance and any other legal documents required for submittal by the Department's, Notice of Intent to Award letter.

Task 517 FINAL DESIGN CORRECTION PROCEDURES: Correct at no additional cost to the Department any design errors or omissions and/or other Project related deficiencies identified during the 600 and 700 Construction Phase. All reproduction costs for design interpretations, clarifications, and Bulletins related to the Professional's final design errors or omissions and similar or avoidable costs shall be accounted as part of the Professional's calculated hourly billing rates.

Provide design clarifications and interpretations of the Contract Documents requirements necessary to: (1) Adequately describe the Project work; (2) Adapt architectural and/or engineering final design documents during construction to accommodate field conditions identified during construction; (3) Refine design details that are not feasible and identified during construction; and (4) Comply with current construction/building codes, and all other Project related design and construction matters as may be necessary to produce a complete Project.

Design Interpretations and Clarifications: For elements of construction having no change in cost to the State the Professional will: (1) Provide instructions, and/or design interpretations and clarifications for design details within five (5) business days of the Construction Contractor's request record same, in writing; and (2) Revise the Professional's original final design architectural and/or engineering drawings and specifications as appropriate to the Project. Marking and initialing of drawings is not an acceptable form of written instruction.

Bulletin Authorization: Request authorization from the Project Director to issue each individual Bulletin. The Professional's Bulletin Authorization request will: (1) Identify the problem requiring the change; (2) Describe clearly if such problem arises from the architectural and/or engineering final design errors or omissions; (3) Identify the anticipated design cost and the estimated construction cost to implement the change(s); and (4) Describe clearly in the Professional's opinion which part, if any, of the design and/or construction costs are the obligation of the State, the Professional or the Construction Contractor. Include a Contract Modification request for any work outside the Project. Identify any anticipated Project design or construction schedule implications.

Bulletins: All reproduction costs for design interpretations and clarifications and Bulletins related to the Professional's architectural and/or engineering final design errors or omissions and similar or avoidable costs shall be accounted as part of the Professional's calculated hourly billing rates.

Describe, by Bulletin, design revisions necessary to correct the architectural and/or engineering final design errors or omissions, to address previously unidentified on-site field design conditions, to reduce costs and for all other matters approved by the Department involving costs or credit to the State. Postponement of action on items to accumulate multi-item Bulletins is not permitted.

Prepare and issue Bulletins within ten (10) business days of receipt of the Department's authorization. Bulletins shall be in such form and detail as the Department may prescribe. The Professional shall incorporate all accepted Bulletin revisions or design interpretations into the appropriate originals of all applicable Contract Documents. Such revised drawings and specifications shall be issued as part of Bulletins. Each Bulletin shall prescribe a time schedule for the Construction Contractor's response. Provide one electronic copy of each Bulletin to the Department and distribute as the Department may direct.

Evaluate the Construction Contractor's price quotation(s) and review and attempt to negotiate with the Construction Contractor to provide the Department with costs that are consistent with the value of the Project Bulletin(s). Recommend appropriate action to the Department regarding the Construction Contractor's quotations within five (5) business days of receipt thereof.

PHASE 600 - CONSTRUCTION ADMINISTRATION - OFFICE SERVICES

During the construction Phase of this Project, the "DTMB-0460, Project Procedures" documents package shall be used by the Professional in the administration of this Contract.

The Professional shall use the "DTMB-0452, The Professional's Inspection Record" for all on-site Inspection visits to the Project site. The form shall be completed and signed by the Professional and compiled monthly with the original form document sent to the Department's, Project Director and a copy sent to the Construction Contractor. The on-site Inspection record standard document form shall be completed and accompany the Professional's monthly payment request.

The Professional shall provide all required construction administration services and timely professional and administrative initiatives as the circumstances of the Project construction may require to allow the design intent requirements of the Professional's Contract Documents to be successfully implemented into a completed Project through the Construction Contractor's completion of the Construction Contract work.

In observed cases which may involve danger to human life, immediate safety hazards to personnel, existing or impending damage to the Project, to State/Client Agency property or to other property; as may be impacted by the Project, the Professional shall inform the Construction Contractor(s) of the situation and their observations.

The Professional shall immediately record and report such situations to the Department and certify any accrued Project costs in writing. The Professional shall always have access to the Construction Contractor(s) work.

Establish and maintain effective construction administration office procedures, systems, and records to progressively, and exclusively, manage and control the Professional's obligations, commitments, achievements, and expenditures under this construction Phase administration.

Monitor the quality and progress of the Project construction Phase work. Maintain all necessary Project records, provide on-site visitation reports, and provide all administrative office action as may be necessary to inform the Construction Contractor(s), in writing, with respect to their compliance with the design intent of the Contract Documents.

Advise and assist the Department in taking all practical steps necessary to address and complete the Project in the event of performance delays or defaults by the Construction Contractor(s).

Task 601 COORDINATION: Coordinate the Professional's staff, Consultants, and all other Project related resources. Preside at all Project related meetings and prepare and distribute minutes of all meetings, reports of on-site visitations, correspondence, memoranda, telephone, and other conversations or communications. Where essential or significant information is established or evaluated, and/or critical decisions are made, whether in meetings, conversation, or email correspondence, include that information or decisions in formal project correspondence and distribute copies to the Project Team within two (2) business days of the date of occurrence, or include such information and decisions in the immediately subsequent project meeting minutes. Meeting minutes shall be distributed within five (5) business days of the meeting. Meeting minutes and agendas are to follow the order and outline of the Departments "Sample Progress Meeting Format" and include a summary of executed CCO's, pending CCO's, Shop and RFI Submittal Logs and statuses.

Task 602 SHOP DRAWINGS, SUBMITTALS, and APPROVALS: Monitor, evaluate, and provide administrative action as necessary to achieve timely processing of shop drawings and such other submittals and approvals that are the responsibility of the Professional. Maintain a record of all required, received, rejected, and approved submittals of shop drawings, color/material samples, finishes, and other items requiring the Professional's approval. Notify the Construction Contractor(s), in writing, (copy to the Department) of delinquent submittals, the consequences of such delays, and prescribe a time schedule for their submittal/resubmittal, which will not jeopardize the Construction Contract completion date.

No design revisions will be made as part of the Professional's review and approval of shop drawings, or other submittals. In addition to all other functions, the Professional's approval of shop drawings shall verify the submittals furnished by the Construction Contractor(s) conforms to the design intent of the Professional's Contract Documents/architectural and/or engineering drawings and specifications requirements. Provide written approval or rejection of shop drawings within ten (10) business days of receipt in the Professional's office. Provide and distribute one electronic copy in PDF format of approved submittals as directed by the Department.

Task 603 PAYMENT PROCEDURES: Monitor, evaluate, and provide timely administrative action, as necessary, to certify or reject, as appropriate, and process the Construction Contractor's schedule of costs and monthly submitted payment requests. Review of Payment Requests are to be completed concurrently by the Professional and the Department's Field Representative in which the Professional is to then provide comments to the Contractor.

Payment by the State of Michigan to the Construction Contractor shall be based on the Construction Contractor's approved completion of Contract work performed prior to the date of each monthly submitted payment request. Payment to the Construction Contractor for each monthly submitted payment request invoice shall be made to the Construction Contractor within thirty (30) consecutive calendar days following the Department's receipt and approval of an approved payment request invoice from the Professional. Certification or rejection of all submitted payment requests will be made by the Professional, in writing, within ten (10) business days of receipt in the Professional's office. The Professional shall certify to the Department, in writing, the dollar amount the Professional determines to be due to the Construction Contractor for their monthly submitted payment request or the Professional shall return the payment request to the Construction Contractor indicating the specific reasons in writing for rejecting the Construction Contractor's monthly submitted payment request certification.

Issue an appropriate certificate for payment only pursuant to a correctly prepared and accurate payment request and only for acceptable Project work. Payment certification shall constitute a written representation by the Professional, to the Department, that based on their Construction Administration on-site field Inspections, and the Professional's evaluations of field reports, test results, and other appropriate and available factors, the quantity and quality of Project work for which the payment request is certified has been accomplished by the Construction Contractor in accordance with the design intent of the Contract Documents and that the payment request is consistent with the quantity and quality of acceptable Project work in place, and that the acceptable materials are properly stored on-site and/or off-site.

No payment request certificate shall be submitted that requests payment for disputed Project work or any Project work showing deficient test results. No payment request certificate may be submitted after the Construction Contract completion date which does not provide for withholding of assessable and/or projected liquidated damages.

Pursuant to the Department's notification, the Professional's certification shall reduce from the amount earned, two (2) times the amount of any current prevailing wage rate payment deficiency, as certified by the Department of Licensing and Regulatory Affairs, Wage and Hour Division against the Construction Contractor or any Subcontractor or supplier thereof. Payment request rejections shall be accompanied with a written explanation and a copy shall be submitted to the Project Director and Department Field Representative.

Task 604 CONSTRUCTION SCHEDULE PROGRESS: Monitor, evaluate, and provide timely administrative action, as necessary, to determine whether the Construction Contractor's construction work schedule and progress appear to be adequate to achieve the Project on time and on schedule. Notify the Department, in writing, within three (3) business days of receipt of the Construction Contractor's proposed Project construction schedule, or amendments thereto, if in the Professional's opinion such construction schedule will produce the Project within the allotted Construction Contract completion time. Notify the Construction Contractor and the Department, in writing, if in the Professional's opinion such schedule should be accepted or rejected. Revise the construction schedule of Task 514 to show that the proposed on-site visitations of Tasks 703-706 are consistent with the actual events of the Project construction schedule. Give prompt, written notification to the Construction Contractor(s) and to the Department of inadequate construction schedule progress.

Unless the Department determines that the needs of the Project require other action the Professional shall proceed as follows: (1) Investigate at the time of occurrence, any areas of inadequate progress whose consequence may be a delay in, or increased cost for, a work item; (2) Notify the Construction Contractor(s) and the Department of the Professional's opinion of the problem and responsibility for the delay and costs. Advise whether the delay in any work may result in delays in the Construction Contract completion date; and (3) Advise the Construction Contractor(s) and the Department, in writing, of recommended action(s) by respective parties necessary to facilitate actions by the Construction Contractor to complete the Project construction on schedule.

Bulletin Costs: During the 600 and 700 Construction Phase, review and evaluate the Construction Contractor's quotations for Bulletin work. Negotiate as appropriate to assure the Department's costs commensurate with the actual value of the Project work. Provide the Department with written recommendation(s) within five (5) business days of receipt of the quotation.

Evaluate any documentable impact on the Project construction schedule claimed by the Construction Contractor(s) arising from Bulletin work. Provide appropriate and timely action under terms allowable under the Construction Contract, to implement any Bulletin work which the Professional and the Department consider critical to the Project construction schedule, but whose cost is disputed.

Within ten (10) business days of its receipt, evaluate and provide the Department with appropriate written recommendations, along with an analysis of any request by the Construction Contractor(s) for a time extension of their Construction Contract completion date. No recommendation for a Construction Contract time extension may be submitted to the Department which is not substantiated by the Professional's technical review and evaluation of the Project construction schedule showing critical path work, noncritical path work, and float time for the complete Project and any work at issue and having such detail as to clearly document the Construction Contractor's claim.

Any recommendation for a time extension of the Construction Contractor's Contract completion date must include a complete analysis of all direct and indirect costs of the Construction Contractor, the Professional, and the Department regarding the time extension. Where the Project is not substantially complete on the Construction Contract completion date, notify the Construction Contractor and the Department, in writing, of the expiration of the Construction Contract completion date and of the assessment and/or withholding of liquidated damages.

Task 605 CONSTRUCTION TESTING PROGRAM: Monitor, evaluate, and provide timely administrative action as may be required in response to the results of the construction quality control and material testing program. In circumstances where the testing is not provided by the Department or the Professional, evaluate, and approve, or disapprove the Construction Contractor(s) work plan for providing all construction test reports.

Provide the Construction Contractor(s) and the Department with written evaluation of all construction test reports, copies of construction test reports, marked with the Professional's approval or disapproval within five (5) business days of receipt of the report.

Within five (5) business days of the receipt of any construction test reports not meeting the Construction Contract requirements direct the Construction Contractor(s), in writing, to take appropriate, corrective, or replacement measures within a prescribed time. Follow up, as appropriate, to require the Construction Contractor(s) to achieve the design intent of the Professional's Contract Documents and avoid delays to any element of work which may, in the Professional's opinion, result in a delay in the Construction Contract completion date. Notify the Construction Contractor, in writing, of any delinquent corrections/replacement and take administrative action in accordance with the Construction Contractor performance text of Task 606.

Task 606 CONSTRUCTION CONTRACTOR PERFORMANCE: Throughout the execution of the Project Construction Contract, monitor and evaluate the Construction Contractor(s) performance and quality assurance procedures and provide timely, administrative action to cause the Construction Contractor(s) to correct their construction deficiencies. With the Department's concurrence, the Professional may direct, in writing, the exposure and testing of any Project construction work, already in place or covered, which the Professional, and/or the Department, believes may not meet the design intent of the Professional's Contract Documents.

Notify the Construction Contractor, and the Department, in writing, within five (5) business days of its identification of any aspect of the Construction Contractor's performance which is inconsistent with the Contract Documents or which, in the Professional's opinion, is inconsistent with the design intent of the Professional's Contract Documents. Prescribe a reasonable time for correction which will not jeopardize the Project construction schedule completion date.

Exert all practical administrative means necessary to require the Construction Contractor to perform as required by their Construction Contract to meet the design intent of the Professional's Contract Documents/architectural and/or engineering drawings and specifications requirements.

Deficient Performance: Upon identification of deficient performance, where the Project Construction Contractor fails to provide timely or acceptable performance, the Professional shall proceed as follows: (1) Notify within three (3) business days the Department, the Construction Contractor and any affected surety, in writing, and by registered mail delivery, of the potential for the Construction Contractor's default action and the Professional's recommendation; (2) Identify applicable Construction Contract references, with design interpretation of such references, and clearly explain where the Construction Contractor's performance fails to meet the design intent of the Professional's Contract Documents; and (3) Specify a time and date for the Construction Contractor to begin active and continuous work towards Contract compliance and a specific time and date for completion.

Potential Default: Upon notification by the Department of potential default by the Construction Contractor, where the Project Construction Contractor fails to adequately perform, the Professional shall proceed as follows: (1) Document the potential default, in writing, to the Construction Contractor, the Construction Contractor's surety and the Department; (2) Provide an explanation of the consequences of the potential default to the Project; (3) Provide the Department with a complete set of Project record documentation necessary to assist the Department in the legal implementation of the Construction Contractor's default action; (4) Establish an appropriate amount and withhold from payment certification of the associated line item(s), include a retainage consisting of any costs expended for testing and other investigations necessary to establish unsatisfactory performance plus a contingency amount, adequate for the Department to correct such unacceptable performance by means other than the Construction Contractor; and (5) Notify the Construction Contractor and their surety, in writing, of the withholding.

Default: Upon notification of the Project Construction Contractor's default, the Professional shall proceed as follows: (1) Identify the extent of defaulted and/or remaining Project work; (2) Recommend a procedural program for the Department to achieve the defaulted work within the remaining Project construction time schedule if possible; and (3) Provide modified Bidding Documents that will allow the Department to rebid the remaining portion of work using the Professional's recommendations. The Professional will be compensated by the Department with a Contract Change Order for providing the defaulted Construction Contractor assistance service.

Task 607 PUNCH LIST PROCEDURES: Prepare and distribute Punch Lists for each Construction Contract.

Prescribe a reasonable time schedule for completion of all construction Punch List items and identify an additional amount to be withheld from payment should standard closeout schedule of values be deemed insufficient to assure the Department sufficient funds to cover all costs as may become necessary to complete the remaining delinquent work. Distribute Punch Lists within five (5) business days of the final Inspection. Notify the Construction Contractor of any delinquent Punch List construction corrections and take appropriate action in accordance with Tasks 604 and 606.

Task 608 CLAIMS: Evaluate and respond to any claims (in whole or in part) against the Department within five (5) business days of the receipt of such claim, in the Professional's office. Where any element of claims or subsequent litigation, are based, in whole or in part, upon any deficiency or delinquency in the Professional's services, the Professional shall provide, in a timely manner, all professional services necessary to defend the claim issue(s). No payment will be due for claim defense services accumulated under this Task until settlement or judgment of litigation concludes the claim issue. The claim settlement or judgment decision will be used as the basis for determining the Professional's obligation, if any, for the costs of such professional services and/or for any costs incurred by the Department for which performance by the Professional may be responsible or contributory. Billing under this claims Task will be in accordance with an appropriate Contract Modification and/or Contract Change Order.

Task 609 AS-BUILT DOCUMENTS: Within forty-five (45) consecutive calendar days after receipt of properly prepared and submitted Construction Contractor annotated as-built documents, incorporate, and render them into the Professional's original Contract Documents for as-built documents. The Professional shall provide the Design and Construction Division with the following two (2) types of deliverable as-built documents for Project close-out: 1) One (1) set of legible/reproducible bond copy completely updated and corrected, as-built records of the Contract Documents/architectural and/or engineering drawings; and 2) Two (2) electronic sets of completely updated and corrected as-built record close- out documents and architectural and/or engineering drawings, one in .pdf format and one in Auto CAD format that is "Auto CAD readable" and conforms to the American Institute of Architects (AIA) National CAD Standard format.

The as-built documents shall depict all construction modifications, additions, and deletions made either by Addendum, Bulletin, supplemental written instructions, and the written notations shown on the Construction Contractor's as-built drawings. The Professional's as-built architectural and engineering drawings shall be of such clarity, detail, and completeness that reference to other documents will not be required to describe or depict, the Project. The as-built documents shall be free of the Professional's original architectural and/or engineering final design errors and omissions. The Professional shall revise the final design as-built drawings as necessary to incorporate all requested Department revisions as required for the Department's formal written acceptance and approval of the Project as-built drawings and the Project final on-site Inspection.

The Professional's services for the Task 609, As-Built Documents are not complete until: (1) The as-built architectural and engineering drawings have been verified, in writing, by the Professional to the Project Director as being accurate and complete; and (2) The as-built architectural and engineering drawings have been turned over and accepted by the Department's, Project Director in writing.

Task 610 CLOSE-OUT PROCEDURES: Maintain for the Project record a schedule of the Construction Contractor's required submittals for Project close-out. Review and approve or reject all submittals as appropriate. Within forty-five (45) consecutive calendar days after Substantial Completion of the Project, after building or Project occupancy, verify to the Department's, Project Director in writing, that the following documents have been received: (1.) All Project code compliance approvals; (2.) Final Inspections; (3.) Final occupancy permits; (4.) Construction Contractor's as-built final design marked-up architectural and engineering drawings; (5.) Copies of "Operation and Maintenance Manuals" of the Project systems; and (6.) Equipment warranties and guarantees.

Provide to the Design and Construction Division within forty-five (45) consecutive calendar days after Substantial Completion of the Project, three (3) copies of "Operation and Maintenance Manuals" of the Project systems and equipment. These close-out manuals shall include copies of reduced size, as-built architectural and engineering drawings, specifications, and all instructions published or furnished by respective manufacturers, construction code compliance certificates, equipment warranties, and guarantees. The manuals shall also include a complete description of the Professional's Final Design intent concepts, operation, and required maintenance of each system. Participate in the Construction Contractor's start-up and in the training instruction of State/Client Agency personnel in the operation and use of the Project systems.

PHASE 700 - CONSTRUCTION ADMINISTRATION - FIELD SERVICES

The Department may provide full or part-time Department Field Representatives to monitor the coordination and progress of the services of the Professional and the Project work of the Construction Contractor(s). Such Inspections may generate reports, minutes of meetings, notes, and documents, which will be available to, and may be useful for, the Professional. The Project Director, or Department Field Representative, has the authority to require the Professional to respond to and resolve design related problems, construction field problems and to attend Project related meetings. Unless delegated by specific written notice from the Department, the Department Field Representative does not have any authority to order any changes in the Project scope of work or authorize any adjustments in Contract price or Contract time.

The Professional shall provide sufficient field Inspections of the Project to administer the construction Phase field services and its related construction Phase administration office services, as directly related to the degree of Project complexity and, up to and including full-time field Inspections. The construction field Inspections shall occur as the construction on-site field conditions and the Project may require and during the regularly scheduled twice a month progress meeting.

The Professional shall use for their construction field Inspection services, only personnel having such professional expertise, experience, authority, and compatibility with departmental procedures as the Department may approve. The Professional agrees that such characteristics are essential for the successful completion of the Project. Such individuals shall be replaced for cause where the Department determines and notifies the Professional, in writing, of their unacceptable performance.

The Professional shall review the Project construction work in place and that sequentially planned. The Professional shall determine whether the actual Project construction schedule progress appears to be in accordance with the approved Project construction schedule and whether the quality of the work appears to be in accordance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements and are without apparent defects or deficiencies. No on-site advertising by, or of, the Professional or Project signs other than those appropriate to locate an approved field office will be permitted.

Task 701 COORDINATION: Coordinate the Professional's staff, Consultant firm's staff, Construction Contractors, and all other Project related resources.

Task 702 PRECONSTRUCTION MEETING: Preside at and record preconstruction/organizational meetings for each Construction Contract. Issue meeting minutes and the completed "DTMB 0460, Project Procedures" documents package.

Task 703 CONSTRUCTION INSPECTIONS: The Professional and their Consultants shall conduct and record the principal events and status of the work of all scheduled and other on-site Project activities. The construction field Inspections shall occur as the field conditions and the Project may require and during the regularly scheduled progress and payment meetings.

All construction progress Inspections shall be recorded in the form of a written report to the Department and the Construction Contractor within five (5) business days of the Project construction progress Inspection. The purpose of such Inspection/visitations includes, but is not limited to: (1) Achieve and maintain a working familiarity with the status, quantity, and quality of the Project construction work in place; (2) Determine if the actual Project construction schedule progress is in accordance with the approved Project construction schedule; (3) Review the installation and determine the acceptability of preparations for, and installation of, pending critical construction components and activities; and (4) The Inspection of Project construction work completed or in progress by the Construction Contractor to determine and verify, in writing, to the Department's, Project Director and the Department Field Representative that the quantity and quality of all Project construction work is in accordance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements.

Task 704 PROBLEM SOLVING MEETINGS: Conduct and record problem solving meetings between the Professional and the Professional's Consultants, the Construction Contractor(s), their Subcontractors, the Department, the Project Director and the Department Field Representative, and any construction managers and other affected parties on-site or elsewhere to assess the construction work progress and provide design interpretation decisions to resolve problems affecting the construction work.

These problem- solving meetings shall be scheduled as the construction field conditions and the Project may require, and/or shall be at such time as the Construction Contractor(s), the Professional, the Department, the Project Director, the Department Field Representative, and any construction manager agree is appropriate to the Project construction work progress. Non-scheduled or emergency meetings shall be held at such time as necessary to maintain the schedule of various work items and to avoid delays in the Construction Contract completion date.

Task 705 PROGRESS MEETINGS: Conduct and record scheduled Project construction progress meetings (twice a month) with the Project Director, the Department Field Representative, the State/Client Agency, the Construction Contractor(s), and any construction manager. Assess Project construction work progress and provide timely, administrative actions as necessary to maintain the Project construction work on schedule and respond to and resolve all design related and construction items affecting the Project construction cost and be following the design intent of the Contract Documents, in accordance with Tasks 513 and 514.

Task 706 FINAL PROJECT INSPECTION: Conduct final construction field Inspections of the Project, in concert with the Construction Contractor(s), the Project Director, the Department Field Representative, the State/Client Agency, and any construction manager. Final Project field Inspections shall be conducted to witness and record equipment start-up and all testing, to verify, in writing, that each Construction Contractor has achieved Substantial Completion, to prepare Punch List(s) items, and to determine the status of any part of the Project construction work where the Department intends to take beneficial use or occupancy. Verify to the Project Director and Department Field Representative, in writing, the completeness and accuracy of the Construction Contractor's as-built drawings during the Project construction Phase Field Inspection(s) and identify any corrections required. The Professional shall revise the final as-built drawings as necessary to incorporate all requested Department revisions as required for the Department's formal written acceptance and approval of the Project as-built drawings and the Project final Inspection. Determine to the extent possible that the Project has been constructed in accordance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements and that all equipment and systems function without defects.

ARTICLE II
COMPENSATION

In consideration of the performance of this Contract, the Department agrees to pay the Professional, as compensation for professional services, an hourly billing rate for each employee providing a direct service to this Project, on a not-to-exceed basis as specified herein, subject to subsequent modification mutually agreeable to the parties hereto; provided, however, the Professional may not incur costs, or bill the Department, for professional services in excess of the estimates established for this Project without the prior written agreement of the Department.

The attached proposal prepared by the Professional in response to the Request for Proposal, by the Owner, may describe methodology, services, schedule, and other aspects of the work to be performed under the Contract but does not supersede the Contract.

Compensation to the Professional shall be on an hourly billing rate basis for professional services rendered by salaried and non-salaried professional, technical, and non-technical support employees, except for any authorized reimbursable expenses provided for in this Contract. Total compensation for any Phase shall not exceed the amount authorized for that Phase, unless authorized in writing by the Department's approved Contract Change Order.

Professional services shall not be performed, and no Project expense shall be incurred by the Professional prior to the issuance of a written and signed Professional Services Contract and a DTMB Form 0402 - Contract Order by the Department to the Professional, authorizing the Professional to start the Project work.

The preparation of Bulletins and Contract Change Orders resulting from increases in the Project scope of work or previously unknown on-site field conditions will be compensated to the Professional, as approved by the Project Director, on an hourly billing rate basis in accordance with this article.

This compensation shall not exceed seven and half percent (7.5%) of the Construction Contractor’s quotation for the Bulletin or Contract Change Order or an amount mutually agreed upon by the Professional and the Project Director. The Professional shall provide, at no additional compensation, professional services necessary to respond to and resolve all Construction Contractor design related claims arising wholly or in part from the Professional’s Contract Documents errors or omissions or other aspects of the Project’s design or the Professional’s performance which are inconsistent with the Professional or Construction Contract. Reproduction costs for the Professional firm’s interpretations, study/design clarifications, and Bulletins necessary to achieve the Contract scope of work final design requirements is not allowable for reimbursement and shall be accounted as part of the Professional firm’s lump sum fee of this Contract.

2.1 PREMIUM TIME/OVERTIME: This Contract anticipates that no premium or overtime is required to achieve this Project's scope of work. No compensation will be allowed to the Professional for any premium or overtime cost incurred to achieve the Project schedule of this Contract, unless directed in writing by the Project Director.

2.2 EMPLOYEE HOURLY BILLING RATES: Hourly billing rates will include all direct and indirect monetary costs to the State for the Professional's services under this Contract other than the authorized and approved reimbursements. Hourly billing rates shall be based on the Professional's documented historical operating expenses and adjusted for Project specific costs. In no case shall this documentation period include more than eighteen (18) months prior to the date of award of this Contract. The Professional may not provide different hourly billing rates for the same individual for different Phases.

No lump-sum subcontracts for the professional services of any employee may be billed against this Contract. Any employee associated with this Project who performs the professional services of a subordinate or of a position classification having a lower classification/pay range shall be accounted and paid for at the lower hourly billing pay rate.

The hourly billing rate charge of any employee may be changed by the Professional with a written and Department approved Contract Modification during the life of this Contract to account for normal personnel pay increases.

Hourly billing rates include but are not limited to: Overhead items such as employee fringe benefits, vacations, sick leave, insurance, taxes, pension funds, retirement plans, meals, lodging, computer costs/operating costs and time, telephone, telephone-related services, and all reproduction services (except Contract Bidding Documents).

The hourly billing rate also includes all reproduction costs for design interpretations, study/design clarifications and Bulletins related to design errors or omissions, construction code compliance (precipitating either from design code compliance and plan review, design interpretations, or construction on-site/field Inspections), and all similar, or avoidable costs shall be accounted as part of the Professional's calculated hourly billing rate.

All incidental postage, mail, or other shipping or delivery services, acquisition, bad debts, previous business losses, employment fees, depreciation, and operating costs for equipment, including computer design and/or computer drafting systems, and any specialized testing equipment are to be included. The hourly billing rate shall include, without exception, secretarial, computer/typing/word processing, editing, and clerical services utilized in any way for the Project as well as other non-technical and/or overhead employees. The hourly billing rate also includes all profit without regard to its form or distribution.

Items not allowable as part of the Professional's calculated hourly billing rate include but are not limited to: Any costs associated with litigation and settlements for the Professional, or other liability suits, out-of-state offices, and associated travel, bonuses, profit sharing, premium/overtime costs, public relations, entertainment, business promotion, contributions, and various speculative allowances.

The hourly billing rate for the Professional may not be applied to the work of the Professional's Consultant's staff. Each Consultant firm must submit a separate hourly billing rate with proper documentation for the Consultant services they will provide as part of the Proposal.

The hourly billing rate of the respective Consultant firm shall be used for that Consultant firm's personnel only. The Professional's Consultant services shall be billed as an authorized reimbursable expense item at a direct cost times the Firm's mark-up percentage, not to exceed 5%, accepted by the Department.

2.3 RANGE OF EMPLOYEE HOURLY BILLING RATES: The Professional shall identify the service being provided and include the Professional's or Consultant's employee(s) full names and position classifications for the Project and their current hourly billing rates at the beginning and at the anticipated end of the Project. This hourly billing rate range shall reflect any anticipated pay increases over the life of the Contract. The range of hourly billing rates for any employee position or classification may not be changed without an approved Contract Modification.

2.4 DIRECT COST REIMBURSEMENT ITEMS: The Professional's Consultant services and authorized reimbursable expenses shall be treated as an authorized reimbursable expense item at a direct cost times the firm's mark-up percentage amount approved by the Department, not to exceed 5%. Reimbursement of authorized expense items at direct cost times the firm's mark-up percentage amount is intended only to compensate the Professional for their direct costs. The Professional shall be responsible for the selection of the supplier of their professional services or materials, the coordination, adequacy, and application of their professional services, whether provided by the Professional's staff or provided by their Consultant, and therefore responsible for any Project costs that exceed the Contract per Phase reimbursement Budget.

For Projects further than 100 miles one-way from the Professional firm's office, travel expenses to the project site will be allowed as a reimbursable expense at the State of Michigan's rates, based on DTMB's Vehicle and Travel Services Travel Rate Reimbursement for premium mileage rates in effect at execution of this contract. Mileage allowed will be actual, less 100 miles each way. Other travel expenses are not to be included, unless specifically authorized in writing.

In addition, direct cost reimbursement items may include soil borings, site surveys and any required laboratory testing not performed in house, Design Code Compliance and Plan Review Approval Fees by the licensing agency; reproduction of documents for legislative presentation, artistic productions, mobilization of testing equipment, laboratory costs for testing samples, per-linear-foot cost of soil borings and specialized inspections of the structural, mechanical, electrical, chemical or other essential components of the Project.

Compensation for this Contract shall not exceed the amounts per Project Phase shown in the attached Contract Order unless authorized by a Department approved Contract Modification. It shall be the Professional's responsibility to carefully monitor their and their Consultant firms Project costs, activities, and progress and to give the Project Director timely notification of any justifiable need to increase the authorized fee. The Professional may not proceed with professional services that have not been authorized by the Project Director and shall immediately notify the Project Director if such services have been requested or have become necessary. Identification of Professional and Consultant staff, hourly billable rates, and an itemized list per Project Phase of authorized direct cost reimbursement items are identified in the attached Professional's proposal.

ARTICLE III
PAYMENTS

Payment of the professional services fee shall be based on the Professional's performance of authorized professional service(s) performed prior to the date of each submitted payment request. Payment requests shall be submitted monthly to the Project Director on a payment request form (DTMB- 440). Payment for each monthly submitted payment request shall be made within thirty (30) consecutive calendar days following the Department's approval of the payment request.

Payment requests shall include signed certification by the Professional of the actual percentage of work completed as of the date of invoicing for each Phase and summarize the amounts authorized, earned, previously paid, and currently due for each Project Phase. Payment requests shall be supported by itemized records or documentation in such form and detail as the Department may require. Each of the Professional's Consultant's submitted payment request applications shall include similar information.

This includes, but is not limited to:

- Phase Numbers for the professional services provided.
- Professional's personnel and position/classification providing service and hours worked
- Current hourly billing rate charges for each individual position/classification.
- Copy of certified on-site visitation log or site visit report showing time on-site.
- Itemized invoices from each of the Professional's Consultant's documenting that firm's professional services charge and the Project work related services provided.
- Authorized reimbursable expense items provided with receipts and invoices.

The State has the right to withhold payment of any disputed amounts until the parties agree as to the validity of the disputed amount. The State will notify the Professional of any dispute within a reasonable time. Payment by the State will not constitute a waiver of any rights as to the Professional's continuing obligations, including claims for deficiencies or substandard Contract Activities. The Professional's acceptance of final payment by the State constitutes a waiver of all claims by the Professional against the State for payment under this Contract, other than those claims previously filed in writing on a timely basis and still disputed.

The State will only disburse payments under the Contract through Electronic Funds Transfer (EFT). Contractor must register with the State at http://www.michigan.gov/SIGMAVSS to receive electronic funds transfer payments. If Contractor does not register, the State is not liable for failure to provide payment. Without prejudice to any other right or remedy if may have, the State reserves the right to set off at any time any amount then due and owing to it by Contractor against any amount payable by the State to Contractor under this Contract.

ARTICLE IV
ACCOUNTING

The Professional shall keep current and accurate records of Project costs and expenses, of hourly billing rates, authorized reimbursable expense items, and all other Project related accounting document to support the Professional's monthly application for payment. Project records shall be kept on a generally recognized accounting basis. Such records shall be available to the Department for a period of three (3) years after the Department's final payment to the Professional. The State of Michigan reserves the right to conduct, or have conducted, an audit and inspection of these Project records at any time during the Project or following its completion.

ARTICLE V
INSURANCE

The Professional shall purchase, maintain, and require such insurance that will provide protection from claims set forth below which may arise out of or result from the Professional firm's services under this Contract, whether such service is performed by the Professional or performed by any of the Professional Firm's Consultant's or by anyone directly or indirectly employed by them, or by anyone for whose acts they may be liable. The following insurance policy limits described below are intended to be the minimum coverage acceptable by the State:

For this Section, "State" includes its departments, divisions, agencies, offices, commissions, officers, employees, and agents.

(a) The Professional must provide proof that it has obtained the minimum levels of insurance coverage indicated or required by law, whichever is greater. The insurance must protect the State from claims that may arise out of or result from or are alleged to arise out of or result from the Professional's or a consultant's performance, including any person directly or indirectly employed by the Professional or a Consultant, or any person for whose acts the Professional or a consultant may be liable.

(b) The Professional waives all rights against the State for the recovery of damages that are covered by the insurance policies the Professional is required to maintain under this Section. The Professional's failure to obtain and maintain the required insurance will not limit this waiver.

(c) All insurance coverage provided relative to this Contract is primary and non-contributing to any comparable liability insurance (including self- insurance) carried by the State.

(d) The State, in its sole discretion, may approve the use of a fully funded self-insurance program in place of any specified insurance identified in this Section.

(e) Unless the State approves, any insurer must have an A.M. Best rating of "A-" or better and a financial size of VII or better, or if those ratings are not available, a comparable rating from an insurance rating agency approved by the State. All policies of insurance must be issued by companies that have been approved to do business in the State.

To view the latest A.M. Best's Key Ratings Guide and the A.M. Best's Company Reports (which include the A.M. Best's Ratings) visit the A.M. Best Company internet web site at http://www.ambest.com.

(f) The Professional is responsible for the payment of all deductibles.

(g) In the event the State approves the representation of the State by the insurer's attorney, the attorney may be required to be designated as a Special Assistant Attorney General by the Michigan Attorney General.

(h) Workers' Compensation Insurance: The Professional must provide Workers' Compensation coverage according to applicable laws governing work activities in the state of the Professional's domicile. If the applicable coverage is provided by a self-insurer, the Professional must provide proof of an approved self-insured authority by the jurisdiction of domicile. For employees working outside of the state of the Professional's domicile, the Professional must provide certificates of insurance proving mandated coverage levels for the jurisdictions where the employees' activities occur.

(i) Except where the State has approved a subcontract with other insurance provisions, the Professional must require any Consultant to purchase and maintain the insurance coverage required in this Article. Alternatively, the Professional may include a Consultant/Subconsultant under the Professional's insurance on the coverage required in that Section. The failure of a Consultant/Subconsultant to comply with insurance requirements does not limit the Professional's liability or responsibility.

(j) If any of the required policies provide claims-made coverage, the Professional must: (a) provide coverage with a retroactive date before the effective date of the contract or the beginning of Contract Activities; (b) maintain coverage and provide evidence of coverage for at least three (3) years after completion of the Contract Activities; and (c) if coverage is canceled or not renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective date, Professional must purchase extended reporting coverage for a minimum of three (3) years after completion of work.

(k) Professional must: (a) provide insurance certificates to the Contract Administrator, containing the (1) project file number; (2) the project title; and (3) description of the program, at Contract formation and within 20 calendar days of the expiration date of the applicable policies; (b) require that consultants maintain the required insurances contained in this Section; (c) notify the Contract Administrator within 5 business days if any insurance is cancelled; and (d) waive all rights against the State for damages covered by insurance. Failure to maintain the required insurance does not limit this waiver.

Required Limits	Additional Requirements
Commercial General Liability Insurance	
Minimum Limits: $1,000,000 Each Occurrence Limit $1,000,000 Personal & Advertising Injury $2,000,000 General Aggregate Limit $2,000,000 Products/Completed Operations	Professional must have their policy endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds using endorsement CG 20 10 11 85, or both CG 20 10 12 19 and CG 20 37 12 19.
Umbrella or Excess Liability Insurance	
Minimum Limits: $2,000,000 General Aggregate	Professional must have their policy follow form.
Automobile Liability Insurance	
Minimum Limits: $1,000,000 Per Accident	Professional must have their policy: (1) endorsed to add "the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents" as additional insureds; and (2) include Hired and Non-Owned Automobile coverage.
Workers' Compensation Insurance	
Minimum Limits: Coverage according to applicable laws governing work activities.	Waiver of subrogation, except where waiver is prohibited by law.
Employers Liability Insurance	
Minimum Limits: $500,000 Each Accident $500,000 Each Employee by Disease $500,000 Aggregate Disease.	
Professional Liability (Errors and Omissions) Insurance	
Minimum Limits: $1,000,000 Each Claim $2,000,000 Annual Aggregate	

Environmental and Pollution Liability (Errors and Omissions) ***	
Minimum Limits: $1,000,000 Each Occurrence $2,000,000 Annual Aggregate	Professional must have their policy: (1) be applicable to the work being performed, including completed operations equal to or exceeding statute of repose; (2) not have exclusions or limitations related to Transportation (upset overturn, spills during loading or unloading, Hazardous Materials Handling, and Non Owned disposal site liability; and (3) endorsed to add "the State of Michigan, its departments, division, agencies, offices, commissions, officers, employees, and agents" as additional insured..

(***Professional to include Pollution Liability Insurance if needed ***)

Contractual Liability insurance for claims for damages that may arise from the Professional's assumption of liability on behalf of the State under Article VI concerning indemnification for errors, omissions, or negligent acts in the course of the professional service or other provision within this Contract to the extent that such kinds of contractual liability are insurable in connection with and subject to limits of liability not less than for the general liability insurance and the professional liability insurance and set forth in subsections (c) and (d) above.

Except where the State has approved a subcontract with other insurance provisions, the Professional must require any Consultant/Subcontractor to purchase and maintain the insurance coverage required in this Article. Alternatively, the Contractor may include a Consultant/Subcontractor under the Professional's insurance on the coverage required in that Section. The failure of a Consultant/Subcontractor to comply with insurance requirements does not limit the Professional's liability or responsibility.

Certificate of Insurance documents, acceptable to the State, shall be provided and filed with the Department prior to commencement of the Professional's Project services, unless otherwise approved in writing, and not less than 20 days before the insurance expiration date every year thereafter. Facsimile copies of the Certificate of Insurance **will not** be accepted. Certificate of Insurance documents must be either submitted hard copy or portable document file (.pdf). The Certificate of Insurance documents must specify on the certificate in the oblong rectangle space labeled "Description of Operations/Locations/Vehicles/Exclusions Added by Endorsement/Special Provisions/Special Items" the following items: (1) The ISID Title; (2) The ISID Contract Number; and (3) The State of Michigan must be named as an "Additional Insured on the General Liability and Automobile Insurance Policy." The Certificate of Insurance documents shall contain a provision that the Project insurance coverage afforded under the insurance policies for this Contract will not be modified or canceled without at least thirty (30) consecutive calendar days prior written notice, except for 10 days for non-payment of premium, to the State of Michigan, Department.

This Section is not intended to and is not to be construed in any manner as waiving, restricting, or limiting the liability of either party for any obligations under this Contract (including any provisions hereof requiring Professional to indemnify, defend and hold harmless the State).

The attached, Certificates of Insurance documents required for this Project shall be in force for this Project until the final payment by the State to the Professional is made and shall be written for not less than any limits of liability specified above. The Professional has the responsibility for having their consultant firms comply with these insurance requirements.

ARTICLE VI
INDEMNIFICATION

(a) To the extent permitted by law, the Professional shall indemnify, defend and hold harmless the State from liability, including all claims and losses, and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties), accruing or resulting to any person, firm or corporation that may be injured or damaged by the Professional in the performance of this Contract and that are attributable to the negligence or tortious acts of the Professional or any of its Subconsultants/Consultants, or by anyone else for whose acts any of them may be liable.

(b) Employee Indemnification: In any and all claims against the State of Michigan, its departments, divisions, agencies, boards, sections, commissions, officers, employees and agents, by any employee of the Professional or any of its Subconsultants/Consultants, the indemnification obligation under this Contract shall not be limited in any way by the amount or type of damages, compensation or benefits payable by or for the Professional or any of its Subconsultants/Consultants under worker's disability compensation acts, disability benefit acts or other employee benefit acts. This indemnification clause is intended to be comprehensive. Any overlap in provisions, or the fact that greater specificity is provided as to some categories of risk, is not intended to limit the scope of indemnification under any other provisions.

(c) Patent/Copyright Infringement Indemnification: To the extent permitted by law, the Professional shall indemnify, defend and hold harmless the State from and against all losses, liabilities, damages (including taxes), and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties) incurred in connection with any action or proceeding threatened or brought against the State to the extent that such action or proceeding is based on a claim that any piece of equipment, software, commodity or service supplied by the Professional or its Subconsultants/Consultants, or the operation of such equipment, software, commodity or service, or the use of reproduction of any documentation provided with such equipment, software, commodity or service infringes any United States patent, copyright, trademark or trade secret of any person or entity, which is enforceable under the laws of the United States.

In addition, should the equipment, software, commodity, or services, or its operation, become or in the State's or Professional's opinion be likely to become the subject of a claim of infringement, the Professional shall at the Professional's sole expense (i) procure for the State the right to continue using the equipment, software, commodity or service or, if such option is not reasonably available to the Professional, (ii) replace or modify to the State's

satisfaction the same with equipment, software, commodity or service of equivalent function and performance so that it becomes non-infringing, or, if such option is not reasonably available to Professional, (iii) accept its return by the State with appropriate credits to the State against the Professional's charges and reimburse the State for any losses or costs incurred as a consequence of the State ceasing its use and returning it.

Notwithstanding the foregoing, the Professional shall have no obligation to indemnify or defend the State for, or to pay any costs, damages or attorneys' fees related to, any claim based upon (i) equipment developed based on written specifications of the State; or (ii) use of the equipment in a configuration other than implemented or approved in writing by the Professional, including, but not limited to, any modification of the equipment by the State; or (iii) the combination, operation, or use of the equipment with equipment or software not supplied by the Professional under this Contract.

ARTICLE VII
OWNERSHIP OF DOCUMENTS

All Project deliverables, including but not limited to reports, Bidding Documents, Contract Documents, electronic documents and data, and other Project related documents, including the copyrights, prepared, and furnished by the Professional shall become the property of the State of Michigan upon completion of the Project, completion, and acceptance of the professional's work, or upon termination of the Contract. Project deliverables shall be delivered to the Department upon their request. The Professional shall have no claim for further employment or additional compensation because of this Contract requirement. The Professional may retain a copy of all Project documents for their files. The professional is to provide unedited CAD files (without Professionals title block) to the Contractor as requested for use in creating Shop Drawings at no additional cost.

If the Professional is in default or breach of its obligations under this Contract, the State shall have full ownership rights of the Project deliverables, including Bidding Documents and Contract Documents, including all electronic data. If the Professional is in default or this Contract Agreement is terminated, the State shall not use the Contract Documents and deliverables of this Contract for completion of the Project by others without the involvement of other qualified Professionals who shall assume the professional obligations and liability for the Project work not completed by the Professional.

To the fullest extent allowed by law, the State releases the Professional, the Professionals Consultant(s) and the agents and employees of any of them from and against legal claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of the State's use of the Contract Documents other than in accordance with this Contract Agreement. All Contract deliverables listed may be published or issued for informational purposes without additional compensation to the Professional. The Professional may not use any of the Contract Documents and Contract deliverables for any purpose that may misrepresent the professional services they provided. The Professional shall retain full rights to the Contract Documents and deliverables and the right to reuse component information contained in them in the normal course of the Professional's professional activities.

The Contract deliverables, Contract Documents, or other documents produced under this Contract may be used by the Department, or others employed by the Department or State of Michigan, for reference in any completion, correction, remodeling, renovation, reconstruction, alteration, modification of or addition to the Project, without monetary compensation to the Professional.

The State of Michigan will not construct additional Projects or buildings based on the work of this Contract without notice to the Professional.

Whenever renderings, photographs of renderings, photographs or models, or photographs of the Project are released by the State of Michigan for publicity, proper credit for design shall be given to the Professional, provided the giving of such credit is without cost to the State of Michigan

ARTICLE VIII
TERMINATION

The State may, by written notice to the Professional, terminate this Contract in whole or in part at any time, either for the State's convenience or because of the failure of the Professional to fulfill their Contract obligations. Upon receipt of such notice, the Professional shall:

a) Immediately discontinue all professional services affected (unless the notice directs otherwise), and

b) Deliver to the State all data, drawings, specifications, reports, estimates, summaries, and such other information and materials as may have been accumulated by the Professional in performing this Contract, whether completed or in process.

8.1 If the termination is for the convenience of the State, an equitable adjustment in the Contract price shall be made, but no amount shall be allowed for anticipated profit on unperformed professional services.

8.2 If the termination is due to the failure of the Professional to fulfill their Contract obligations, the State may take over the work and prosecute the same to completion by Contract or otherwise. In such case, the Professional shall be liable to the State for any additional cost occasioned to the State thereby.

8.3 If, after notice of termination for failure to fulfill Contract obligations, it is determined that the Professional had not so failed, the termination shall be deemed to have been affected for the convenience of the State. In such event, adjustment in the Contract price shall be made as provided in Section 8.1 of this article.

The rights and remedies of the State provided in this article are in addition to any other rights and remedies provided by law or under this Contract.

ARTICLE IX
SUCCESSORS AND ASSIGNS

This Contract shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns; provided, however, that neither of the parties hereto shall assign this Contract without the prior written consent of the other.

ARTICLE X
GOVERNING LAW

This Contract shall be construed in accordance with the laws of the State of Michigan.

ARTICLE XI
NONDISCRIMINATION

In connection with the performance of the Project under this, the Professional agrees as follows:

- The Professional will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, age, sex *(as defined in Executive Directive 2019-09)*, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the particular job or position. The Professional will provide equal employment opportunities to ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the job or position. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

- The Professional will, in all solicitations or advertisements for employees placed by or on behalf of the Professional, state that all qualified applicants will receive equal employment opportunity consideration for employment without regard to race, color, religion, national origin, age, sex, height, weight, marital status, or a physical or mental disability that is unrelated to the individual's ability to perform the duties of the job or position.

- The Professional or their collective bargaining representative will send to each labor union or representative of workers with which is held a collective bargaining agreement or other Contract or understanding, a notice advising the said labor union or workers' representative of the Professional's nondiscrimination commitments under this article.

- The Professional will comply with the Elliot-Larsen Civil Rights Act, 1976 PA 453, as amended, MCL 37.2201 et seq; the Michigan Persons with Disabilities Civil Rights Act, 1976 PA 220, as amended, MCL 37.1101 et seq; Executive Directive 2019-09; and all published rules, regulations, directives, and orders of the Michigan Civil Rights Commission which may be in effect on or before the date of award of this Contract.

- The Professional will furnish and file nondiscrimination compliance reports within such time and upon such forms as provided by the Michigan Civil Rights Commission; said forms may also elicit information as to the practices, policies, program, and employment statistics of the Professional and of each of their Consultant firms. The Professional will permit access to all books, records, and accounts by the Michigan Civil Rights Commission, and/or its agent, for purposes of investigation to ascertain nondiscrimination compliance with this Contract and with rules, regulations, and orders of the Michigan Civil Rights Commission relevant to Article 6, 1976 PA 453, as amended.

- In the event that the Michigan Civil Rights Commission finds, after a hearing held pursuant to its rules, that the Professional has not complied with the contractual nondiscrimination obligations under this Contract, the Michigan Civil Rights Commission may, as part of its order based upon such findings, certify said findings to the State Administrative Board of the State of Michigan, which the State Administrative Board may order the cancellation of the Contract found to have been violated, and/or declare the Professional ineligible for future Contracts with the State and its political and civil subdivisions, departments, and officers, and including the governing boards of institutions of higher education, until the Professional complies with said order of the Michigan Civil Rights Commission.

Notice of said declaration of future ineligibility may be given to any or all the persons with whom the Professional is declared ineligible to Contract as a contracting party in future Contracts. In any case before the Michigan Civil Rights Commission in which cancellation of an existing Contract is a possibility, the State shall be notified of such possible remedy and shall be given the option by the Michigan Civil Rights Commission to participate in such proceedings.

- The Professional shall also comply with the nondiscrimination provisions of 1976 PA 220, as amended, concerning the civil rights of persons with physical or mental disabilities.

- The Professional will include, or incorporate by reference, the nondiscrimination provisions of the foregoing paragraphs a) through g) in every subcontract or Contract Order unless exempted by the rules, regulations, or orders of the Michigan Civil Rights Commission, and will provide in every subcontract or Contract Order that said nondiscrimination provisions will be binding upon each of the Professional's Consultant's or seller.

ARTICLE XII
CONTRACT CLAIMS AND DISPUTES

In any claim or dispute by the Professional which cannot be resolved by negotiation, the Professional shall submit the claim or dispute for an administrative decision by the Department of Technology, Management and Budget, Director of State Facilities Administration within thirty (30) consecutive calendar days of the end of the disputed negotiations, and any decision of the Director of State Facilities Administration may be appealed to the Michigan Court of Claims within one (1) year of the issuance of the Director's decision. The Professional agrees that the Department's appeal procedure to the Director of State Facilities Administration is a prerequisite to filing a suit in the Michigan Court of Claims.

ARTICLE XIII
DEFINITION OF TERMS

The definition of terms and conditions of this Contract are described and outlined in the following Articles 1 through 14 and attached appendices. The capitalized defined terms used in this Professional Services Contract shall have the following definitions:

ADDENDA: Written or graphic numbered documents issued by the Department and/or the Professional prior to the execution of the Construction Contract which modify or interpret the Project Bidding Documents, including architectural and/or engineering drawings, and specifications, by additions, deletions, clarifications, or corrections. The Addenda shall: (1) Be identified specifically with a standardized format; (2) Be sequentially numbered; (3) Include the name of the Project; (4) Specify the SIGMA Funding Information, Project File No., the Contract Order No. Y, and a description of the proposed Addenda; and (5) Specify the date of Addenda issuance. As such, the Addenda are intended to become part of the Project Contract Documents when the Construction Contract is executed by the Professional's recommended lowest responsive, responsible qualified Construction Contractor. An Addendum issued after the competitive construction Bid opening to those construction Bidders who submitted a Bid, for the purpose of rebidding the Project work without re-advertising, is referred to as a post-Bid Addendum.

BID: A written offer by a construction Bidder for the Department. Project construction work, as specified, which designates the Construction Bidder's Base Bid and Bid prices for all alternates.

BIDDER: The person acting directly, or through an authorized representative, who submits a competitive Construction Bid directly to the Department.

BIDDING DOCUMENTS: The Professional's Project Contract Documents as advertised, and all Addenda issued before the construction Bid opening, and after the Construction Bid opening, if the Project construction work is rebid without re-advertising. Bidding documents shall consist of the Phase 500 - Final Design architectural and/or engineering drawings and specifications, any Addenda issued, special, general, and supplemental conditions of the Construction Contract, and modifications, if any, to standard forms provided by the Department. Such forms consist of the Project advertisement, the Instructions to Bidders, the proposal forms, general, supplemental, and any special conditions of the Construction Contract, and the form of agreement between the Department and the Construction Contractor for the project work requirements.

BID SECURITY: The monetary security serving as guarantee that the Bidder will execute the offered Construction Contract or as liquidated damages in the event of failure or refusal to execute the Construction Contract.

BUDGET: The maximum legislatively authorized Budget amount to be provided by the State of Michigan and available for a specific purpose or combination of purposes to accomplish the project for this Contract.

BULLETIN: A standard document form (DTMB-0485, Bulletin Authorization No. and the DTMB-0489, Instructions to Construction Contractors for Preparation of Bulletin Cost Quotations for Contract Change Orders) used by the Department to describe a sequentially numbered change in the Project under consideration by the Department and the Professional and to request the Construction Contractor to submit a proposal for the corresponding adjustment in the Contract price and/or Contract time, if any. These standard document forms are a part of the "DTMB-0460, Project Procedures" documents package.

CONSTRUCTION CONTRACT: A separate written Contract agreement between the Construction Contractor and the Department for the construction, alteration, demolition, repair, or rebuilding of a State/Client Agency building or other State property.

CONSTRUCTION CONTRACTOR: Any construction firm under a separate Contract to the Department for construction services.

CONSTRUCTION INSPECTION SERVICES: The Professional's field Inspections of the Project during the construction Phase of this Contract which includes but is not limited to: (1) Documenting the quantity and quality of all Project construction work and verifying that the Project construction work is properly completed; (2) Resolve Project problems that are affecting the Project construction work, certify payment requests, process Bulletins, Contract Change Order recommendations, and requests for information (RFI's) in a timely manner as prescribed in the Department's, current version of MICHSPEC or DC Spec as adopted and modified by the State of Michigan and incorporated into the Construction Contract; and the (3) Inspection of Project construction work completed or in progress by the Construction Contractor to determine and verify to the Department's Project Director and the Department Field Representative that the Project construction work is in compliance with the Professional's design intent and that the Project has been completed by the Construction Contractor in accordance with the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements. The Professional shall provide sufficient Inspections of the Project during the construction Phase to administer the construction Phase field and office services as directly related to the degree of Project complexity, up to and including full-time field Inspections. Construction field Inspections shall occur as the construction field conditions and the Project may require and during the regularly scheduled progress (twice monthly) meetings. The Professional shall use for their construction field Inspection services, only personnel having professional expertise, experience, authority, and compatibility with departmental procedures as the Department may approve.

The Professional agrees that such characteristics are essential for the successful completion of the Project. Such individuals shall be replaced for cause where the Department determines and notifies the Professional, in writing, of their unacceptable performance.

CONSULTANT: Any individual, firm, or employee thereof, not a part of the Professional's staff, but employed by the Professional and whose professional service cost is ultimately paid by the State of Michigan, either as a direct cost or authorized reimbursement. This includes the recipient(s) of Contract Orders for material, support, and/or technical services. Also, included are persons and firms whose management and/or direction of services are assigned to the Prime Professional as may be provided elsewhere in this Contract.

CONTRACT CHANGE ORDER: A standard document form (DTMB-0403) issued and signed by the State of Michigan and signed by the Professional which amends the Project Design Professional's Contract Documents for changes in the Appendix 1 – Project/Program Statement or an adjustment in Contract price and/or Contract time, or both.

CONTRACT DOCUMENTS: The Professional's Phase 100 – Study, Final Report and Phase 500 - Final Design architectural and/or engineering plans/drawings, specifications, Construction Contract, instructions to construction Bidders, proposal, Bidding Documents, agreement, conditions of the Contract, payment bond, performance/labor and material bond, prevailing wages if applicable, all Addenda, and attachments as may be necessary to comprise a Construction Contract for the Project. Specifications for this Contract will be prepared for Division 00 through 49, in the current version of the Master Format Outline by the Construction Specifications Institute (C.S.I.), as appropriate for the Project.

CONTRACT MODIFICATION: A form (DTMB-0410) amending the Contract signed by the Department and the Professional. The preparation of Bulletins and Contract Change Orders resulting from changes in the Appendix 1 – Project/Program Statement or previously unknown on-site field conditions as approved by the Department will be compensated to the Professional by way of the Contract Modification in accordance with the Article 2, Compensation text of this Contract. Any Contract Modification of this Professional Services Contract must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the Department may require. No Contract Modification will be approved to compensate the Professional for correcting, or for responding to claims or litigation for, the Professional's Phase 100 – Study, Final Report and Phase 500 - Contract Documents/architectural and/or engineering study/design errors, omissions, or neglect on the part of the Professional.

CONTRACT ORDER: A form (DTMB-0402) issued and signed by the State of Michigan. Once authorized to proceed by the Project Director, the Professional may: (1) Begin to incur Project expenses and proceed with the Project on-site; and (2) Provide professional services for the fee amount designated in the Phases of the Contract Order. Issuance of the DTMB-0402 certifies that: (1) The State has entered enter into a Professional Services Contract for the professional services described in the various Phases of this Contract; and that (2) The proper Certificate of Insurance documents have been received and accepted by the State along with the approval and signing of the Professional's Professional Services Contract by the SFA, DCD Director.

DEPARTMENT: The Department of Technology, Management and Budget, State Facilities Administration, Design and Construction Division. The Department will represent the State of Michigan in all matters pertaining to this Project. This Professional Services Contract will be administered through the Department on behalf of the State of Michigan and The State/Client Agency.

DESIGN MANUAL: Provides the Professional with information regarding the Department's current "DTMB DCD Design and Construction Standards for Office Construction and Tenant Fit out" and Capital Outlay Design Manual for State Universities, Community Colleges, State Agencies and Professional Services Contractors" review process requirements regarding the uniformity in Contract materials presented to it by the Professional and the State/Client Agency(ies). This manual contains the following noted standards, instructions, and procedures information for: (1) General instructions for planning documents from Phase 100-Study through Phase 500-Final Design; (2) Net and gross area/volume; (3) Project cost format; (4) Outline architectural and engineering specifications; (5) Specifications in documentation Phase; (6) Instructions for proposal; (7) Bidders questionnaire; and the (8) Project job sign

DIRECTOR: The Director of the Department of Technology, Management and Budget or their authorized State of Michigan representative.

DIRECTOR-SFA: The Director of the Department of Technology, Management and Budget, State Facilities Administration, or their authorized State of Michigan representative.

DEPARTMENT FIELD REPRESENTATIVE: An employee of the State under the direction of the Department who provides the Inspection of construction Projects for compliance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specification requirements and the building construction codes. The Department Field Representative is the liaison between the Construction Contractor, the Professional, and the Project Director. The Project Director, or the Department Field Representative, has the authority to require the Professional to respond to and resolve study/design related problems, construction field problems and to attend Project meetings. Unless delegated by specific written notice from the Department, the Department Field Representative has no authority to order any changes in the Project scope of work or authorize any adjustments in Contract price or Contract time. The Department Field Representative is be included throughout all other phases (100 – 400) to provide additional knowledge and input throughout the development of the project.

INSPECTION: The Professional and their Consultant firm's on-site and/or off-site examination of the Project construction work completed or in progress by the Construction Contractor to determine and verify to the Department's, Project Director and the Department Field Representative that the quantity and quality of all Project construction work is in accordance with the design intent of the Professional's Phase 500 - Contract Documents/architectural and/or engineering drawings and specifications requirements.

KEY PRINCIPAL PERSONNEL/EMPLOYEE: An individual employee of a Professional who is essential for the successful completion of the Project.

NOTICE OF INTENT TO AWARD: A written notice to the Construction Contractor, by the Department accepting the Professional's written recommendation to award the construction Bid to the lowest responsive, responsible best value construction Bidder. The Notice of Intent to Award letter will also designate the Contract price and itemize the alternates that the Department, at its sole discretion has accepted.

PHASE: A discretely distinguishable step necessary to produce the Project during the Professional providing architectural and/or engineering study, design, and construction administration services.

PRIME PROFESSIONAL SERVICES CONTRACTOR/PROFESSIONAL: An individual, firm, partnership, corporation, association, or other legal entity who is legally permitted by law to sign and seal final design construction Contract Documents and licensed under the State of Michigan's professional licensing and regulation provisions of the Occupational Code (State Licensing Law), Act 299 of the Public Acts of 1980, Article 20, as amended, to practice architecture, engineering, environmental engineering, geology, civil, land surveying, or landscape architecture services in the State of Michigan.

The Prime Professional Services Contractor/Professional is also legally permitted by the State of Michigan's regulation provisions of the State Construction Code, Act 230 of the Public Acts of 1972, as amended, and designated in a Construction Contract by the Department to recommend construction progress payments to the Construction Contractor.

PROJECT: Any new construction, existing site, new utilities, existing building renovation, roof repairs and/or removal and replacement, additions, alteration, repair, installation, construction quality control and material testing services, painting, decorating, demolition, conditioning, reconditioning or improvement of public buildings, works, bridges, highways, or roads authorized by the Department that requires professional study/design services as part of this Contract.

PROJECT COST: The total Project cost including, but not limited to, site purchase, site survey and investigation, hazardous material abatement, construction, site development, new utilities, telecommunications (voice and data), professional fees, construction quality control and material testing services, testing and balancing services, furnishings, equipment, architectural and/or engineering plan(s)/drawing(s) design code compliance and plan review approval fees and all other costs associated with the Project .

PROJECT DIRECTOR: The professional licensed employee of the Department who is responsible for directing and supervising the Professional's services during the life of this Contract. The Project Director, or the Department Field Representative, has the authority to require the Professional to respond to and resolve study/design related problems, construction field problems and to attend Project related meetings.

PROJECT/PROGRAM STATEMENT: The Project/Program Statement is provided by the Department and defines the scope of the problem, describes why this Project is desirable, and provides a preferred resolution of the problem.

PROJECT TEAM: The Professional, the Project Director, the Department Field Representative, a representative of the State/Client Agency, and others as considered appropriate by the Department.

PUNCH LIST: A list of minor construction Project items to be completed or corrected by the Construction Contractor, any one of which do not materially impair the use of the Project work, or the portion of the Project work inspected, for its intended purpose. A Punch List shall be prepared by the Professional upon having decided that the Project work, or a portion of the Project construction work inspected, in concert with the Professional, the Construction Contractor, the Department, the Project Director and the Department Field Representative, the State/Client Agency and any construction manager, is substantially complete and shall be attached to the respective DTMB-0455, Certificate of Substantial Completion form. This standard document form is a part of the "DTMB-0460, Project Procedures" documents package.

SOIL EROSION AND SEDIMENTATION CONTROL: The planning, design and installation of appropriate Best Management Practices (as defined by the most current version of the Department's Soil Erosion and Sedimentation Control Guidebook) designed and engineered specifically to reduce or eliminate the off-site migration of soils via water runoff, wind, vehicle tracking, etc. and comply with the Soil Erosion and Sedimentation Control in the State of Michigan as regulated under the 1994 Public Act 451, as amended – The Natural Resources Environmental Protection Act, Part 91 – Soil Erosion and Sedimentation Control. Soil Erosion and Sedimentation Control associated with this Contract will be monitored and enforced by the Department of Technology, Management and Budget, State Facilities Administration, Soil Erosion and Sedimentation Control Program.

STATE: The State of Michigan in its governmental capacity, including its departments, agencies, boards, commissions, officers, employees, and agents. Non-capitalized references to a state refer to a state other than the State of Michigan.

STATE/CLIENT AGENCY: A Department of the State of Michigan, for whose use the Project will ultimately serve, which requires professional architectural and/or engineering design services.

SUBSTANTIAL COMPLETION: The form (DTMB-0445) stating that the Project work, or a portion of the Project work eligible for separate Substantial Completion, has been completed in accordance with the design intent of the Professional's Contract Documents to the extent that the Department and the State/Client Agency can use or occupy the entire Project work, or the designated portion of the Project work, for the use intended without any outstanding, concurrent work at the Project work site, except as may be required to complete or correct the Project work Punch List items.

SUSTAINABLE DESIGN: The Professional's use of a balance of appropriate materials, products and design methods that reduce the impact to the natural ecosystems and be within the Budget constraints of the Project. Sustainable Design shall be used wherever possible by the Professional in their Project design and an itemized list shall be provided with the Professional's Contract Documents that identifies the processes and products.

TASK: Shall mean the following: (1) A quantifiable component of design related professional architectural and/or engineering study/design Task services required to achieve a Phase of the Project; (2) The most manageable sub-element within a study/design Phase; (3) A unique item of work within a study/design Phase for which primary responsibility can be assigned; and (4) Has a time related duration and a cost that can be estimated within a study, design, and construction Phase.

ARTICLE XIV
COMPLETE AGREEMENT/MODIFICATION

This Professional Services Contract constitutes the entire agreement as to the Project between the parties. Any Contract Modification of this Contract and the Project/Program Statement must be in writing, signed by duly authorized representatives of the parties, and shall be in such format and detail as the State may require. No Contract Modification may be entered to compensate the Professional for correcting, or for responding to claims or litigation for the Professional's Contract Documents/architectural and/or engineering study/design errors, omissions, or neglect on the part of the Professional.

APPENDIX 1

PROJECT/PROGRAM STATEMENT

PROJECT STATEMENT

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design and Construction Division
3111 West St. Joseph Street
Lansing, Michigan 48909

FILE NUMBER Various		PROPOSAL DUE DATE Thursday, January 19, 2023, at 2:00 p.m., EASTERN
CLIENT AGENCY Department of Technology, Management and Budget		
PROJECT NAME AND LOCATION 2023 Indefinite Scope Indefinite Delivery (ISID) for General Professional Architectural / Engineering Design Services		
PROJECT ADDRESS (if applicable) Various		
CLIENT AGENCY CONTACT Various		TELEPHONE NUMBER
DTMB - DCD PROJECT DIRECTOR Chris Parsons		TELEPHONE NUMBER 517.256.5677

WALK-THROUGH INSPECTION DATE, TIME, AND LOCATION:

NO Pre-Proposal Meeting or Walkthrough will be held

☐ **MANDATORY** (Check box if Mandatory)

PROJECT DESCRIPTION/SERVICES REQUESTED

Provide professional architectural, engineering, surveying, or landscape architectural ISID services for a variety of state funded construction projects.

Please NOTE:

- Proposal responses MUST be uploaded to SIGMA VSS. Please enter the total cost for all phases as the bid amount.
- Firms should only submit one (1) attachment (being less than 6 MB) for proposal submission. The attachment is to be the technical and cost proposal combined.
- Do not wait until just before the 2:00 p.m. solicitation deadline to submit your proposal response. SIGMA VSS will not allow a proposal to be submitted after 2:00 p.m., even if a portion of the proposal response has been uploaded.
- If you experience issues or have questions regarding your electronic submission, you **must** contact the SIGMA Help Desk for assistance prior to the 2:00 p.m., solicitation deadline. You may contact the SIGMA Help Desk by telephone at 517.284.0540 or toll-free at 888.734.9749. You may also email the SIGMA Help Desk at sigma-procurement-helpdesk@michigan.gov
- Please email the Design and Construction Contract Specialists if you are having SIGMA VSS issues. Please include your SIGMA ticket number and any supporting documentation (i.e., screenshots) to Anne Watros (WatrosA@michigan.gov) **and** Don Klein (KleinD4@michigan.gov).
- You may be asked by our contract specialists to email your proposal. Emailed submissions will require DCD approval and will be handled on a case-by-case basis.
- Approved emailed submissions MUST be received prior to 2:00 p.m. deadline to be considered responsive and responsible.
- Responses should not be emailed to the Project Director.

NIGP CODES
906, 90607, 90610, 90632, 90638, 90642, 90644, 90646, 90648, 90658, 90672, 925, 92507, 92531, 92540, and 92588.

DESIRED SCHEDULE OF WORK
Dependent on the assigned project

ACCEPTING RFP QUESTIONS UNTIL:
Please do not submit online questions via VSS. ALL questions should be emailed to Chris Parsons at parsonsc5@michigan.gov address no later than 12:00 p.m., Eastern on Thursday January 12, 2023

REFERENCE STANDARDS: This project will comply with all codes, standards, regulations, and workers' safety rules that are administered by federal agencies (EPA, OSHA, and DOT), state agencies (DHHS, EGLE, DNR, and MIOSHA), and any other local regulations and standards that may apply.

This form is required to be a part of the professional service contract. (Authority: 1984 PA 431)
Attachment(s)

DTMB-0430 ISID AE
Billable rate (R 02/22)

STATE CAPITAL OUTLAY PROJECTS

REQUEST FOR PROPOSALS
FROM
PROFESSIONAL SERVICE CONTRACTORS

(Authority PA 431 of 1984)

For Indefinite Scope Indefinite Delivery
Not-to-Exceed Fee, Billable-Rate

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
Request for Proposal for
2023 Indefinite Scope Indefinite Delivery (ISID) for General Architectural / Engineering / Landscape Architecture Services
Various Locations, Michigan

PROPOSAL DUE DATE: Thursday, January 19, 2023, 2:00 p.m., Eastern Time

ISSUING OFFICE

Department of Technology, Management & Budget
State Facilities Administration
Design and Construction Division

Minor State Capital Outlay Projects
REQUEST FOR PROPOSALS

Part I - Technical Proposal
Part II – Cost Proposal

Professional Services for
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
2023 Indefinite Scope Indefinite Delivery (ISID) Contract
for General Architectural / Engineering / Landscape Architecture Services
Various Locations, Michigan

SECTION I GENERAL INFORMATION

I-1 Purpose

This Request for Proposals invites the prospective professional service contractor (Professional) to prepare a qualifications statement and proposal for an Indefinite Scope Indefinite Delivery (ISID) contract for general professional design services (architecture, engineering, landscape architecture) for State of Michigan facilities maintenance, alteration, and construction projects. ISID contracts provide the State of Michigan with a simple and streamlined qualifications-based selection process for obtaining professional architectural and engineering services for minor, emergency and / or routine professional services.

Projects will be located statewide, within both developed and undeveloped areas. Proposing firms must indicate regions in which they are willing to provide services, (refer to Questionnaire Article 3, Project Location). Project types expected include building alterations, additions, various facility upgrades and special maintenance projects. ISID contracts will be used for minor, emergency and / or routine projects, but client agency needs may require ISID contracting for other or specialized, projects. Most projects will be minor (below $500,000 total cost) in nature. The ISID contracts will supplement, but not replace, standard requests for proposals or qualifications as a method for obtaining professional services.

This selection round will supplement its roster of professional firms holding ISID contracts. The Department of Technology, Management and Budget (DTMB) currently holds several three-year and four-year term ISID contracts which will expire March 2023. This solicitation will add a certain number of firms to this roster so that a steady flow of firms is available.

The 2023 General Professional Design Services ISID contract will be limited to a term of four base years and one option year for assignments. A firm holding an ISID contract may not re-propose until their contract term is exhausted.

Firms with ISID contracts are eligible to participate in MIDeal, a cooperative purchasing program, local units of government, K-12 schools, state colleges and universities, and not for profit hospitals, may, if the firm agrees to participate, contract with an ISID contract holder at the billable rates specified in the ISID contract.

Please Note:

1. **FIRMS HOLDING ISID CONTRACTS ARE NOT GUARANTEED ANY ASSIGNMENTS**

2. **If your firm was awarded a 2021 General Architectural / Engineering/ Landscape Architecture ISID, you do not need to re-propose.**

3. **If your firm holds an ISID contract for environmental, testing or another variety of ISID contract and you wish to provide General Professional Design Services, please respond to this Request for Proposal.**

If DTMB, Design and Construction Division (DCD) determines that a particular project is suited to the ISID contracting method, The DCD Project Director will select an ISID Professional to provide a specific proposal of services and fee for that project. If the proposal is acceptable, the project will be assigned to that Professional under their ISID contract. DCD reserves the option of requesting such informal proposal from more than one professional for a particular project.

ISID contracts may include, but not be limited to, the following phase(s) from DTMB's attached Sample Standard ISID Contract for Professional services.

Phase–

100 Study
200 Program Analysis
300 Schematic Design
400 Preliminary Design
500 Final Design
600 Construction Administration - Office Services
700 Construction Administration - Field Services

The minimum professional qualifications to complete the scope of work for this project are demonstrated experience in the successful planning and execution of similar projects in full accordance with all applicable Local, State, and Federal regulations.

I-2 Project/Program Statement

See attached project/program statement for more detailed information. The Professional, by submitting a Technical (Part I) and Cost (Part II) Proposal to DTMB for evaluation, states that they can and will provide complete services when an individual project is assigned to them.

No increase in compensation to the Professional will be allowed unless there is a material change made to the scope of work of the project/program statement and the change to the project/program statement is approved in writing by DTMB, State Facilities Administration (SFA), Design and Construction Division (DCD).

I-3 Issuing Office

This RFP is issued by the Department of Technology, Management and Budget (DTMB), on behalf of the State of Michigan and its Client Agencies. PROPOSALS SHALL BE RETURNED TO THE ISSUING OFFICE via State of Michigan Procurement website – SIGMA VSS.

The point of contact for all other items in this Request for Proposal is:

Chris Parsons, Project Director
Department of Technology, Management and Budget
State Facilities Administration, Design and Construction Division
Telephone Number: (517) 256-5677
Email: parsonsc5@michigan.gov

I-4 Contract Award

Professionals are requested to submit a two-part proposal, Technical Proposal - Part I, including a Qualifications Questionnaire, and Cost Proposal - Part II. Proposals will be evaluated by an Ad Hoc Advisory Committee based on the Technical Portion - Part I eighty percent (80%) and the Cost Proposal - Part II twenty percent (20%).

The professional firm must complete the Professional Questionnaire and select the Project Types and Project Locations they wish to be considered for.

DTMB will offer a contract to several professional firms recommended by the Ad Hoc Advisory Committee after evaluation of the proposal. Recommendation is expected within thirty (30) days following the due date of the proposal.

The Professional must include signed PSC Certification forms and the Addendum Acknowledgment form located at the end of this RFP as part of your proposal response.

I-5 Rejection of Proposals

The State of Michigan reserves the right to reject any or all proposals, in whole or in part, received because of this Request for Proposals.

I-6 *Incurring Costs*

The State of Michigan is not liable for any cost incurred by the Professional prior to acceptance of a proposal and the award and execution of a contract and issuance of the state's contract order.

I-7 *Mandatory Pre- Proposal Meeting*

NO MANDATORY PRE-PROPOSAL MEETING will be conducted by the Issuing Office for this Request for Proposal.

Questions that arise because of this RFP **MUST BE EMAILED to Chris Parsons at parsonsc5@michigan.gov** no later than **Thursday, January 12, 2022,** at **12:00 p.m.,** Eastern time (ET). If it becomes necessary to amend any part of this RFP, addenda will be posted on the SIGMA VSS website.

I-8 *Responsibilities of Professional*

The Professional will be required to assume responsibility for all professional services offered in their proposal whether they possess them within their organization or not. Further, the State of Michigan will consider the Professional to be the sole point of contact regarding contractual matters, including payment of all charges resulting from the contract. The prime professional shall possess a license to practice in the State of Michigan pursuant to the Occupational Code (PA 299 of 1980).

I-9 *Proposals*

The professional must submit a complete, straightforward response to this Request for Proposal. The proposal should describe the professional's ability to meet the requirements of the Request for Proposal.

The proposal must be submitted electronically through the State of Michigan Procurement System (SIGMA VSS). No other distribution of proposals will be made by the Professional. To be considered responsible and responsive, proposals must be uploaded to SIGMA VSS **on or before 2:00 p.m., Eastern time (ET), on Thursday, January 19, 2022.** Proposal must be signed by an official authorized to bind the professional firm to its provisions. NO FACSIMILES OR E-MAILS OF THE REQUEST FOR PROPOSAL WILL BE ACCEPTED.

The proposal and attachments must be fully uploaded and submitted prior to the proposal deadline. **Please do not wait until the last minute to submit a proposal**, as the SIGMA VSS system **will not** allow a proposal to be submitted after the proposal deadline identified in the solicitation, even if a portion of the proposal has been uploaded.

SIGMA has a maximum size limit on file uploads. When uploading, your attachment(s) the attachment must be 6mb or less.

Also, when entering proposal amount, please enter the total cost amount as $1.00. Bidder's failure to submit a proposal as required may result in being deemed nonresponsive.

Questions on vendor registration, proposal submissions, or navigation in the SIGMA VSS system can be answered by contacting the SIGMA Help Desk either by telephone at 517.284.0540 or toll free at 888.734.9749 or by email at sigma-procurement-helpdesk@michigan.gov

SECTION II PROPOSAL FORMAT - PART I – TECHNICAL

The Professional firm submitting a proposal must complete the Professional Questionnaire (see attached fillable form document in Microsoft Word format). This questionnaire must be accompanied by a narrative addressing the items below.

The proposal must be submitted in the format outlined below. Paginate proposals and ensure that the proposals refer specifically to the project at hand. Proofread proposals for language and mathematical errors. The items shown below are considered in the Ad Hoc Committee proposal review of technical qualifications.

II-l General Information and Project Team

State the full name, address, and SIGMA Vendor Number of the organization and, if applicable, the branch office, consultants or other subordinate elements that will provide or assist in providing the service. Indicate whether you operate as an individual, partnership, or corporation. If a corporation, include the state in which you are incorporated. State whether you are licensed to operate and practice in the State of Michigan.

II-2 Understanding of Project and Tasks

Outline your experience with governmental or institutional design and construction, particularly as it relates to small facility preservation, maintenance, and alterations projects. Address programming, schematic and design development phases, construction documentation and construction inspection.

Explain how your firm or project team is the best suited to provide the services required for this project and would provide the best value to the State of Michigan for this work.

II-3 Personnel

The professional must be able to staff a project team which has the qualifications and expertise necessary to undertake small facility preservation, maintenance, and alterations projects. Include the full names of all personnel by classification that will be employed in the project. Indicate which of these individuals you consider to be "Key Personnel" for the successful completion of these project types, identify them by position and classification and provide their resumes.

The Professional must identify all Key Personnel that will be assigned to this contract in the table below which includes the following:

a. Name and title of staff that will be designated as Key Personnel.

b. Key Personnel years of experience in the current classification.

c. Key Personnel's roles and responsibilities, as they relate to this RFP, if the Professional is successful in being awarded the Contract. Descriptions of roles should be functional and not just by title.

d. Identify if each Key Personnel is a direct, or consultant employee.

e. Identify where each Key Personnel staff member will be physically located (city and state) during the Contract performance.

The Professional must provide detailed, chronological resumes of all proposed Key Personnel, including a description of their work experience relevant to their proposed role as it relates to the RFP. Qualifications will be measured by education and experience with particular emphasis to experience on projects similar to that described in the RFP.

Provide an organization chart outlining authority and communication lines for each professional firm, including Key Personnel, including sub-consultants, client agency, and DTMB.

II-4 *Management Summary, Work Plan, and Schedule*

The Professional must outline their work plan and methodology so that it is understood what services and deliverables will be provided, and the quality of the services and deliverables as well. Describe in detailed narrative form your plan for accomplishing the projects of the type expected. Describe clearly and concisely each professional task, event, and deliverable required for project completion. Do not simply reiterate language and tasks from the DTMB Professional Services Contract. Describe your constructability review and quality control plan.

II-5 Questionnaire

The professional firm submitting a proposal must complete the Professional Questionnaire (refer to attached fillable form in Microsoft Word format).

II-6 References

Provide references, with contact information of previous clients, particularly for similar projects. Outline your experience with similar projects, sites, and contacts.

SECTION III PROPOSAL FORMAT - PART II - COST

III-1 Instructions and Information – Billable Rate

The Part II - Cost Proposal for the ISID contract shall outline the billable ranges for each of the Professional firm's positions / classifications. Specific cost proposals for individual projects will be obtained at the time of individual project assignment and shall identify specific personnel assigned and carefully interface with all phases/tasks of the work plan requested at that time. If sub-consultants are used, their fees shall be provided. A mark-up of the Professional consultants' fees or billing rates will be allowed; indicate the percentage of the mark-up within the tables, not to exceed 5%.

Reimbursable Expenses: The DTMB will reimburse the Professional for the actual cost of printing and reproduction of project deliverables such as survey and/or study reports. DTMB will also reimburse for U. S. Mail regular shipping or postage. A mark-up of reimbursable expenses will be allowed for services not performed in house; indicate the percentage of the mark-up within the tables, not to exceed 5%.

All other costs, such as fringe benefits, vacations, sick leave, insurance, meals, lodging, travel, all computer time, and clerical/secretarial services (not project related), telephone services, miscellaneous travel, reproduction services for other than bid documents, employees not providing a direct service, other indirect costs, overhead and profit, shall be included in the calculation of the Professional's billing rates.

If the project is further than 100 miles one-way from the Professional firm's office, travel expenses to the project site will be allowed as a reimbursable expense at the State of Michigan's rates, based on DTMB's Vehicle and Travel Services Travel Rate Reimbursement for premium mileage rates in effect at execution of the contract. Mileage allowed will be actual, less 100 miles each way. Other travel expenses are not to be included, unless specifically authorized in writing. Provide an estimated allowance of reimbursable costs for travel expenses to the project site, in your proposal response.

Completeness of Proposal: The design phase services shall cumulatively include any services required for subsequent issuing and processing of bulletins arising from, but not limited to, design errors and/or omissions, code compliance (precipitating either from plan

review or on-site/field observations), or modification of existing structures or systems necessary to achieve the intent of the project statement.

The design phase services shall include, either by cumulative allowance or by specific task, the furnishing of all project data and services necessary to legally implement the project. his includes but may not be limited to, code reviews and/or interpretations, project meetings, presentations, hearings, utility allocations requests, and/or connections, easements, or permits.

Any contract issued by the state pursuant to this proposal anticipates that the Professional will provide, but shall not seek compensation for, services necessary to respond to and resolve contractor claims arising wholly or in part from the Professional's design errors or omissions or other aspects of the design or for any aspect of the professional's performance which is inconsistent with the professional or construction contracts. No task or part thereof may include costs for such efforts.

Cost Review: Cost Proposals are reviewed on Interface and Total Fee. Interface refers to how the effort proposed (defined as the numbers of hours per phase, considered with the staff and classification assigned to that phase) relates to the effort the DTMB and the Client Agency expect or estimate to be required to deliver the project successfully. Total Fee refers to the total of the prime Professionals' fee, sub-consultants, travel, and other reimbursable expenses.

III-2 *Identification of Personnel and Estimated Compensation*

Provide compensation information for the Professional as well as any Sub-consultants. Note that employees of a separate professional firm or consultant, if proposed, should also be included, and noted.

A. Primary Professional and Sub-consultant(s) – Position, Classification & Employee Billable Rate Information

Using the format of Form II-2-A (attached), identify the service being provided and the Sub-consultant's employee(s) names and position classifications. It is not required to provide a team that covers all disciplines.

List current hourly billable rate ranges for each year / classification, from the beginning to the end of the contract This range of current and anticipated hourly billing rates shall include any anticipated pay increases over the life of the Professional's four-year ISID contract duration. Sub-consultant fees will be included in individually assigned project contracts as not-to-exceed reimbursable amounts, including a reasonable mark-up to be specified, mark-up not to exceed 5%.

To determine your current billing rates, use the attached guideline page for information regarding the "Overhead Items Used for Professional Firm's Billing Rates Calculation," and

the web-link to “Sample Standard ISID Contract for Professional Services,” Article 2 – Compensation.

Consultants providing professional services must submit separate billing rates for services that they will provide. A reasonable mark-up of the consultants billing rates, not to exceed 5%, will be allowed. ALL other costs, such as indirect labor, telephones, miscellaneous reproduction, travel, etc. shall be included in the professional’s billing rate.

For individual assigned projects the proposal will identify, for each task, the estimated cost. The combination of all phases/tasks shall become the professional’s maximum not-to-exceed cost for all services. Compensation for each phase will be in accordance with the “Sample Standard ISID Contract for Professional Services,” Article 2 – Compensation. The following Items B, C and D will be required only at the time a proposal for an individual assigned project is requested.

B. Fee with Anticipated Hours by Phase for Individual Assigned Projects

Using the format of Form II-2-B, identify for each phase the estimated hours for each employee and include the billable rate for each employee. Provide totals.

C. Reimbursable Expenses for Individual Assigned Projects

Using the format of Form II-2-C, identify the phase number, firm name and description of sub-consulting services expressed as a not-to-exceed amount. Identify the phase number, firm name, and description of all reimbursable direct expenses expressed as a not-to-exceed amount (travel over 100 miles one-way, printing, tests, etc.). Note the mark-up(s) for handling reimbursable expenses is not to exceed 5% Provide totals.

D. Total, Summarized by Phase for Individual Assigned Projects

Using the format of Form II-2-D, provide a total of the fees and reimbursable expenses, by phase, as outlined in items B and C above. The total of all phases shall become the Professional's maximum not-to-exceed contract for all design services. Compensation for each phase will be in accordance with the "Sample Standard ISID Contract for Professional Services."

Use the attached forms to establish your total compensation and trade contract reimbursables.

The following instructions are to be used by the Professional Services Contractor firms to determine the hourly billing rate to use on State of Michigan Projects.

The Professional's Consultant must submit a separate hourly billing rate for the professional consultant services they will provide for State of Michigan Projects. A moderate mark-up, not to exceed 5%, of the Professional's Consultant services hourly billing rates will be allowed.

The Department will reimburse the Professional for the actual cost of printing and reproduction of the Contract Bidding Documents, soil borings, surveys and any required laboratory testing services and use of field equipment. **No mark-up of these Project costs will be allowed if services are performed in house.**

2023 HOURLY BILLING RATE
Based on 2022 Expenses

OVERHEAD ITEMS ALLOWED FOR THE PROFESSIONAL SERVICES CONTRACTOR FIRM'S HOURLY BILLING RATE CALCULATION

SALARIES:	**EMPLOYEE BENEFITS:**	**INSURANCE:**
Principals (Not Project Related)	Hospitalization	Professional Liability Insurance
Clerical / Secretarial	Employer's Federal Insurance Contributions Act (FICA)Tax	Flight and Commercial Vehicle
Technical (Not Project Related)	Unemployment Insurance	Valuable Papers
Temporary Help Tax	Federal Unemployment	Office Liability
Technical Training	Disability	Office Theft
Recruiting Expenses	Worker's Compensation	Premises Insurance
	Vacation	Key – Personnel Insurance
	Holidays	Professional Liability Insurance
	Sick Pay	
	Medical Payments	
	Pension Funds	
	Insurance - Life	
	Retirement Plans	

TAXES:	**SERVICES (PROFESSIONAL)**	**EQUIPMENT RENTALS:**
Franchise Taxes	Accounting	Computers
Occupancy Tax	Legal	Typewriter
Unincorporated Business Tax	Employment Fees	Bookkeeping
Single Business Tax	Computer Services Bond)	Dictating
Property Tax	Research	Printing
Income Tax	Project / Contract Bond	Furniture and Fixtures
		Instruments

OFFICE FACILITIES:

Rents and Related Expenses
Utilities
Cleaning and Repair

LOSSES:

Bad Debts (net)

Uncollectible Fee
Thefts (not covered by Project / Contract)
Forgeries (not covered by Project / Contract)

FINANCIAL:

Depreciation

SUPPLIES:

Postage

Drafting Room Supplies
General Office Supplies
Library
Maps and Charts
Magazine Subscriptions

PRINTING AND DUPLICATION:

Specifications (other than Contract Bidding documents)
Drawings (other than Contract Bidding documents)
Xerox / Reproduction

Photographs

SERVICES (NONPROFESSIONAL):

Telephone and Telegram

Messenger Services

TRAVEL:

All Project – Related Travel*

MISCELLANEOUS:

Professional Organization Dues for Principals and Employees
Licensing Fees

III-2-A. Position, Classification and Employee Billing Rate Information

Firm Name **XYZ, Inc.**

Yearly Hourly Billing Rate Increase **≈4%**

Position/Classification	Year 2023	Year 2024	Year 2025	Year 2026
Principal/Project Manager**	$100.00	$105.00	$110.00	$116.00
Senior Architect	$100.00	$105.00	$110.00	$116.00
Quality Control/Assurance	$100.00	$105.00	$110.00	$116.00
Licensed Surveyor**	$90.00	$95.00	$99.00	$104.00
Project Engineer**	$90.00	$95.00	$99.00	$104.00
Mechanical Engineer**	$90.00	$95.00	$99.00	$104.00
Sr. Structural Engineer	$80.00	$84.00	$88.00	$92.00
Electrical Engineer	$80.00	$84.00	$88.00	$92.00
Scientist/Surveyor	$65.00	$68.00	$71.00	$75.00
Staff Engineer	$65.00	$68.00	$71.00	$75.00
Staff geologist	$65.00	$68.00	$71.00	$75.00
CAD Operator	$75.00	$79.00	$83.00	$87.00
Technician	$65.00	$68.00	$71.00	$75.00
Field Technician	$50.00	$53.00	$56.00	$59.00
Technical Support	$35.00	$37.00	$39.00	$41.00

*Billing Rate will be in accordance with the attached guideline page for instructions regarding the "Overhead Items used for Professional Billing Rate Calculation," and the "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

** Key Project Personnel

III-2-B. Fee with Anticipated Hours and Billing Rate

	POSITION/ CLASSIFICATION	TOTAL HOURS	BILLING RATE	TOTAL
	Principal/Project Manager	30	100.00	3,000.00
	Senior Architect	17	100.00	1,700.00
	Licensed Surveyor	9	90.00	810.00
	Project Engineer	8	90.00	720.00
	Mech. Engineer.	8	90.00	720.00
	Sr. Structural Engineer	8	80.00	640.00
	Electrical Engineer	22	80.00	1,760.00
	Draftsperson	40	35.00	1,400.00
	Quality Control	2	100.00	200.00
	CAD Operator	42	35.00	1,470.00
	SUBTOTAL	186		$10,667.50

III-2C. Authorized Reimbursables -- Sub-consultants, Testing and Expenses

***Firm's Mark-Up Percentage:_____**

PHASE	NAME OF FIRM	DESCRIPTION OF SERVICES PROVIDED	TOTAL AMOUNT* (Including mark-up)
Phase 400	Forrest T. Arrea, Landscape Architect, Howell, Michigan	Design of Stormwater Management Rain Garden	500.00
Phase 500	XYZ Productions, Inc. Lansing, Michigan	Printing and reproduction of bidding documents	500.00
Phase 500	Forrest T. Arrea, Landscape Architect, Howell, Michigan	Design of Stormwater Management Rain Garden	500.00
	SUBTOTAL		$ 1,500.00

III-2D. Total, Summarized by Phase

PHASE	Phase 300	Phase 400	Phase 500	Phase 600	Phase 700	TOTAL
Professional Fee	1,597.50	2,820.00	3,970.00	1,120.00	1,160.00	10,667.50
Reimbursable Expenses	0.00	750.00	1,250.00	0.00	500.00	1,500.00
SUB-TOTAL	1,597.50	3,570.00	5,220.00	1,120.00	1,660.00	
TOTAL CONTRACT AMOUNT						$ 12,167.50

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

Certification of a Michigan Based Business

(Information Required Prior to Contract Award for Application of State Preference/Reciprocity Provisions)

To qualify as a Michigan business:

Vendor must have, during the 12 months immediately preceding this bid deadline:
or
If the business is newly established, for the period the business has been in existence, it has:

(Check all that apply):

- ☐ Filed a Michigan single business tax return showing a portion, or all the income tax base allocated or apportioned to the State of Michigan pursuant to the Michigan Single Business Tax Act, 1975 PA 228, MCL • ˜208.1 – 208.145: or
- ☐ Filed a Michigan income tax return showing income generated in or attributed to the State of Michigan; or
- ☐ Withheld Michigan income tax from compensation paid to the bidder's owners and remitted the tax to the Department of Treasury; or

I certify that **I have personal knowledge** of such filing or withholding, that it was more than a nominal filing for the purpose of gaining the status of a Michigan business, and that it indicates a significant business presence in the state, considering the size of the business and the nature of its activities.

I authorize the Michigan Department of Treasury to verify that the business has or has not met the criteria for a Michigan business indicated above and to disclose the verifying information to the procuring agency.

Bidder shall also indicate one of the following:

- ☐ Bidder qualifies as a Michigan business (provide zip code: _____)
- ☐ Bidder does not qualify as a Michigan business (provide name of State: _____).
- ☐ Principal place of business is outside the State of Michigan, however service/commodity provided by a location within the State of Michigan (provide zip code: _____)

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

Bidder: _____

_____
Authorized Agent Name (print or type)

_____
Authorized Agent Signature & Date

Fraudulent Certification as a Michigan business is prohibited by MCL 18.1268 § 268. A BUSINESS THAT PURPOSELY OR WILLFULLY SUBMITS A FALSE CERTIFICATION THAT IT IS A MICHIGAN BUSINESS OR FALSELY INDICATES THE STATE IN WHICH IT HAS ITS PRINCIPAL PLACE OF BUSINESS IS GUILTY OF A FELONY, PUNISHABLE BY A FINE OF NOT LESS THAN $25,000 and subject to debarment under MCL 18.264.

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

Responsibility Certification

The bidder certifies to the best of its knowledge and belief that, within the past three (3) years, the bidder, an officer of the bidder, or an owner of a 25% or greater interest in the bidder:

(a) Has not been convicted of a criminal offense incident to the application for or performance of a contract or subcontract with the State of Michigan or any of its agencies, authorities, boards, commissions, or departments.

(b) Has not had a felony conviction in any state (including the State of Michigan).

(c) Has not been convicted of a criminal offense which negatively reflects on the bidder's business integrity, including but not limited to, embezzlement, theft, forgery, bribery, falsification, or destruction of records, receiving stolen property, negligent misrepresentation, price-fixing, bid rigging, or a violation of state or federal anti-trust statutes.

(d) Has not had a loss or suspension of a license or the right to do business or practice a profession, the loss or suspension of which indicates dishonesty, a lack of integrity, or a failure or refusal to perform in accordance with the ethical standards of the business or profession in question.

(e) Has not been terminated for cause by the Owner.

(f) Has not failed to pay any federal, state, or local taxes.

(g) Has not failed to comply with all requirements for foreign corporations.

(h) Has not been debarred from participation in the bid process pursuant to Section 264 of 1984 PA 431, as amended, MCL 18.1264, or debarred or suspended from consideration for award of contracts by any other State or any federal Agency.

(i) Has not been convicted of a criminal offense or other violation of other state or federal law, as determined by a court of competent jurisdiction or an administrative proceeding, which in the opinion of DTMB indicates that the bidder is unable to perform responsibly or which reflects a lack of integrity that could negatively impact or reflect upon the State of Michigan, including but not limited to, any of the following offenses under or violations of:

   i. The Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.101 to 324.90106.
   ii. A persistent and knowing violation of the Michigan Consumer Protection Act, 1976 PA 331, MCL 445.901 to 445.922.

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

iii. 1965 PA 166, MCL 408.551 to 408.558 (law relating to prevailing wages on state projects) and a finding that the bidder failed to pay the wages and/or fringe benefits due within the period required.

iv. Repeated or flagrant violations of 1978 PA 390 MCL 408.471 to 408.490 (law relating to payment of wages and fringe benefits).

v. A willful or persistent violation of the Michigan Occupational Health and Safety Act, 1974, PA 154, MCL 408.10001 to 408.1094, including: a criminal conviction, repeated willful violations that are final orders, repeated violations that are final orders, and failure to abate notices that are final orders.

vi. A violation of federal or state civil rights, equal rights, or non-discrimination laws, rules, or regulations.

vii. Been found in contempt of court by a Federal Court of Appeals for failure to correct an unfair labor practice as prohibited by Section 8 of Chapter 372 of the National Labor Relations Act, 29 U. s. C. 158 (1980 PA 278, as amended, MCL 423.321 et seq).

(j) Is NOT an Iran linked business as defined in MCL 129.312.

I understand that a false statement, misrepresentation, or concealment of material facts on this certification may be grounds for rejection of this proposal or termination of the award and may be grounds for debarment.

Bidder: _____ _____
Authorized Agent Name (print or type)

_____
Authorized Agent Signature & Date

☐ I am unable to certify to the above statements. My explanation is attached.

ACKNOWLEDGMENT OF ADDENDUMS

PSC acknowledges receipt of Addenda: No. ___ dated: _____,

No. ___ dated: _____ No. ___ dated: _____

Questionnaire for Professional Services
Department of Technology, Management and Budget
2023 Indefinite-Scope Indefinite-Delivery – Request for Qualifications
Architecture, Engineering, and Landscape Architecture Services
Various Locations, Michigan

INSTRUCTIONS: Firms shall complete the following information in the form provided. A separate sheet may be used if additional space is needed; please key the continuation paragraphs to the questionnaire. Answer questions completely and concisely to streamline the review process.

ARTICLE 1: BUSINESS ORGANIZATION

1. Full Name: Click or tap here to enter text.
   Address: Click or tap here to enter text.
   Telephone and Fax: Click or tap here to enter text.
   Website: Click or tap here to enter text. E-Mail: Click or tap here to enter text.
   SIGMA Vendor ID: Click or tap here to enter text.

   If applicable, state the branch office(s), partnering organization or other subordinate element(s) that will perform, or assist in performing, the work: Click or tap here to enter text.

   If awarded a contract and / or subsequent assignment(s), state the specific SIGMA business address which you would like associated for all communication (Contracts, Contract Order, Contract Modifications and Payments)? Click or tap here to enter text.

   Please list all person(s) authorized to receive and sign a resulting contract and / or subsequent assignment(s). Please include persons name, title, address, email and phone number. Click or tap here to enter text.

2. Check the appropriate status:

   ☐ Individual firm ☐ Association☐ Partnership☐ Corporation, or ☐ Combination – Explain: Click or tap here to enter text.

   If you operate as a corporation, include the state in which you are incorporated and the date of incorporation: Click or tap here to enter text.

   Include a brief history of the Professional's firm: Click or tap here to enter text.

3. Provide an organization chart depicting key personnel and their roles for a typical assigned project. Include generic supporting staff positions.

4. Has there been a recent change in organizational structure (e.g., management team) or control (e.g. merger or acquisition) of your company? If the answer is yes: (a) explain why the change occurred and (b) how this change affected your company. Click or tap here to enter text.

5. Provide a four year rate schedule per position.

ARTICLE 2: PROJECT TYPES AND SERVICES OFFERED

Identify **ALL** project types and professional services for which your firm is exceptionally qualified and experienced.

Provide attachments illustrating a minimum of three examples, with references, of successful projects performed in the last five years for each item checked. Identification of specialties will not exclude selected firms from project types but will assist the DCD Project Directors in matching firms with projects.

☐ ADA facility assessment and remodeling
☐ Boilers and steam systems
☐ Bridges – pedestrian and vehicular
☐ Building and structure additions

☐ Building envelope investigation, repair, upgrade

☐ Correctional facilities
☐ Door and window replacement
☐ Elevators
☐ Fire and security alarm systems
☐ Fish passage structures

☐ General architectural and/or engineering design

☐ Historical Preservation

☐ HVAC equipment replacement, upgrade, selection

☐ HVAC controls replacement, upgrade, selection

☐ Interior remodeling and renovation
☐ Laboratory facilities
☐ Landscape architecture
☐ Land Planning

☐ Locks, Dams, Water Diking Systems and Water Control Structures

☐ Maintenance and facility preservation

☐ Marine work - boat launch facilities, docks, harbors

☐ Parking and paving
☐ Recreation and Sports Facilities / Fields

☐ Roof repair, restoration and/or replacement design

☐ Soil Erosion Sedimentation Controls
☐ Site surveying

☐ Stormwater management and drainage plans

☐ Structural investigation and assessment
☐ Toilet and/or shower room remodeling or design.

☐ Trail design and development
☐ Wastewater systems
☐ Water supply systems

ARTICLE 3: PROJECT LOCATION

Identify the regions where your firm can most efficiently provide services. Assignments may vary from the regions checked, depending on the specialties and services required.

☐ Western Upper Peninsula (west of Marquette)

☐ Eastern Upper Peninsula (east of Marquette)

☐ Northern Lower Peninsula (north of Grayling)

☐ Saginaw Bay area (east of 127, north of I-69 and M 57, south of Grayling)

☐ Western Lower Peninsula (west of 127, north of Muskegon, south of Grayling)

☐ Central Lower Peninsula (east of Battle Creek, west of Chelsea, south of M 46 and M 57)

☐ Southwestern Lower Peninsula (west of Battle Creek, south of Muskegon)

☐ Southeastern Lower Peninsula (east of Chelsea, south of I-69)

ARTICLE 4: CONTRACT UNDERSTANDING

The following items should be addressed on the assumption that your firm is awarded an Indefinite-Scope, Indefinite-Delivery contract. (See attached sample contract).

4.1 Is it understood that your firm is required to respond to small projects (less than $25,000) as well as larger projects?

Yes ☐ No ☐

4.2 Is it understood that there is no guarantee of any work under this contract?

Yes ☐ No ☐

4.3 Is it understood that your firm will be required to execute the attached standard State of Michigan contract language for professional services?

Yes ☐ No ☐

4.4 Is it clearly understood that professional liability insurance is required at the time of execution of the ISID contract? (See Article 5 of the attached Sample Contract.)

Yes ☐ No ☐

4.5 Is it understood that your firm must comply with State of Michigan law as it applies to your services?

Yes ☐ No ☐

4.6 Is your firm familiar with Design and Construction's MICHSpec and DCSpec contracts and the enforcement of such?

Yes ☐ No ☐

If yes, explain: Click or tap here to enter text.

4.7 Doesyour firm have prior experience working with the State of Michigan?

Yes ☐ No ☐

If yes, explain: Click or tap here to enter text.

ARTICLE 5: CAPACITY AND QUALITY

5.1 Briefly describe your firm's methods and procedures for quality control for your deliverables and services.

Click or tap here to enter text.

5.2 Has your firm been involved in claims or suits associated with professional services errors and/or omissions?

Yes ☐ No ☐

If yes, explain: Click or tap here to enter text.

5.3 Will there be a key person who is assigned to a project for its duration?

Yes ☐ No ☐

5.4 Please present your understanding of the relationship between your firm, the DTMB Design and Construction Division, and the State Agency for whom a project will be completed.

Click or tap here to enter text.

5.5 Describe your approach if a bidder proposes a substitution of a specified material during bidding.

Click or tap here to enter text.

5.6 Describe your approach if a contractor proposes a substitution of a specified material or detail with shop drawing submittals or in construction.

Click or tap here to enter text.

5.7 How will your firm provide consistent and continuous communication pertaining to project activities and project status to the State of Michigan during the progress of projects?

Click or tap here to enter text.

5.8 Does your company have an FTP or similar site for quick posting and distribution of information, drawings, field inspection reports, and other communications?
Yes ☐ No ☐

5.9 Describe your method of estimating construction costs and demonstrate the validity of that method.

Click or tap here to enter text.

5.10 Describe your approach to minimizing construction cost over-runs.

Click or tap here to enter text.

5.11 What percentage of the PSC cost should be devoted to construction administration (office and field)?

Click or tap here to enter text. %

5.12 What portion of the assigned work will be performed with your staff and what portion will be provided by sub-consultants?

Click or tap here to enter text. %

5.13 On a typical project, what would be your response time, from the time receive a project assignment to starting investigation and design work? (A typical project might be one involving several disciplines and in the neighborhood of a $25,000 fee.)

Click or tap here to enter text. Days/Weeks

5.14 How do you assess whether a construction bidder is responsive and responsible?

Click or tap here to enter text.

5.15 Describe your firm's understanding of Sustainable Design and LEED Certification.

Click or tap here to enter text.

5.16 Describe your experience with similar open-ended contracts.

Click or tap here to enter text.

5.17 Describe your methodology for obtaining information about the existence and condition of an existing, facility's components and systems.

Click or tap here to enter text.

5.18 Describe your approach to securing permits/approvals for the following: campgrounds, critical dunes, coastal zone management, projects adjacent to Michigan lakes and rivers.

Click or tap here to enter text.

5.19 Describe your approach to a construction contractor's request for additional compensation for a change in the project scope.

Click or tap here to enter text.

POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION

2023 Indefinite-Scope Indefinite-Delivery – Request for Proposal
General Professional Design Services
(Architecture, Engineering, Landscape Architecture)

Firm Name _____
Yearly Hourly Billing Rate Increase _____
Mark-up for Sub-Consultants (not to exceed 5%) _____
Mark-up for Reimbursables (not to exceed 5%) _____

Position/Classification	Rate Ranges			
	Year 1	Year 2	Year 3	Year 4

*Billing Rate will be in accordance with the attached guideline page for instructions regarding the "Overhead Items used for Professional Billing Rate Calculation," and the attached "Sample Standard Contract for Professional Services," Article 5, Compensation Text.

** Key Project Personnel

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design and Construction Division

REQUEST FOR PROPOSAL
ADDENDUM NO. 1

This form identifies an Addendum to a Request for Proposal for Professional Services, and incorporates interpretations or clarifications, modifications, and other information into the Request for Proposals. Addenda will be numbered by the Project Director and distributed through SIGMA Vendor VSS as an attachment.

TO: ALL PROPOSERS	DATE ISSUED December 8, 2022
PROJECT NAME 2023 General Architectural / Engineering Services Indefinite Scope Indefinite Delivery (ISID)	FILE NUMBER
PROJECT DIRECTOR Chris Parsons	PROPOSAL DUE DATE: January 19, 2023

ADDENDUM ITEMS: (attach additional sheets and drawings if required)

This addendum is to clarify the contract term listed in the Request for Proposal and in the Sample Contract. The term of this contract will be for a period of four (4) base years with **no** option year.

End of Addendum 1

APPROVED BY:
Chris Parsons

PROJECT DIRECTOR DATE 12/7/2022

APPENDIX 2

PROFESSIONAL'S PROPOSAL

2023 Indefinite Scope Indefinite Delivery (ISID) for General Architectural/Engineering /Landscape Architecture Services

DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET

JANUARY 19, 2023

WADE TRIM

Wade Trim, Inc.
10850 East Traverse Highway, Suite 2260 • Traverse City, MI 49684
231.947.7400 • www.wadetrim.com

January 19, 2023

Department of Technology, Management and Budget
State Facilities Administration
Design and Construction Division
3111 West St. Joseph Street
Lansing, MI 48917

Attention: Chris Parsons, Project Director

Re: Request for Proposal
2023 ISID - General Professional Design Services
(Architecture, Engineering, Landscape Architecture)

Dear Mr. Parsons:

We appreciate the opportunity to submit our qualifications and proposal for general professional design services for State of Michigan facilities. Wade Trim has been providing design and construction phase services for projects throughout Michigan since 1926. Led by our Gaylord, Flint, Traverse City, and Taylor offices with assistance from professionals located in three additional statewide locations, our team will provide a cost-effective range of services including engineering, surveying, planning, landscape architecture, and construction administration and support. Our team is fully prepared to provide services for projects under this ISID contract.

We look forward to continuing to work with the Department of Technology, Management & Budget. If you have any questions or require further information, please call our office at 989.732.3584.

Respectfully submitted,

Wade Trim, Inc.

Paul M. Repasky, PE
Project Manager

Brian C. Sousa, PE
Vice President

CONTENTS

PART I - TECHNICAL

PART II -COST

REQUIRED DOCUMENTS

APPENDIX A RESUMES 48

EXHIBITS

PART I - TECHNICAL

1 General Information and Project Team

Below is the general information about our firm and our project team.

Full Name: Wade Trim, Inc.
Address: 4241 Old 27 South, Suite 1, Gaylord, MI 49735
Telephone: 989.732.3584
Fax: 833.837.0723
Website: www.wadetrim.com
E-Mail: prepasky@wadetrim.com
Professional(s) Federal I.D. Number(s): 38-1539898
SIGMA Vendor ID: VWTM9898

Our Michigan offices are located in Gaylord, Traverse City, Bay City, Flint, Grand Rapids, Taylor, and Detroit. The project manager selection will be based on office location and their experience with the specific project. Project mangers will provide responsive and cost effective services and are based throughout Michigan – Gaylord, Traverse City, Flint, and Taylor.

The project team identified for each project will be selected based on their expertise that they bring to the team for the scope of work identified. The type of tasks typically included in DTMB projects will generally involve the same group of staff that are familiar with the state's standards. However, the strongest team will be selected. From time to time, this will include staff from each of the offices listed. For some services, such as surveying and construction observation tasks, it is more cost effective to utilize staff from an office closer to the project site. Similarly, there may be instances where the technical requirements for the project can best be met by utilizing the special talents of key staff located in other offices. In those cases, project efficiency is maintained using high speed data connections and an integrated corporate computer network.

Our firm operates as a corporation and has been incorporated in Michigan since 1926. At Wade Trim, we are committed to maximizing the value of your infrastructure investment. For nearly a century, we've been solving complex engineering challenges to create stronger communities. Our work approach is customized to fit each client and project. We use a collaborative, friendly style – built on excellent communication before, during, and after your project to deliver solutions you can stand behind. Nationally recognized, Wade Trim provides a wide range of services: engineering design; construction administration, inspection and materials testing, surveying, planning, and landscape architecture services. Since being established in 1926, we have grown to nearly 600 professionals and support staff located in 19 offices in 10 states, including seven offices in Michigan.

2 Understanding of Project and Tasks

Understanding the project requirements is one of the most important elements in the success of any project. The project manager and lead designer(s) must have a good understanding of the project's budget, design criteria, design standards, construction and ADA codes, permitting requirements, completion date, construction schedule, and other project specific requirements. In addition, it is equally important to understand the chain of communication and authority for decision making.

At the beginning, the project site should be visited to better understand the terrain, property boundaries, environmental conditions, existing facilities and utilities and other possible design and potential construction constraints. Most every project has a number of questions that either need to be clarified or further explored to reduce potential risks to the Owner, Designer, and Contractor. The line of communication for questions should be easy, convenient and relatively quick. We also understand that at times, the Owner may not know the exact answer to a specific question and are looking to the Designer for additional input or recommendations.

Wade Trim has developed into a full service engineering company oriented to municipalities from its beginning in 1926. Our clients include villages, cities, townships, counties, County Road Commissions, MDOT, DTMB, MDNR-Fisheries, Parks, and Wildlife Divisions, Department of Veterans Affairs, Community Colleges and Universities, US Forest Service, and other governmental and institutional agencies.

The projects types have varied from culvert removal and replacement projects; potable water supply, storage and distribution; wastewater collection, pumping, treatment and disposal; storm water management; soil erosion control; landscape architecture and streetscapes; parks and trails; parking facilities; boat launch and access sites; dam removal, repairs, and replacement; fish passage; marinas; roads; buildings and structural investigation; and pedestrian, snowmobile and vehicular bridges. Most of our municipal related projects are related to preservation or upgrading existing facilities. We understand the importance to provide a full range of services, when needed, coupled with simple, technically sound, efficient, cost effective, and flexible solutions.

We typically manage design projects with multiple phases including: study or feasibility phase; conceptual or schematic design; preliminary; and final design. The primary purpose of the phased approach is to gather information and present to the Owner in a timely fashion including the direction of the design work, ask relevant questions, answer questions, recommend alternatives, receive clear directions, coordinate schedules, and confirm construction budget.

During construction, we prefer to maintain continuity. During the construction phase, the project engineer retains managerial oversight to provide continuity of design objectives and fully understands the flexibility in the alternatives. This continuity from design through construction is important to a project's success. Our construction services are tailored to each Owner's needs, but typically include contract administration, on-site construction observation and materials testing and preparation of record drawings.

WADE TRIM - BEST VALUE FOR THE STATE

The following key factors demonstrate the ways that the Wade Trim team can bring the best value to the State of Michigan for this project.

Several Locations | Led by our Gaylord, Flint, and Taylor offices with assistance from professionals located in four additional statewide locations, Wade Trim can provide responsive and cost-effective service for a wide range of engineering, surveying, planning, landscape architecture and construction administration and support services. This will provide an efficiency benefit for field data collection, site visits, in-person meetings and eventually on-site inspections and over-site.

Expertise and Creativity | Licensed civil engineer designers offer practical knowledge to bring solutions to a project.

Innovative Technology | Surface and subsurface nautical drones are equipped with onboard GPS, sonar, and echosounding technology that allows for open drain survey, bathymetry, and mapping. Submersible drones enable efficient inspections in difficult, submerged conditions while limiting safety and operational risks.

Efficiency | We have assembled a team of highly proficient professionals that have the knowledge and background required to efficiently accomplish the work.

Relationships | Our existing relationships and strong reputations with the project partners and regulatory agencies associated with this project. This gives us the ability to anticipate and deliver our work effectively.

Communication | Frequent and effective communications are important to the project partners and to the overall success of the project. We are committed to creating a strong team environment with our communication efforts.

Project Management | Tasks will be defined, clear direction will be provided for all work by sub-consultants or by disciplines within our firm, and timely completions will be required, allowing time for QA/QC. The Wade Trim Project Managers will be responsible for all work completed and will verify a very high level of quality.

3 Personnel

Wade Trim has developed our team of engineers, surveyors, certified inspectors, technicians, and administrative support to capitalize on our experience, ability to perform, and success working together on various types of projects. Our team members are committed to providing quality work to all of our clients.

We can provide the correct level of effort and an experienced staff for the specific project. Our team leaders, Paul Repasky, PE, Kevin Cook, PE, Troy Andrews, PE, and Garth Bogart, PE, are licensed professional engineers.

Each project manager has a wide variety of engineering and construction knowledge and experiences that will benefit the project(s) and lead to their success.

Exhibit 1 below highlights the names and titles of all key personnel along with the additional information requested by DTMB. An organizational chart identifying all key personnel and their respective position is provided in **Exhibit 2** on the page 5. The organizational chart also outlines the typical chain of authority and communication line. Resumes are located at the end of the proposal in Appendix A.

EXHIBIT 1 Key Personnel

NAME AND TITLE OF KEY STAFF	YEARS OF EXPERIENCE	ROLE AND RESPONSIBILITIES	TYPE OF EMPLOYEE	PHYSICAL LOCATION DURING CONTRACT
Paul Repasky, PE Project Manager	39	Project Manager Project Management, Civil Engineering	Direct	Gaylord, MI
Kevin Cook, PE Project Manager	32	Project Manager Project Management, Civil Engineering	Direct	Flint, MI
Troy Andrews, PE Project Manager	12	Project Manager Project Management, Civil Engineering	Direct	Bay City, MI
Garth Bogart, PE Project Manager	4	Project Manager Project Management, Civil Engineering	Direct	Traverse City, MI
Brian Sousa, PE Principal-in-Charge	24	Principal-in-Charge Project Management	Direct	Traverse City, MI
Jennie Benford Administrative Technician	26	Administrative Technician Document control, grant funding	Direct	Bay City, MI
Pam Halcomb Accounting Analyst	25	Accounting Analyst Document control, grant funding	Direct	Taylor, MI
Jason Caverson, PS Professional Surveyor	26	Professional Surveyor Boundary and topographic surveying	Direct	Gaylord, MI
Scott Bliss, PS Professional Surveyor	12	Professional Surveyor Boundary and topographic surveying	Direct	Flint, MI
Nicholas Grim Professional Surveyor	24	Surveyor Boundary and topographic surveying	Direct	Flint, MI
Breanna Anderson, PE Civil Engineer	9	Professional Engineer Civil Engineering	Direct	Taylor, MI
Tiffany Harrison, PE Civil Engineer	22	Professional Engineer Civil Engineering	Direct	Flint, MI
Damian Curry, PE Civil Engineer	24	Professional Engineer Civil Engineering	Direct	Traverse City, MI
Jeffrey Reynhout, PE Civil Engineer	47	Professional Engineer Civil Engineering	Direct	Detroit, MI

NAME AND TITLE OF KEY STAFF	YEARS OF EXPERIENCE	ROLE AND RESPONSIBILITIES	TYPE OF EMPLOYEE	PHYSICAL LOCATION DURING CONTRACT
Mark Pribak, PE Civil Engineer	33	Professional Engineer Civil Engineering	Direct	Detroit, MI
Quinn Ridley, PE Civil Engineer	10	Professional Engineer Civil Engineering	Direct	Gaylord, MI
Kenneth Schwerdt, PE Civil Engineer	22	Professional Engineer Civil Engineering	Direct	Traverse City, MI
Carmelle Tremblay, PE Civil Engineer	9	Professional Engineer Civil Engineering	Direct	Taylor, MI
Robert Breen, PE Structural Engineer	47	Professional Engineer Structural Engineering	Direct	Taylor, MI
Leon Solowjow, Jr., PE Structural Engineer	32	Professional Engineer Structural Engineering	Direct	Taylor, MI
Michael Nicolls, PE Structural Engineer	22	Professional Engineer Structural Engineering	Direct	Taylor, MI
Brian Gombos, PE Structural Engineer	23	Professional Engineer Structural Engineering	Direct	Detroit, MI
Scot Lautzenheiser, PLA Professional Landscape Architect	16	Professional Landscape Architect Landscape architecture and Design	Direct	Detroit, MI
Jason Smith, AICP Professional Planner	19	Professional Planner Community, land, and infrastructure planning	Direct	Detroit, MI
David Richards, PLA Professional Landscape Architect	7	Professional Landscape Architect Landscape architecture and design	Direct	Detroit, MI
Catherine Dennis, PLA Professional Landscape Architect	11	Professional Landscape Architect Landscape architecture and design	Direct	Detroit, MI
Arthur Mullen, AICP Professional Planner	29	Professional Planner Community, land, and infrastructure planning	Direct	Detroit, MI
Michael Lynett, PE Construction Engineer	13	Professional Engineer Construction engineering	Direct	Taylor, MI
David Ashenfelter Construction Technician	42	Construction Technician Field construction engineering and inspection	Direct	Gaylord, MI
Tyler Tomlinson Construction Technician	9	Construction Technician Field construction engineering and inspection	Direct	Grand Rapids, MI
Brian Scherdt Construction Technician	24	Construction Technician Field construction engineering and inspection	Direct	Taylor, MI
Scott Butkovich Construction Technician	10	Construction Technician Field construction engineering and inspection	Direct	Gaylord, MI
Jason Martin Construction Technician	25	Construction Technician Field construction engineering and inspection	Direct	Flint, MI
Russ Whaley CADD Technician	25	CADD Technician CADD design services	Direct	Grand Rapids, MI
Martin Flanagan CADD Technician	28	CADD Technician CADD design services	Direct	Taylor, MI
Timothy Ruggles CADD Technician	32	CADD Technician CADD design services	Direct	Flint, MI

EXHIBIT 2 ORGANIZATIONAL CHART

DTMB PROJECT DIRECTOR

CLIENT REPRESENTATIVE

PROJECT MANAGERS

PRINCIPAL-IN-CHARGE
Brian Sousa, PE
Traverse City Office

PROJECT MANAGER
Paul Repasky, PE
Gaylord Office

PROJECT MANAGER
Garth Bogart, PE
Traverse City Office

ADMINISTRATION/ACCOUNTING
Jennie Benford
Pam Halcomb

PROJECT MANAGER
Kevin Cook, PE
Flint Office

PROJECT MANAGER
Troy Andrews, PE
Bay City Office

CORE TEAM

CIVIL ENGINEERING
Paul Repasky, PE
Kevin Cook, PE
Garth Bogart, PE
Breanna Anderson, PE
Tiffany Harrison, PE
Damian Curry, PE
Jeffrey Reynhout, PE
Mark Pribak, PE
Quinn Ridley, PE
Kenneth Schwerdt, PE
Carmelle Tremblay, PE

STRUCTURAL ENGINEERING
Robert Breen, PE
Leon Solowjow, PE
Michael Nicolls, PE
Brian Gombos, PE

SURVEY
Jason Caverson, PS
Scott Bliss, PS
Nicholas Grim

CADD DESIGN
Russ Whaley
Martin Flanagan
Timothy Ruggles

CONSTRUCTION ENGINEERING/INSPECTION
Michael Lynett, PE
David Ashenfelter
Tyler Tomlinson
Brian Scherdt
Scott Butkovich
Jason Martin

LANDSCAPE ARCHITECTURE/PLANNING
Scot Lautzenheiser, PLA
Jason Smith, AICP
David Richards, PLA, LEED GA
Catherine Dennis, PLA, LEED GA
Arthur Mullen, AICP

4 Management Summary, Work Plan, and Schedule

Wade Trim's management will consist of a project manager who has the authority and responsibility to develop a project team of professionals that have the technical qualifications and experience necessary to undertake the project. The project manager and design leader are required to understand the project requirements, ask the relevant questions, and provide an efficient and cost effective approach. The project manager is also responsible to gather pertinent information, coordinate site topographic survey, soil borings, wetland delineation, threatened and endangered species reviews, State Historic Preservation Office (SHPO) reviews, understand the required permitting and regulatory processes, and other upfront related information gathering tasks. The project manager will continue to monitor the progress of the project from the beginning through design to final completion.

Wade Trim's work plan, depending on the type and complexity of the project, typically will consist of a phased approach. The ***Feasibility or Study phase*** requires a concise understanding of the project requirements, site limitations, project constraints, schedule and budget. This will be accomplished by meeting with the DTMB's Project Director, State/Client Agency and possibly others. The Study phase typically requires experienced professionals that can think quickly; know and understand spatial needs, building and construction codes, ADA guidelines; and can provide flexible solutions based on sound engineering principles and judgment.

Research and data gathering is involved to better understand the project's design criteria, requirements, and Owner's desires. Interpreting and analyzing data and other gathered information, coupled with flexible solutions and alternatives will provide a successful solution to the problem in an efficient and cost effective manner. The solution will be defined in enough detail to establish the needs of the program, as well as identify operational, maintenance and other factors. The conclusion to this phase will be a report stating the problem, alternatives considered, conclusion, recommendation(s), cost estimate, if necessary and pertinent discussions and details.

The ***Program Analysis Phase*** will be a continuation of the study phase to amend the Project/Program statement. The Program Analysis will consist of coordination with the DTMB's Project Director, State/Client Agency and possibly others. The primary intent of the Program Analysis is establishment of clear and concise objectives and needs of the Program and other support features for a fully functional project. Utilizing the data from the study phase, coupled with a revised program statement, we will consolidate all data, studies and analyses into a comprehensive program report. The study phase cost estimate will be reviewed, revised if necessary, and submitted for approval so that the budget for the project is adequate to achieve the proposed project program.

The ***Schematic Design Phase*** will establish design criteria, standards, permitting requirements and a basis for principal components, spatial needs, water and waste water flows, pump sizing, and other design elements necessary for the specific project. At this phase, we will provide topographic and property surveys, if necessary and coordinate a site geotechnical investigation.

We will coordination with the DTMB's Project Director, State/Client Agency and possibly others to better establish or confirm physical size, location and arrangement of major elements. We will attempt to identify physical features or hazardous materials on the site that may affect the project design and provide alternative solutions. When critical decisions are made and significant information is obtained, copies will be distributed to the DTMB Project director and all other participants in a timely fashion.

Construction codes, design standards and permitting requirements will be identified and reviewed. Coordination with regulatory agencies and utility companies will be made early in the process. After the site topographic survey is completed, a base map will be prepared and reviewed by the survey crew chief for accuracy, especially any existing underground facilities, environmentally sensitive areas and soil boring locations.

When existing structures need to be evaluated, we will field-check and verify for accuracy the building with the

record drawings for structural, mechanical, plumbing, electrical and architectural components, as necessary for the project functionality.

We will also prepare schematic design drawings or renderings of the proposed project noting proposed features and existing noteworthy features. We will prepare an itemized construction cost estimate and propose a construction schedule. The drawings, renderings, cost estimate and construction schedule will be presented and reviewed with the MDTM Project Director, State/Client Agency and possibly others. The proposed Schematic Design will be revised, as necessary to incorporate design review comments. An appropriate number of copies will be provided to meet the requirements of the project.

The ***Preliminary Design Phase*** is a continuation of the DTMB approved schematic design and leads the project forward toward final design and construction documents. The preliminary design will clearly show the design intent through the use of line diagrams, system layouts, and developed drawings with some design details. The proposed construction schedule and project estimate of costs shall also be reviewed and revised, if necessary to represent the developing project. Draft technical specifications will be prepared to match with the design intent of the project.

The preliminary design phase will include a project "kick-off" meeting typically at the site to introduce key personnel, establish lines of communication, discuss priorities and concerns, to review the approved schematic design, drawings, better define the project scope, and to gather all available information and standard details. Coordination between the DTMB's Project Director, State/Client Agency, regulatory agencies, utility companies and possibly others will be initiated at the beginning of the preliminary design phase to recognize site limitations and construction constraints.

We will confirm the identification of physical features or hazardous materials on the site that may require testing, abatement or removal. We will identify and provide solutions for minimizing the impact of the proposed project while maintaining facility operations. A quality control and constructability review will be conducted by experienced construction engineers and technicians. Preliminary plans and technical specifications will be developed and presented to the project team for review at the 50 percent and 90 percent intervals. During these review meetings, minutes will be taken and distributed to the project team along with pertinent reports, correspondence, and other related items in a timely fashion.

Technical specifications will be drafted for the appropriate divisions in accordance with the Master format outline by the Construction Specifications Institute to match with the defined project scope. Geotechnical investigation will be conducted if it has not already completed in the schematic design phase. Structural, mechanical, plumbing, electrical and architectural calculations will be provided for to size major components.

Preliminary plans including sections, elevations and critical construction details so that an itemized and accurate construction cost estimate can be developed. The construction cost estimate will consider historical unit prices as well and regional and current economic factors. Phasing of construction activities will be considered if to the benefit of the project.

The ***Final Design Phase*** is a continuation of the DTMB approved preliminary design effort and takes the project to the final design component including construction documents. The final design will revise and amplify the preliminary design documents to clearly depict the project requirements with drawings, technical specifications, construction details, construction schedule and other contract documents standard by the DTMB for a complete and constructible project. The contract documents will comply with current regulations, ordinances, construction codes and permits.

After the preliminary design review meeting, we expect to have a clear and concise direction for revising the plans and details. Plans will be revised to reflect decisions made during the preliminary design review meeting. An independent quality control and constructability review will be conducted by experienced construction engineers and technicians. Any remaining changes or alterations will be incorporated into the final bid package.

Permit applications will be prepared and submitted to the required regulatory agencies. A final design bidding package, including plans, technical specification, general and supplemental specifications, contract documents, updated construction estimate and schedule will then be submitted for review.

We will assist the Department in the bidding and contracting process. We will prepare and provide copies of the bidding documents and instructions. Addenda will be issued, if necessary. A review of the construction bids will be performed and a written recommendation will be provided within five business days of the bid opening.

After a Contractor has been selected and is under contract, ***Construction Administration and Field Services*** will begin. During construction, the project engineer retains managerial oversight to provide continuity of design objectives and fully understands the flexibility in the alternatives. This continuity from design through construction is important to a project's success. Our construction services are tailored to each Owner's needs and project requirements. The services typically include contract administration, shop drawings review and approvals, payment approvals, on-site construction observation and materials testing and preparation of record drawings.

At the beginning of the construction phase, we will hold a preconstruction meeting at the sites to introduce key personnel, establish lines of communication and to discuss any construction constraints or permit concerns. Periodic progress meetings will also be held, if necessary, and a final inspection will be conducted near the end of the construction. A final punch list and meeting minutes will be prepared and distributed to the Contractor, DTMB's Project Director, State/Client Agency and possibly others.

Contractor's payment requests, construction schedule and performance will be reviewed. Construction inspections will be conducted periodically as necessary and required depending on the type of project to ensure the Contractor is performing as intended by the Contract Documents.

5 Questionnaire

The DTMB Questionnaire for Professional Services can be found on the following pages.

Questionnaire for Professional Services
Department of Technology, Management and Budget
2023 Indefinite-Scope Indefinite-Delivery – Request for Qualifications
Architecture, Engineering, and Landscape Architecture Services
Various Locations, Michigan

INSTRUCTIONS: Firms shall complete the following information in the form provided. A separate sheet may be used if additional space is needed; please key the continuation paragraphs to the questionnaire. Answer questions completely and concisely to streamline the review process.

ARTICLE 1: BUSINESS ORGANIZATION

1. Full Name: Wade Trim, Inc.

Address: 4241 Old 27 South, Suite 1, Gaylord, MI 49735

Telephone and Fax: (P) 989.732.3584 (F) 833.837.0723

Website: www.wadetrim.com E-Mail: prepasky@wadetrim.com

SIGMA Vendor ID: VWTM9898

If applicable, state the branch office(s), partnering organization or other subordinate element(s) that will perform, or assist in performing, the work: Our Michigan offices are located in Gaylord, Traverse City, Bay City, Flint, Grand Rapids, Taylor, and Detroit. One of the four project managers identified in this proposal will manage DTMB projects and are based in offices to provide responsive and cost effective services throughout Michigan – Gaylord, Traverse City, Flint, and Taylor. The project team identified for each project will be selected based on their expertise that they bring to the team for the scope of work identified. The type of tasks typically included in DTMB projects will generally involve the same group of staff that are familiar with the state's standards. However, the strongest team will be selected. From time to time, this will include staff from each of the offices listed. For some services, such as surveying and construction observation tasks, it is more cost effective to utilize staff from an office closer to the project site. Similarly, there may be instances where the technical requirements for the project can best be met by utilizing the special talents of key staff located in other offices. In those cases, project efficiency is maintained through the use of high speed data connections and an integrated corporate computer network.

If awarded a contract and / or subsequent assignment(s), state the specific SIGMA business address which you would like associated for all communication (Contracts, Contract Order, Contract Modifications and Payments)? 4241 Old 27 South, Suite 1, Gaylord, MI 49735

Please list all person(s) authorized to receive and sign a resulting contract and / or subsequent assignment(s). Please include persons name, title, address, email and phone number.

Brian Sousa, PE, Principal-in-Charge, 10850 East Traverse Highway, Suite 2260, Traverse City, MI 49684, bsousa@wadetrim.com, 231.947.7400

Paul Repasky, PE, Lead Project Manager, 4241 Old US 27 S, Suite 1, PO Box 618, Gaylord, MI 49734, prepasky@wadetrim.com, 989.732.3584

2. Check the appropriate status:

☐ Individual firm ☐ Association☐ Partnership☒ Corporation, or ☐ Combination – Explain: Click or tap here to enter text.

If you operate as a corporation, include the state in which you are incorporated and the date of incorporation: Michigan, 1926

Include a brief history of the Professional's firm: At Wade Trim, we are committed to maximizing the value of your infrastructure investment. For nearly a century, we've been solving complex engineering challenges to create stronger communities. Our work approach is customized to fit each client and project. We use a collaborative, friendly style – built on excellent communication before, during and after your project to deliver solutions you can stand behind. Nationally recognized, Wade Trim provides a wide range of services: engineering design; construction administration, inspection and materials testing, surveying; planning and landscape architecture services. Since being stablished in 1926, we have grown to nearly 600 professionals and support staff located in 19 offices in 10 states, including seven offices in Michigan.

3. Provide an organization chart depicting key personnel and their roles for a typical assigned project. Include generic supporting staff positions.

   An example of what a typical project organizational chart looks like is provided on page 11. Our complete organizational chart for this contract can be found earlier in this proposal on page 5.

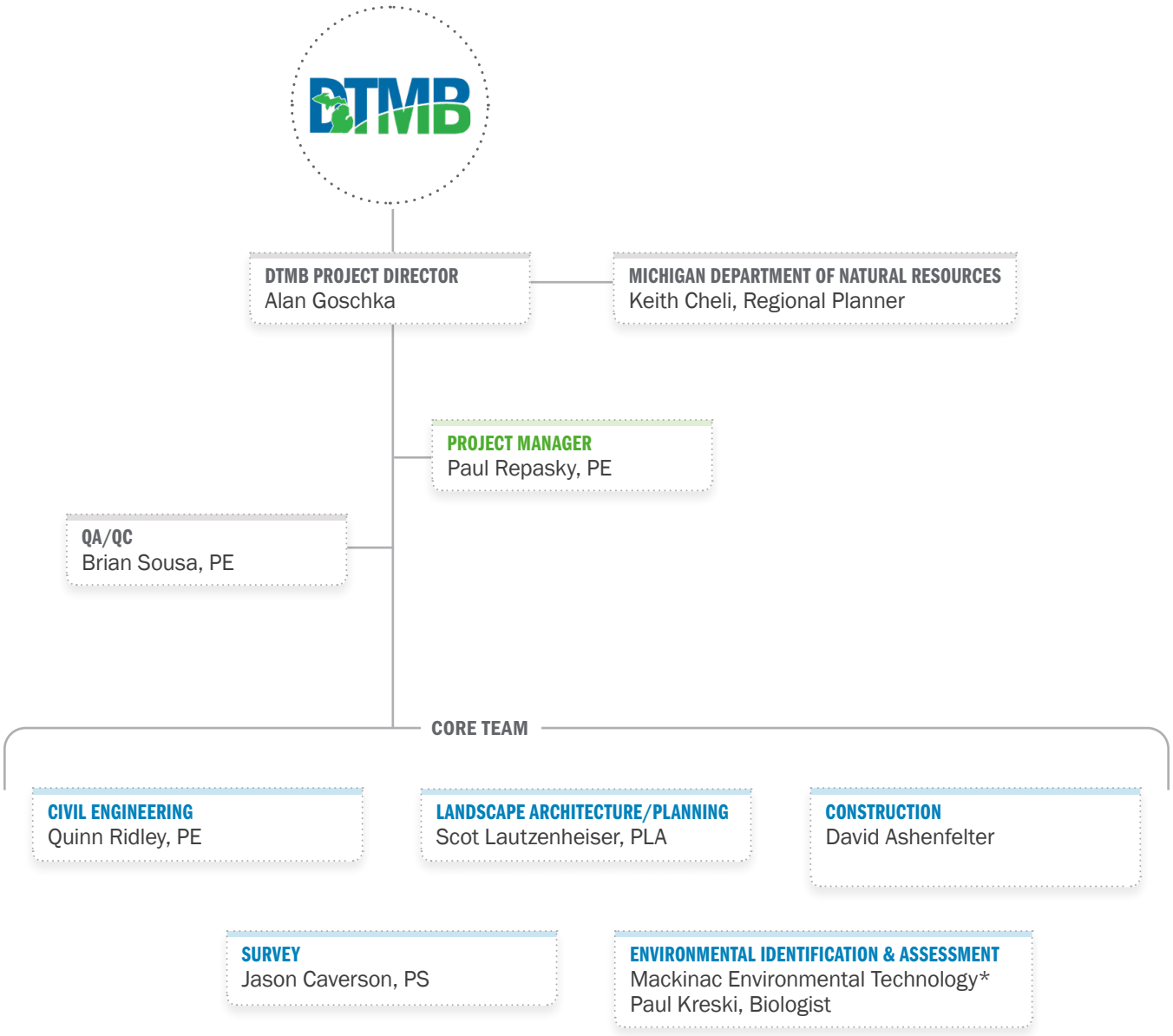
4. Has there been a recent change in organizational structure (e.g., management team) or control (e.g. merger or acquisition) of your company? If the answer is yes: (a) explain why the change occurred and (b) how this change affected your company. No.

5. Provide a four year rate schedule per position.

   Provided on page 12.

EXAMPLE PROJECT ORGANIZATIONAL CHART

Milakokia Lake State Forest Campground
Boating Access Site Design
Gould City, Michigan



*Subconsultant

POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION
2023 Indefinite-Scope Indefinite-Delivery – Request for Proposal
General Professional Design Services
(Architecture, Engineering, Landscape Architecture)

Firm Name Wade Trim, Inc.
Yearly Hourly Billing Rate Increase 3%
Mark-up for Sub-Consultants (not to exceed 5%) 3%
Mark-up for Reimbursables (not to exceed 5%) 3%

	RATE RANGES			
POSITION/CLASSIFICATION	YEAR 1	YEAR 2	YEAR 3	YEAR 4
Paul Repasky, PE Project Manager Professional Engineer V	$210	$216.30	$222.79	$229.47
Kevin Cook, PE Project Manager Professional Engineer V	$210	$216.30	$222.79	$229.47
Troy Andrews, PE Project Manager Professional Engineer III	$160	$164.80	$169.74	$174.83
Garth Bogart, PE Project Manager Professional Engineer I	$120	$123.60	$127.31	$131.13
Brian Sousa, PE Principal-in-Charge Senior Professional	$210	$216.30	$222.79	$229.47
Jennie Benford Administrative Technician Project Aide III	$110	$113.30	$116.70	$120.20
Pam Halcomb Accounting Analyst Project Aide II	$90	$92.70	$95.48	$98.34
Jason Caverson, PS Professional Surveyor Professional Surveyor III	$160	$164.80	$169.74	$174.83
Scott Bliss, PS Professional Surveyor Professional Surveyor III	$160	$164.80	$169.74	$174.83
Nicholas Grim, PS Surveyor Project Specialist IV	$175	$180.25	$185.66	$191.23
Breanna Anderson, PE Civil Engineer Professional Engineer III	$160	$164.80	$169.74	$174.83
Tiffany Harrison, PE Civil Engineer Principal	$260	$267.80	$275.83	$284.10

	RATE RANGES			
POSITION/CLASSIFICATION	YEAR 1	YEAR 2	YEAR 3	YEAR 4
Damian Curry, PE Civil Engineer Professional Engineer III	$160	$164.80	$169.74	$174.83
Jeffrey Reynhout, PE Civil Engineer Senior Professional	$210	$216.30	$222.79	$229.47
Mark Pribak, PE Civil Engineer Senior Professional	$210	$216.30	$222.79	$229.47
Quinn Ridley, PE Civil Engineer Professional Engineer III	$160	$164.80	$169.74	$174.83
Kenneth Schwerdt, PE Civil Engineer Professional Engineer III	$160	$164.80	$169.74	$174.83
Carmelle Tremblay, PE Civil Engineer Professional Engineer III	$160	$164.80	$169.74	$174.83
Robert Breen, PE Structural Engineer Senior Professional	$210	$216.30	$222.79	$229.47
Leon Solowjow, Jr., PE Structural Engineer Senior Professional	$210	$216.30	$222.79	$229.47
Michael Nicolls, PE Structural Engineer Professional Engineer III	$160	$164.80	$169.74	$174.83
Brian Gombos, PE Structural Engineer Senior Professional	$210	$216.30	$222.79	$229.47
Scot Lautzenheiser, PLA Landscape Architect Senior Professional	$210	$216.30	$222.79	$229.47
David Richards, PLA Landscape Architect Professional Landscape Architect II	$120	$123.60	$127.31	$131.13
Catherine Dennis, PLA Landscape Architect Professional Landscape Architect II	#120	$123.60	$127.31	$131.13
Jason Smith, AICP Professional Planner Senior Professional	$210	$216.30	$222.79	$229.47
Arthur Mullen, AICP Professional Planner Professional Planner III	$140	$142.20	$146.47	$150.86
Michael Lynett, PE Construction Engineer Professional Engineer V	$190	$195.70	$201.57	$207.62
David Ashenfelter Construction Technician Construction Technician VI	$145	$149.35	$153.83	$158.44

	RATE RANGES			
POSITION/CLASSIFICATION	YEAR 1	YEAR 2	YEAR 3	YEAR 4
Tyler Tomlinson Construction Technician Engineer III	$110	$113.30	$116.70	$120.20
Brian Scherdt Construction Technician Construction Technician VI	$145	$149.35	$153.83	$158.44
Scott Butkovich Construction Technician Construction Technician VI	$145	$149.35	$153.83	$158.44
Jason Martin Construction Technician Construction Technician VI	$145	$149.35	$153.83	$158.44
Russ Whaley CADD Technician CADD Technician VI	$120	$123.60	$127.31	$131.13
Martin Flanagan CADD Technician CADD Technician VI	$120	$123.60	$127.31	$131.13
Timothy Ruggles CADD Technician CADD Technician VI	$120	$123.60	$127.31	$131.13

ARTICLE 2: PROJECT TYPES AND SERVICES OFFERED

Identify **ALL** project types and professional services for which your firm is exceptionally qualified and experienced.

Provide attachments illustrating a minimum of three examples, with references, of successful projects performed in the last five years for each item checked. Identification of specialties will not exclude selected firms from project types but will assist the DCD Project Directors in matching firms with projects.

The following pages provide recent project examples that Wade Trim has completed in the project types indicated below.

☒ ADA facility assessment and remodeling
☐ Boilers and steam systems
☒ Bridges – pedestrian and vehicular
☒ Building and structure additions
☒ Building envelope investigation, repair, upgrade
☐ Correctional facilities
☐ Door and window replacement
☐ Elevators
☐ Fire and security alarm systems
☒ Fish passage structures
☒ General architectural and/or engineering design
☒ Historical Preservation
☐ HVAC equipment replacement, upgrade, selection
☐ HVAC controls replacement, upgrade, selection
☐ Interior remodeling and renovation
☐ Laboratory facilities
☒ Landscape architecture
☒ Land Planning
☒ Locks, Dams, Water Diking Systems and Water Control Structures
☐ Maintenance and facility preservation
☒ Marine work - boat launch facilities, docks, harbors
☒ Parking and paving
☒ Recreation and Sports Facilities / Fields
☐ Roof repair, restoration and/or replacement design
☒ Soil Erosion Sedimentation Controls
☒ Site surveying
☒ Stormwater management and drainage plans
☒ Structural investigation and assessment
☒ Toilet and/or shower room remodeling or design
☒ Trail design and development
☒ Wastewater systems
☒ Water supply systems

WADE TRIM PROJECTS AND REFERENCES

ADA Facility Assessment and Remodeling (completed within various projects below)

Bridges – Pedestrian and Vehicular

Merriman Road over Tarabusi Drain, Wayne County Department of Public Services, Wayne County, MI

Merriman Road over the Tarabusi Drain is currently a three-span, continuous flat slab bridge. The abutments are pile-supported, cast-in-place retaining walls, and the piers are cast-in-place, concrete piles with concrete pile caps. Due to the poor condition of the flat slab and the substructure's inability to carry current design loads, the bridge which had been slated for a superstructure replacement is now being revised to a bridge replacement project. The proposed superstructure will be a single span bridge, using ten, 27-inch by 48-inch prestressed concrete spread box beams to carry the 64-foot clear roadway width and two, 6-foot sidewalks. The bridge will be designed per current AASHTO LRFD standards using the MDOT HL-93 Modified loading. A hydraulic analysis has been completed to be sure of adequate hydraulic capacity and to address scour. The abutments will be pile-supported, cantilevered concrete retaining walls with pile-supported, 90-degree return walls. Due to high traffic volumes, the bridge will be constructed part-width.

Client: Wayne County Department of Public Services
Contact: Ali Aljawad, PE, Project Manager
Phone: 734.858.2764

Middlebelt Road over Bell Creek, Wayne County Department of Public Services, Wayne County, MI

The existing Middlebelt Road over Bell Creek is a two-span bridge that consists of mixed design because of widening of the original 1930 bridge in the mid-1960s. This resulted in a mix of substructure and superstructure designs. Due to a number of structural and functional deficiencies, it was decided to replace the bridge. Wade Trim was selected to oversee design of the replacement structure. The new bridge will be a single-span structure using 27-inch spread box beams on pile-supported integral abutments. The clear roadway width has been increased from its current 60-foot, 5 inches to 64-feet. Sidewalks are being retained on both sides of the bridge. The bridge has been designed to current AASHTO LRFD standards. A load rating is required for all bridge design projects. Wade Trim performed the required load rating of the proposed Middlebelt Bridge using Load Resistance Factor Rating (LRFR) per FHWA and MDOT requirements. HL-93 truck loads were analyzed for Federal Inventory and Operating Ratings and Michigan legal loads were analyzed for Michigan Operating Ratings.

Client: Wayne County Department of Public Services
Contact: Ali Aljawad, PE, Project Manager
Phone: 734.858.2764

Building and Structure Additions (completed within various projects below)

Building Envelope Investigation, Repair, Upgrade

Partial Roof Assessment, City of Taylor Sportsplex, Taylor, MI

Wade Trim was retained by the City of Taylor to perform a structural analysis of a portion of the existing roof at the Taylor Sportsplex. The roof area in question is identified on as the refrigeration area. The existing rooftop condenser unit was proposed to be replaced. However, the proposed evaporative condenser unit was heavier than the existing due to changes in the unit design. It was determined there was an uncertainty as to whether or not the existing roof beams could support this heavier load. After obtaining cut sheets of the proposed refrigeration equipment, a field review of the roof area in question was conducted. It was noted that with the existing system, there was a propensity for ice buildup on the roof area adjacent to the unit. This ice buildup was incorporated into the analysis in addition to any code required snow load on the roof.

Based on the plan reviews and structural analysis of the impacted roof beams, it was determined the existing structural steel was capable of carrying the imposed loads of the proposed condenser along with all existing dead and live loads. The beams met strength and deflection criteria. A successful installation of the new equipment was completed the following spring (2021).

Contact: Darin Grabowski, TSX Manager
Phone: 734.374.8900

Former Star Movie Theater Complex, Structural Investigation, City of Taylor Building Department, MI

The City of Taylor retained Wade Trim to perform a structural investigation of a former 10-screen movie theater that had been closed for the past 10 years. The City wanted to determine if the structure was structurally sound or if major problems existing that may require condemnation. The complex was comprised of three sections. There were two wings with five theater rooms in each wing. The center section was a two-story atrium where tickets were sold and the main concessions had been. The framing consisted of structural steel supporting the metal roof deck. In each wing, there were also load bearing masonry block walls that supported the mezzanine areas where the projection rooms were located.

The resulting eight assessment report, including photos, presented to the city indicated that while other non-structural elements of the former movie theater were in a significant state of disrepair and damage, the structural portion was in relatively good condition with no need for major structural rehabilitation required. It was noted that condemnation of the building from a structural perspective was not critical.

Contact: Christopher Gibbs, City Engineer
Phone: 734.287.6550

Fish Passage Structures

Townline Creek Dam Removal, MDNR, Wildlife Division, Clare County, MI
Design and construction services for the complete removal of an 8-bay concrete dam overflow structure and earthen dike dam. Design tasks included developing alternative construction access through State Forest property, evaluating stream geomorphology to restore Townline Creek to near it original geometry, final grading, plunge pool filling, and stream restoration with the use of live stakes and root wades.

Contact: Keith Fisher
Phone: 989.965.1297

Little Mud Lake Dam Removal - MDNR Wildlife Division, Roscommon County, MI
Design and construction services for the complete removal of a four-bay concrete dam overflow structure and earthen dike dam. Design tasks included evaluating stream geomorphology to restore Backus Creek to near it original geometry, final grading, and stream restoration with the use of native planting. EGLE permitting included a Basis of Design addressing HEC-RAS stream modeling and analysis, stream hydrology and hydraulics. A project assessment identifying both positive and negative impacts and implementation of best management practices to minimize impacts on the adjacent natural resources including sediment transport and construction sequencing was prepared.

Contact: Keith Fisher
Phone: 989.965.1297

Denton Creek Dam Removal - MDNR Wildlife Division, Roscommon County, MI
Design and construction services for the complete removal of a single bay concrete dam overflow structure and earthen dike dam. Design tasks included evaluating stream geomorphology to restore Denton Creek to near it original geometry, final grading, plunge pool filling, and stream restoration with the use of native planting. EGLE permitting included a Basis of Design addressing HEC-RAS stream modeling and analysis, stream hydrology and hydraulics. A project assessment identifying both positive and negative impacts and implementation of best management practices to minimize impacts on the adjacent natural resources including sediment transport and construction sequencing was prepared.

Contact: Keith Fisher
Phone: 989.965.1297

General Architecture and / or Engineering Design

Engineer of Record – East Bay Township, MI
Wade Trim has been the Engineer for East Bay Township since 2007. In that time, we have helped them in just about every facet of the Township from planning/zoning to large infrastructure projects, to handling daily questions from staff and project estimates. East Bay Township shared municipal boundaries with the City of Traverse City, has its own potable water system and sanitary sewage collection system.

Water System Expansion
Wade Trim led the Township through the preliminary investigation, funding, design, permitting, construction, and closeout of a $5M water system expansion project.

Completed in 2019, this was needed to improve system reliability and to prepare for the large development boom the Township has been seeing. Engineering-wise the project involved developing a new well field for the Township (to add to the two others already in place), the design of a new elevated water storage tank, well house, injection equipment, and approximately 4 miles of water main through existing neighborhoods.

Park Improvements
Wade Trim has assisted the Township with many park improvements including new bathrooms and paving design at their Grace MacDonald Park, to the design of an ADA compliant kayak and canoe launch at their Gens Park waterfront facility. We have also completed design of a new seawall at the Arbutus 5 Park, along with completing a development assessment for a new bathroom and drain field.

Wastewater Analysis
Wade Trim is assisting the Townships of East Bay and Acme in Grand Traverse County to direct their sewage flow through the city's adjoining townships to discharge flows to the wastewater treatment plant. As the Engineer of Record for East Bay Township, Wade Trim was asked to determine the current contractual methods of billing and the accuracy of the meter utilized for establishing flows and therefore revenues. The county DPW has also asked that Wade Trim review the formulas used to approximate flows for sewage contributions from non-metered Acme Township sewage contributions in a different part of the Township.

Water Tank Rehabilitation
Working as the Township Engineer for East Bay Township, Wade Trim recently assisted this municipality with assessing the condition of their two existing steel elevated water storage tanks. The Cherry Ridge and English Woods tanks were aged and needed to be inspected to determine if rehabilitation was required and if so, how much the improvements would cost. Because inspecting an elevated water storage tank requires special licenses, training, and expertise, Wade Trim contracted with a specialty tank inspection firm to complete the review of the tanks and make a recommendation about their condition. Based on the inspection, several items were in need of updating including exterior painting (both tanks), interior painting (one tank only) and various other upgrades to the cathodic protection system, safety railings, and rooftop hatches. Currently, Wade Trim is working with the Township to wrap the outlined improvements into a larger project including a new elevated water storage tank, expansion to their water treatment plant, and the installation of transmission main to help loop the system to create a safer and more reliable system.

US-31 Sidewalk
Wade Trim completed the design and construction administration of the installation of over 3,000 feet of new sidewalk along US-31 in East Bay Township. The project required coordination and permitting with MDOT to meet their applicable standards, minimize impact to existing MDOT infrastructure and meet improvements constructed as part of a separate MDOT Road improvement project.

Contact: Beth Friend, Supervisor
231.947.8647

Engineer of Record – Filer Charter Township, MI
In 2013, Wade Trim was brought on as the Township's engineer to help with many items on their plate including water and wastewater items.

US-31 Corridor Analysis and Opportunities Plan
Wade Trim was the lead consultant for the Analysis and Opportunities Plan along the US-31 Corridor from 12th Street to Red Apple Road. This project included a detailed study of the immediate corridor and the surrounding areas, multiple public studios to engage the community and gather support for various improvements, and development of design solutions and renderings. After obtaining community input, it was clear that the project limits needed to expand beyond the immediate corridor to not only plan the pedestrian connections to the adjacent uses, but also to also identify opportunities to improve land which is currently underutilized. Improvements that were identified during the design process included sidewalks, trails, boardwalks, green infrastructure, landscaping, future land use and architectural recommendations, service drives, pocket and linear parks, trails, access drive management, intersection improvements, crosswalks, site amenities, lighting, gateways, greenways, increased parkland and open space, relocated town hall and village green, neighborhood connections, and other aesthetic improvements. In addition to these improvements being identified as being critical to the plan, the community also identified the type of character and visual qualities for these improvements.

Wastewater Collection System
Wade Trim was retained by Filer Charter Township to provide guidance in getting a sanitary sewer system designed and constructed in their commercial corridor along US-31. They have had a municipal water system for many years but have never been able to get the sanitary sewer system off the ground. Wade Trim completed a sanitary sewer master plan for the Township. This plan helped the Township determine their core development and residential areas and then helped break these areas into Phases. Wade Trim was able to help the Township plan for their new system financially and contractually, culminating in a $3 million grant being offered through Rural Development in late 2014. These grant dollars coupled with a low interest loan through Rural Development provided a fully funded project. The services provided by Wade Trim in this endeavor were planning, public participation, funding, negotiations, survey, design, permitting, construction oversight and testing.

Contact: Terry Walker, Supervisor
Phone: 231.723.3138

Lake Mitchell Sewer Authority
Wade Trim completed funding assistance along with the design, permitting and bidding of the Lake Mitchell Wastewater Collection system rehabilitation project. This involved the rehabilitation of 215 duplex grinder stations and seven duplex submersible sewage lift stations. This project is currently out for bids.

Contact: Bob Hilty, Chairman
Phone: 231.775.0155

Riverside Park, General Services Department, City of Detroit, MI

Wade Trim provided design services for the redevelopment of the Riverside Park, Phases 3 & 4, located along Detroit's Riverfront. The park is split into Phase 3 on the west and Phase 4 on the east sides of West Grand Blvd. which is also being reconstructed into a pedestrian promenade to connect both sides of the park. Phase 3 features new fishing piers, a sledding hill, pavilion, "Fisherman's" parking lot, and performance stage. Phase 4 boasts a great lawn, comfort station building, splash pad and playground, exercise station, parking lot, pavilions and picnic seating, and direct access to the Riverwalk. Our team worked closely with the City's General Services Department Landscape Architects to determine the most functional layout for all of the park amenities and prepared plan packages for permitting and construction.

Wade Trim provided services such as site analysis of existing conditions, site planning and layout, grading design and site balancing, stormwater drainage and flood control, utility design and coordination, landscape design, electrical design, structural design, permitting assistance, and construction assistance. We also provided concrete jointing plans, soil erosion and sedimentation control plans, ADA compliance, and sledding hill design. This project required a high level of coordination not only with the client, but also with two other adjacent projects, permitting departments, and other City departments such as the Detroit Fire Department and Water and Sewerage Department. Due to direct stormwater outlet to the Detroit River, the project did not require EGLE or GLWA permitting, but it did go through a robust review with the City's Stormwater Management Group for approvals. The project is currently in construction and on schedule for a late-summer opening.

The park had many design challenges, from environmental conditions to adjacent project coordination, which Wade Trim approached with collaboration and creativity. The site required a Due Care Plan and a cap of clean fill throughout all disturbed areas and utility trenches, so the site included strategic areas of fill in order to reduce earthwork costs. The project included utilities such as domestic and fire water, sanitary sewer, stormwater management, electrical and lighting, and irrigation that was coordinated between both phases of the project. Details such as hardscape finishes, parking layout and sidewalk paths, site furniture and lighting, ADA access, and drainage were put together with park visitors in mind – to provide a functional, and attractive new park for the City's residents and visitors. For the client, ease of maintenance and longevity were top priorities, so the selection of pavements, walkways, landscaping materials, and drainage solutions were key factors in the future operations of the park.

Contact: Tim Karl, ASLA, Chief of Landscape Architecture
Phone: 313.224.3484

Historical Preservation (completed within various projects below)

Landscape Architecture

Riverside Park, General Services Department, City of Detroit, MI

Wade Trim provided design services for the redevelopment of the Riverside Park, Phases 3 & 4, located along Detroit's Riverfront. The park is split into Phase 3 on the west and Phase 4 on the east sides of West Grand Blvd. which is also being reconstructed into a pedestrian promenade to connect both sides of the park. Phase 3 features new fishing piers, a sledding hill, pavilion, "Fisherman's" parking lot, and performance stage. Phase 4 boasts a great lawn, comfort station building, splash pad and playground, exercise station, parking lot, pavilions and picnic seating, and direct access to the Riverwalk. Our team worked closely with the City's General Services Department Landscape Architects to determine the most functional layout for all of the park amenities and prepared plan packages for permitting and construction.

Wade Trim provided services such as site analysis of existing conditions, site planning and layout, grading design and site balancing, stormwater drainage and flood control, utility design and coordination, landscape design, electrical design, structural design, permitting assistance, and construction assistance. We also provided concrete jointing plans, soil erosion and sedimentation control plans, ADA compliance, and sledding hill design. This project required a high level of coordination not only with the client, but also with two other adjacent projects, permitting departments, and other City departments such as the Detroit Fire Department and Water and Sewerage Department. Due to direct stormwater outlet to the Detroit River, the project did not require EGLE or GLWA permitting, but it did go through a robust review with the City's Stormwater Management Group for approvals. The project is currently in construction and on schedule for a late-summer opening.

The park had many design challenges, from environmental conditions to adjacent project coordination, which Wade Trim approached with collaboration and creativity. The site required a Due Care Plan and a cap of clean fill throughout all disturbed areas and utility trenches, so the site included strategic areas of fill in order to reduce earthwork costs. The project included utilities such as domestic and fire water, sanitary sewer, stormwater management, electrical and lighting, and irrigation that was coordinated between both phases of the project. Details such as hardscape finishes, parking layout and sidewalk paths, site furniture and lighting, ADA access, and drainage were put together with park visitors in mind – to provide a functional, and attractive new park for the City's residents and visitors. For the client, ease of maintenance and longevity were top priorities, so the selection of pavements, walkways, landscaping materials, and drainage solutions were key factors in the future operations of the park.

Contact: Tim Karl, ASLA, Chief of Landscape Architecture
Phone: 313.224.3484

Greenmead Historic Park Master Plan, City of Livonia, MI

Greenmead Historical Park is a 95-acre historical park operated by the City of Livonia's Parks and Recreation Department. A key component of this project is to draft a 5- to 20-year master plan through robust community engagement that will

develop a mission and vision for the historic park in addition to goals and objectives for the Master Plan.

The park includes the almost 200-year-old underutilized historical Greenmead Farm and its outbuildings, a 13-building historical village, Greenmead community gardens, Virginia B. Matley Nature Trail, and soccer fields. Special events are hosted on the grounds of the historical village including weddings.

This unique and important treasure trove of history needed to be able to better serve the residents of Livonia and Metropolitan Detroit. Wade Trim was contracted to lead a team consisting of experts in several specialized areas including historic preservation and public engagement, landscape architecture and urban design, historic architecture, collections and archiving, construction management, and budgeting. The balance of preserving history and drawing visitors is always a tough design dilemma. Due to the complexity of this effort, the City chose Wade Trim, along with others, to create an experienced and diverse team to understand specific issues and concerns so that our expertise can lead the way on the Greenmead 20-year master plan.

Site planning and a future programming plan will be developed through evaluation of results of public engagement efforts (including graphic design of logos and other material for the online public engagement) and interaction with municipal leadership. A capital improvements plan will be developed as well as evaluating the existing collections, accession/deaccession plan, collections plan, and a curatorial plan for the complex.

Contact: Ted Davis, Superintendent
Phone: 734.466.2298

Flint River Restoration, Genesee County Parks and Recreation, MI
Wade Trim led a team of consultants in the development of a preliminary design for restoration of the City of Flint's downtown riverfront. City leaders recognized an opportunity to reshape the entire riverfront downstream from the Hamilton Dam. A project approach was formulated that sought to engage key stakeholders in order to identify a cost-effective solution that made the best and most balanced use of area resources. The project built upon the momentum created through past planning and design studies and the hard work of a variety of agencies and community groups.

The restoration plan for the riverfront embraced design objectives for physical improvements to the Flint River that would transform the corridor with water-based recreation, improved stormwater/flood control, enhanced ecosystem restoration, and community connectivity. The recommended design for the riverfront would provide for an improved physical relationship between the built environment and the river by creating green edges that engage the river rather than isolate it, allowing for passive recreational pursuits such as kayaking, walking and picnicking.

The restoration plan emphasized the return of the natural river corridor, providing recommendations for restoring the balance between nature and people as well as ecology and urban design. Downstream in the area known as "Chevy in the Hole," where a concrete channel was constructed along an approximately one mile segment of the Flint River, the south bank of the river would be reshaped and the

channel would be realigned to a more natural river terrace cross-section and meander pattern that would serve as a natural floodplain during flood events.

To lead the City and other stakeholder groups through the implementation process, the project included a detailed implementation strategy. A management and operations plan for the riverfront was developed to provide a roadmap for the way forward. Detailed construction cost estimates were developed and a plan for construction phasing and sequencing was outlined. Finally, an overall strategy for project funding was developed.

Contact: Mark Adas, PE, City Engineer
Phone: 810.766.7135

Land Planning

Master Plan, Economic Development Plan, and Marketing Strategy, Linden, MI
Wade Trim has served as the City's planning consultant since 2011. Since that time, we have helped the City implement key strategies from the 2010 Master Plan – most notably, we assisted the City and its DDA to establish a Downtown Action Plan in 2014 which established a framework for downtown investments. Following the plan, the City's downtown has witnessed significant new private investment in recent years, including the construction of a new mixed-use building at the site of the former "Union Block" which had been sitting vacant since being destroyed by fire in 2008.

After engaging in the Michigan Economic Development Corporation (MEDC) Redevelopment Ready Communities (RRC) program, the City received technical assistance funding to prepare a new Master Plan, Economic Development Strategy and Marketing Strategy. Wade Trim is currently leading this project with assistance from CIB Planning. The planning effort has included significant public engagement, including generating nearly 625 comments from residents and stakeholders as part of an online community survey. Key elements of the new Master Plan include a Circulation Plan, which builds upon both local and regional initiatives to transform Linden's streets into safe and efficient routes supporting multiple modes of travel, including vehicular, bicycle and pedestrian.

A new Redevelopment Ready Sites element of the Master Plan envisions several underutilized sites on the edge of downtown being transformed into mixed-use spaces. The Economic Development Strategy and Marketing Strategy components of the effort put the City in a strong position to implement the vision of the new Master Plan, with specific economic development resources and branding strategies identified to drive new public and private investments.

Contact: Ellen Glass, City Manager
Phone: 810.735.7980

Marine City Highway Corridor Study, St. Clair County, MI
Wade Trim was selected by St. Clair County in Michigan to prepare a Corridor Study for Marine City Highway. Marine City Highway is a two-lane county road that stretches for 11-miles across the county. The west end of the corridor is adjacent to Macomb County, where a considerable amount of new development has occurred surrounding the freeway interchange at I-94. The next inevitable step is for this new

growth to cross over the county line and into the corridor. This presents a significant opportunity for St. Clair County to capture new investments that will lead to new jobs and tax base. However, the corridor is largely rural and agricultural and has very limited road and infrastructure capacities to support new development. Recognizing this opportunity, the county used some of its American Rescue Plan Act (ARPA) funding to prepare the Corridor Study and anticipates using additional ARPA funds for future implementation activities, such as water and sewer improvements.

Requiring a multi-disciplinary team approach, the Corridor Study featured a detailed analysis of land use, traffic, infrastructure and market opportunities. Public engagement was also a key component of the planning process. The engagement opportunities were very well attended, as local citizens expressed their desire to manage growth and maintain rural character. Earlier this November, our team hosted a public open house to present our key recommendations, which included a strategy to accommodate high-tech manufacturing and logistics uses within the western third of the corridor.

Contact: Dave Struck, AICP, Planning Director/Deputy County Administrator
Phone: 810.989.6950

Master Plan, City of Durand, MI
A robust community engagement effort was deployed to build an understanding of the desires of the community. This included a public survey with over five percent of the City's population responding, followed up by an Envision Durand day that included several invited specific-interest focus groups during the day with a public workshop in the evening. The results of these engagement activities provided guidance to the Master Plan's Steering Committee and direction regarding its assessment of the City's earlier Master Plan goals and objectives.

The plan utilized the MEDC's Redevelopment Ready Community approach to focus the City's efforts on considering land use changes to support redevelopment. The Plan recognizes that the City is well located between the cites of Flint and Lansing with exceptional rail and freeway access. A Redevelopment Strategy chapter identified a three-prong approach to further development within the City including:
1) Identification of six RRC sites within the downtown, designed to leverage investment while supporting the creation of a more vibrant downtown district;
2) Revising the City's Future Land Use Map to allow for Mixed Us and Mixed Use Downtown land uses in and adjacent to the downtown core; and
3) Identification of two large areas northeast and southwest of the downtown that are well prepped for heavy and light industrial uses.

Recognizing the impacts of climate change, the Plan included a chapter titled Improving Sustainability & Increasing Resiliency, which identifies eight areas and dozens of opportunities for the City to take active steps to promote or engage in sustainable actions. This sustainability chapter supports the City's recently adopted Nonmotorized Transportation Plan that was designed to be implementable while connecting parts of the City separated by the railroad tracks while ensuring connectivity to its neighboring communities.

The Master Plan culminates with a Strategic Implementation Plan that identifies a select number of direct actionable steps that are under the auspices of the Planning

Commission and the City administration. These steps were prioritized into activities that build upon each other and ranked by priority.

Client: City of Durand
Contact: Cameron Horvath, PLA, City Manager
Phone: 989.288.3113

Locks, Dams, Water Diking Systems and Water Control Structures

Various Projects for the Michigan Department of Technology, Management & Budget

- Houghton Lake Flats Dike Evaluation and Improvements
- Backus State Game Area Dams, Removal, Repair and Reconstruction
- Kawkawlin Creek Wildlife Flooding Dam Control Structure Replacement
- Molasses River Flooding Control Structures, Dam #2 and #5
- Stoney Creek Dam Control Structure Repairs
- Cannon #1 Flooding, Control Structure Inspection and Tube Repair
- Dog Lake Wildlife Flooding – Dam Repairs
- Foch Lake Flooding – Dam Renovation
- Townline Dam Repair
- Big Creek Impoundment Repairs
- Molasses River Flooding Control Structures, Dam #2 and #5

Contact: Keith Fisher, Wildlife Biologist
Phone: 989.965.1297

Marine Work - Boat Launch Facilities, Docks, Harbors

Milakokia Lake SFCG BAS – Site Improvements, DTMB/Michigan Department of Natural Resources-Parks and Recreation Division, Gould City, MI

Wade Trim worked with the MDNR and MDTMB to develop a site layout that would best utilize the available space of the Milakokia Lake SFCG BAS site while providing a design that was minimally impactive to the natural setting. The proposed site plan developed space for additional vehicle trailers and improved circulation for vehicle trailers. The project includes site grading, new aggregate parking and drive surfaces, concrete ADA access parking and walks, a new vault toilet and associated restoration and is anticipated to begin construction in the Fall of 2023.

Contact: Keith Cheli, Regional Field Planner
Phone: 989.370.1907

Black River BAS – Site Improvements, DTMB / Michigan Department of Natural Resources-Parks and Recreation Division, Cheboygan, MI

Currently in the design process, Wade Trim is working with the MDNR and MDTMB to provide design recommendations for the proposed Black River BAS which includes 43 parking stalls for vehicle trailers, a new double cast-in-place concrete boat ramp, and naturalized stormwater detention. Working with the Owner, Wade Trim attended a public open house to garner feedback from the community including the Black Lake Preservations Association and discuss with the Owner to incorporate public comments into the design. The first phase of the project includes new paved parking and drive lanes, cast-in-place concrete boat ramp, concrete sidewalks, two vault toilets, solar lights, natural landscaping and site restoration. The site currently

includes designated space for food trucks, broadside mooring, and a waterless boat wash station for potential future buildout.

Contact: Keith Cheli, Regional Field Planner
Phone: 989.370.1907

Bellevile West BAS – Site Improvements, Michigan Department of Technology, Management & Budget, Belleville, MI
Wade Trim is currently working with the MDNR and MDTMB to provide design improvements to the existing Belleville West BAS. Two desires of the owner are the lack of a designated kayak/canoe launch and ADA access routes that are not in compliance with ADA requirements. Wade Trim is working to address client concerns with new ADA parking and access routes and an aesthetic kayak/canoe launch that is more convenient for visitors. The project also includes replacing the existing precast concrete plank boat ramp with a new precast concrete plank boat ramp and additional parking for visitors.

Contact: Joe Strach, Regional Field Planner
Phone: 517.749.3641

Center Road Boat Launch (AKA East Arm Boat Launch), DNR Park and Recreation Division, MI
This project was completed for the DTMB and DNR to reconstruct and expand their existing boat launch, adding more trailered parking spaces, improve vehicular and pedestrian circulation and to relocate the existing vault toilets, all while meeting ADA access requirements.

Contact: Annamarie Bauer, Regional Field Planner
Phone: 231.775.9727

Bower's Harbor Boat Launch, DNR Park and Recreation Division, MI
This project was completed for the DTMB and DNR to reconstruct and expand their existing boat launch, adding more trailered parking spaces, improve vehicular and pedestrian circulation and to relocate the existing vault toilets, all while meeting ADA access requirements.

Contact: Annamarie Bauer, Regional Field Planner
Phone: 231.775.9727

Parking and Paving

Alpena Fisheries Research Station, Site and Parking Area Improvements, DTMB / Michigan Department of Natural Resources-Fisheries Division Alpena, MI
Wade Trim worked with the MDNR and MDTMB to develop multiple alternatives for replacing settling/failing concrete sidewalk and asphalt pavement at the MDNR Alpena Fisheries Research Station located along the shoreline of the Thunder Bay River in Alpena, MI. The new sidewalks and asphalt parking areas were designed to be ADA compliant. The project also included new catch basins, storm manholes, storm sewer, underdrain, and site restoration.

Contact: Todd Wills, Area Research Manager

Phone: 586.904.2058

Camping World Houghton Lake – Site and Parking Area Improvements, Houghton Lake, MI
Currently in design process, Wade Trim is working with Ghafari Associates and the owner of the site, Camping World, to design additional paved parking areas for customers, employees and trailer staging areas. The project included stormwater management, new chainlink fencing, concrete approach aprons for the new building addition, and pavement recommendations.

Client: Ghafari Associates
Contact: Matt Van Wienen, Senior Project Architect
Phone: 616.265.6525

R&L Carriers – Site and Parking Area Expansion, Roscommon, MI
Wade Trim worked with R+L Carriers to design a site expansion for the multi-bay addition of the R+L Carriers Roscommon Facility. The project consisted of additional asphalt parking, drive aisles and concrete approach aprons. Additionally, stormwater management was a significant factor in developing a functional site that could handle the additional runoff produced by the increase in paved area. The project also included site plan and permitting approvals for the new development, new concrete and riprap spillways, concrete approach aprons, addition of septic field for the new bathroom, tree clearing and site restoration.

Client: R+L Carriers
Contact: Neil Mullins, PE
Phone: 800.543.5589 ext. 1750

North Campus Parking Lot 7, University of Michigan, Ann Arbor, MI
Wade Trim provided numerous planning and design tasks for a new parking lot located on the University of Michigan's North Campus. Wade Trim created site planning concepts and cost analysis for a variety of parking lot layout options, environmental planning of tree impacts,
imperviousness, stormwater management modeling, detailed civil engineering design, and solar panel study for the new lot.

The project design included tree removals, pavement removals, curb cuts for a new driveway, regrading of the site and installation of asphalt pavement, concrete curbs, and sidewalk. Other enhancements included pedestrian and parking lot lighting, motorcycle parking, convenient pay station pad, and a new storm system and detention pond with infiltration.

Contact: Patti Spence
Phone: 734.260.2958

Recreation and Sports Facilities/Fields

Beck Ball Field Improvements, Van Buren Township, MI
Wade Trim was the Lead Designer for improvements to an existing Beck baseball field facility occurring over multiple phases. Project included fencing improvements, new dugouts, extensive tree plantings to provide shade for spectators, pavilions,

restroom and concession building renovations, playgrounds, drainage improvements, and walking pathways.

The new sidewalks and structures were all designed to be universally accessible. The pavilion design and layout was specifically oriented to take advantage of multiple field views while having enough spatial separation for safety reasons. A coordinated theme was carried through the improvements, including color schemes for the new dugouts and modifying the existing dugouts to match. Native tree species were selectively placed throughout the park in locations which did not impact game play or spectator view sheds. The playground was designed to serve multiple age groups while being placed in a central location which promoted use and ease of connectivity to each field.

Contact: Ron Akers, Planning and Economic Development Director
Phone: 734.699.8913

Soccer and Lacrosse Field, Eastern Michigan University, Ypsilanti, MI
To support Eastern Michigan University's growing athletic program, a joint-use turf field was added for soccer and lacrosse competitive game use. Wade Trim provided engineering services for design and construction. Design met NCAA requirements and included installation of soccer and lacrosse nets, athletic player pads, and shot clocks. Electric conduit and wiring was required to power the provided shot clocks on site and additional conduit was included to support future electric and communication needs. Construction of storm sewer and grading was required to provide appropriate drainage for the field. Construction of a storm water detention pond was included in the design on the south side of the site.

Contact: Scott Storrar, Executive Director of Facilities, Planning, Maintenance and Construction
Phone: 734.487.3591

Marching Band Field, Eastern Michigan University, Ypsilanti, MI
Wade Trim provided engineering services to complete the design and restoration of the practice marching band field at Eastern Michigan University. The field design was graded to remediate existing depressions and slopes that served as a tripping hazard. The restored marching band field was designed to include a new irrigation system that connected into the existing system. The proposed irrigation system spray radius includes the entirety of the marching band
field surface. Once subsurface construction and grading was complete the site was restored with sod.

Contact: Scott Storrar, Executive Director of Facilities, Planning, Maintenance and Construction
Phone: 734.487.3591

Soil Erosion Sedimentation Controls (completed within various projects above)

Site Surveying (completed within various projects above)

Stormwater Management and Drainage Plans (completed within various projects above)

Structural Investigation and Assessment (completed within various projects above)

Toilet and/or Shower Room Remodeling or Design (completed within various projects above)

Trail Design and Development

Buffalo Ridge Trail Improvements, Charter Township of Garfield, MI

Wade Trim led design for a one-mile extension of the Buffalo Ridge Trail, the premier trailway to connect the west and southwest areas of the Traverse City urban area to expansive recreational opportunities including a 60-mile trail network, multiple parks and natural areas, schools, businesses, and beachfront. This trail extension will provide a critical and safer connection between Traverse City West Middle Schools, the new YMCA facility, and Garfield Township's Kids Creek Park.

The preliminary design phase for this project included topographic survey, geotechnical investigations, wetland delineation, trail centerline routing in the field, preliminary trail layout and cost estimating, and stakeholder and public meetings. Following the preliminary design phase, Wade Trim completed final design and construction documents and obtained all necessary permits including the wetland permit application from the MDEQ.

Working within the context of the land was critical on this project. Steep slopes, wetlands, safety concerns regarding the adjacent buffalo field, poor soils, and stream crossings were all considered during the routing of the trail. The final solution provides a sustainable and safe trail for the sensitive site while minimizing disturbance and maximizing user experience. An important asset during the project was the ability of the Project Manager to graphically translate the trail routing onto the topographic survey and aerial. Development of cross section renderings also helped in obtaining understanding and buy-in for the trail project during public meetings.

Contact: Rob Larrea, Planning Director
Phone: 231.941.1620

Contact: Julie Clark, TART Trails Executive Director
Phone: 231.941.4300

Ann Arbor Trailhead Design, Wayne County Parks, MI

As the prime consultant, Wade Trim was tasked with turning a large woodsy area into an alluring recreational space that would serve the local community. As a result, we prepared the design plans and performed construction services for the construction of the $1.3M Hines Park Greenway Connector at Ann Arbor Trail Road.

This project included construction of 0.4 miles of non-motorized paved trail, an 80-foot shared-use bridge across the Middle Rouge River, 0.1 miles of aggregate foot trails to adjacent natural resource hiking trails, fishing and canoe/kayak access areas, trailhead parking, and green stormwater management controls. Other additions to improve experiences within the park included picnic and barbecue areas, an information kiosk and map along the trail, and a bike repair station.

Wade Trim also included landscape architecture services on this project. The work done by landscape architects included topographic survey, tree survey and removal, native tree and shrub planting design, as well as drafting and providing graphic representation of landscape design plans. This was an MDOT local agency project. Clearances from the State Historic Preservation Office were secured due to potential historic resource impacts. In addition, local and state environmental permits were secured. The project was funded by the MDNR Trust Fund, MDOT TAP Program and Wayne County.

Contact: Elizabeth Iszler, ASLA, Chief of Planning and Design
Contact: 734.261.4312

I-275 Metro Trail Study, Michigan Department of Transportation, MI
Wade Trim and livingLAB are currently working together for MDOT on an assessment of 24.8 miles of the I-275 Metro Trail in Wayne County. The trail, originally built in the 1960s, has seen investment over the past decade as the demand and interest in a connected regional trail network increased. MDOT hired our team of planners, landscape architects, and engineers to evaluate the condition of the trail and develop recommendations for its continued improvement. The entire trail was assessed utilizing GIS/GPS technology to note elements such as pavement condition, drainage issues, visibility, connections, signage, and structures. The results of this field work provided the foundation for the development of recommendations to not only elevate the design and condition of the trail, but to increase usership, safety, and enjoyment. The team worked closely with a number of stakeholders including the I-275 Trail Friends Group, MTGA, Wayne County, and the communities along the trail to ensure coordination between various projects, identify opportunities for trailheads and connectivity, and develop an implementation and funding strategy. The project also included the development of a 2022 Ralph C Wilson Maintenance Fund grant application submitted by MDOT to improve a number of locations where the I-275 Metro Trail crosses wide and busy roads.

Contact: Marji Zabel, MDOT
Phone: 248.228.0417

Wastewater Systems (completed within various projects above as well)

Septic Field Replacement and System Improvements, WTA Architects, Johannesburg, MI
Wade Trim provided preliminary and final engineering design services for the Johannesburg Lewiston Schools septic system replacement project. The design involved gathering actual flows so that an on-site sewage disposal system could be utilized and developing a basis of design. We also coordinated with the Health Department of Northwest Michigan and EGLE to obtain a construction permit and groundwater discharge permit.

The system includes approximately 1,090 lft of gravity sanitary sewer, 1,520 lft of force main, one new 4,000 gallon septic tank, one 1,500 gallon septic tank, a new pump station with duplex pumps and controls, and a 16,800 sft drain-field. The project was completed in early summer of 2022.

Client: WTA Architects
Contact: Erin Andrus, AIA, LEED AP, NCARB
Phone: 989.752.8107

Sojourn Resort Septic System Improvements, Otsego County, MI
Wade Trim provided design engineering and permitting services for the Sojourn Resort septic field replacement project. The design included performing a topographic survey in order to de-sign a trench system conducive to the site. A tiered trench system was designed in order to utilize the existing sloped hillside within the code requirements. A basis of design was developed and submitted to the Health Department of Northwest Michigan. The system includes approximately 200 lft of force main, one new 2,000 gallon septic tank, one 750 gallon dosing tank with duplex pumps and controls, and a multi-zone valve to effectively distribute effluent doses to the separate zoned trenches. The project was completed in early spring of 2019.

Client: Paxton Resources
Contact: Mark Bailey, Operations Manager
Phone: 989.732.9400

Water Supply Systems (completed within various projects above)

Shops at Victories Center, Odawa Economic Development Management, Inc., Petoskey, MI
Wade Trim designed a water distribution network including water services, fire suppression services and fire hydrants for a new commercial development including numerous restaurants, hotel, professional offices, retail stores and a recreational facility. Estimates were completed for fire flows and peak flows for the entire build-out development and alternatives were evaluated for supplying water.

Contact: Alan Proctor, Board Director
Phone: 231.242.1580

Murray Road Tribal Housing Project, Little Traverse Bay Bands of Odawa Indians, Petoskey, MI
Wade Trim is currently working with the LTBB to design a new well and well house capable of providing potable water and fire suppression for a new housing facility located near Bayshore, MI. The project includes coordinating with a well drilling contractor to locate a new 6-inch well capable of producing the required firm pumping capacity for the development, and design of a new 20’x20’ wellhouse, including all associated piping, valves, meters, controls and appurtenances.

Contact: Amanda Swiss, Planning Director
Phone: 231.838.9230

ARTICLE 3: PROJECT LOCATION

Identify the regions where your firm can most efficiently provide services. Assignments may vary from the regions checked, depending on the specialties and services required.

☐ Western Upper Peninsula (west of Marquette)

☒ Eastern Upper Peninsula (east of Marquette)

☒ Northern Lower Peninsula (north of Grayling)

☒ Saginaw Bay area (east of 127, north of I-69 and M 57, south of Grayling)

☒ Western Lower Peninsula (west of 127, north of Muskegon, south of Grayling)

☒ Central Lower Peninsula (east of Battle Creek, west of Chelsea, south of M 46 and M 57)

☒ Southwestern Lower Peninsula (west of Battle Creek, south of Muskegon)

☒ Southeastern Lower Peninsula (east of Chelsea, south of I-69)

ARTICLE 4: CONTRACT UNDERSTANDING

The following items should be addressed on the assumption that your firm is awarded an Indefinite-Scope, Indefinite-Delivery contract. (See attached sample contract).

4.1 Is it understood that your firm is required to respond to small projects (less than $25,000) as well as larger projects?

Yes ☒ No ☐

4.2 Is it understood that there is no guarantee of any work under this contract?

Yes ☒ No ☐

4.3 Is it understood that your firm will be required to execute the attached standard State of Michigan contract language for professional services?

Yes ☒ No ☐

4.4 Is it clearly understood that professional liability insurance is required at the time of execution of the ISID contract? (See Article 5 of the attached Sample Contract.)

Yes ☒ No ☐

4.5 Is it understood that your firm must comply with State of Michigan law as it applies to your services?

Yes ☒ No ☐

4.6 Is your firm familiar with Design and Construction's MICHSpec and DCSpec contracts and the enforcement of such?

Yes ☒ No ☐

If yes, explain: Wade Trim is well versed with the use of MICHSpec and DCSpec contract documents. We have prepared numerous contract documents for the State of Michigan using these contract documents for State Park infrastructure improvements, MDNR dam removal and replacement, Boat Access Sites, and Parking Facility projects. We have followed the Best Value Construction Bidder Evaluation for State of Michigan funded projects as well as with other client contracts.

4.7 Does your firm have prior experience working with the State of Michigan?

Yes ☒ No ☐

If yes, explain: Wade Trim has prior experience working for the State of Michigan on projects ranging from water and wastewater projects to planning and landscape architecture. We have worked on projects for the DTMB, Michigan Department of Natural Resources, Michigan Economic Development Corporation, and the Michigan Department of Agriculture and Rural Development.

ARTICLE 5: CAPACITY AND QUALITY

5.1 Briefly describe your firm's methods and procedures for quality control for your deliverables and services.

Wade Trim established formal procedures to monitor quality on all projects since 1992 and it is a continuous improvement process. Quality Assurance (independent reviews by experienced staff) and Quality Control (the day-to-day checking of tasks) is completed for all projects. Documents and procedures for this process are provided on the Wade Trim employee website, providing project managers and team members with the necessary guidance to complete QA/QC tasks.

5.2 Has your firm been involved in claims or suits associated with professional services errors and/or omissions?

Yes ☒ No ☐

If yes, explain: Wade Trim has been included as a defendant or co-defendant on claims in the past. In all instances, the firm has either been released or a settlement has been negotiated. The firm has never been deemed at fault in a claim or suit. Details on specific claims can be provided upon request.

5.3 Will there be a key person who is assigned to a project for its duration?

Yes ☒ No ☐

5.4 Please present your understanding of the relationship between your firm, the DTMB Design and Construction Division, and the State Agency for whom a project will be completed.

Our role is to provide planning, design and construction phase services for infrastructure and other types of projects on behalf of the State of Michigan. While completing this work, we will seek to incorporate the most cost effective solutions to problems that are of concern to the numerous stakeholders both in and out of State agencies and above all else, striving to protect the public health, safety and welfare.

5.5 Describe your approach if a bidder proposes a substitution of a specified material during bidding.

The bidders will be instructed to include the specified material in bids. Substitutions during the bidding phase will not be evaluated, as this is a very short window of time that could impact the essessence of the design greatly. Bidders will be informed that the contract documents outline the approproiate process for substitution and their review if awarded the contract.

5.6 Describe your approach if a contractor proposes a substitution of a specified material or detail with shop drawing submittals or in construction.

The contract documents will be completed to specify required products for the project. It will also clearly state the process that a contractor must follow in order to submit a request for a substitution.

5.7 How will your firm provide consistent and continuous communication pertaining to project activities and project status to the State of Michigan during the progress of projects?

The use of an integrated communication system will include voicemail, email, high speed internet access and cellular phones to provide consistent and continuous communication with all stakeholders. The exchange of electronic word processing and CAD files provides fast and efficient technical communication and easy conversion to PDF file format facilitates simple and effective distribution of nearly all document types. Clients are provided direct access to project managers, design engineers and surveyors throughout each phase of the project.

5.8 Does your company have an FTP or similar site for quick posting and distribution of information, drawings, field inspection reports, and other communications?
Yes ☒ No ☐

5.9 Describe your method of estimating construction costs and demonstrate the validity of that method.

Construction costs are estimated via detailed and itemized material takeoffs and the use of current and historical bid results from similar type of projects. Means Construction Cost Data manuals are also used for certain work components to provide a benchmark. Evaluations of the Labor, equiupment and material componets are reviewed for further analysis.

5.10 Describe your approach to minimizing construction cost over-runs.

Developing high-quality plans and specifications that depict work items in detail is a key element of this issue within the construction industry. This element, along with a QA/QC process that is diligently followed, is the best way to minimize construction cost over-runs. If a bulletin becomes

necessary, it is crucial to coordinate what is needed with the owner and the Contractor and negotiate a fair price.

5.11 What percentage of the PSC cost should be devoted to construction administration (office and field)?

4-12% (depending on type and duration of project)

5.12 What portion of the assigned work will be performed with your staff and what portion will be provided by sub-consultants?

90-100% (by Wade Trim)

a. On a typical project, what would be your response time, from the time receive a project assignment to starting investigation and design work? (A typical project might be one involving several disciplines and in the neighborhood of a $25,000 fee.)

This depends on scheduled workload at the time of the project initiation, but we strive to give priority to our long-term contracts.

b. How do you assess whether a construction bidder is responsive and responsible?

To determine if the bidder is responsive, we conduct a thorough review of the submitted bid documents to verify that the bid items, unit pricing, quantity, and totals add up correctly. We also identify discrepencies and create a bid tabulation. We then review the documents to make sure the items bid are properly prepared and completed and that all contractural documents are legitimate, signed, and dated. Responsibility of a bidder is vetted by reference checks and follow up from requested references on the bidder's ability to complete similar projects of type and size. We will also check the proposed project management and supervision for experience on similar projects, and further discuss the project in detail to determine if there are any outstanding issues and if they understand the requirements to complete the project. We follow the Best Value Construction Bidder Evaluation process and document our finding. Upon completion of this process, an award recommendation letter is typically provided to the Owner.

c. Describe your firm's understanding of Sustainable Design and LEED Certification.

Incorporating sustainable design and green building practices into projects clearly benefits the environment, but can also lead to economic, health and community benefits. Green design and construction practices conserve natural resources and improve air and water quality. They also reduce operating costs, enhance the asset value and profits, improve employee productivity and satisfaction, minimize strain on local infrastructure, and contribute to the overall quality of life. The US Green Building Council's Leadership in Energy and Environmental Design (LEED) certification program sets the nationwide standard for "green projects." LEED certification provides independent, third-party verification that a building project meets the highest green building and performance measures. Wade Trim engineers, landscape architects and planners are helping clients achieve LEED certification and incorporate sustainable design concepts into a wide variety of projects. Several of our staff are LEED - AP (Accredited Professionals) certified and have been integral to the success of many LEED certified projects.

d. Describe your experience with similar open-ended contracts.

We currently have similar open-ended or prequalified contracts with MDOT. We also serve as the Engineer of Record for several municipalities. Our experience with open-ended contracts has been very successful because we clearly identify the scope upfront and describe the task, establish the schedule, and understand the client expectations to deliver the best project that meets the needs of all parties/stakeholders.

e. Describe your methodology for obtaining information about the existence and condition of an existing, facility's components and systems.

Information about existing facility's components and systems typically would come directly from the Owner. First, we would request all pertinent information available for the facility in question. We would then request information from all franchise corporations providing service to the facility, compile and conduct a review of that information, and verify the information, if possible, via a site visit. If the information is unreliable, unable to provide adequate information, and visual verification is insufficient to make an assessment, we would suggest a more detailed, non-destructive investigation be conducted.

f. Describe your approach to securing permits/approvals for the following: campgrounds, critical dunes, coastal zone management, projects adjacent to Michigan lakes and rivers.

Campgrounds require coordination with local staff, MDEQ/Health Department staff and the normal list of state project managers and departments having regulatory authority for lakes, streams, wetlands, dunes and other natural features in proximity to the project. Critical Dunes and Coastal Management issues require close coordination and sustained review of construction details in order to ensure that protection of critical features is incorporated into the construction, use and maintenance of the proposed infrastructure.

g. Describe your approach to a construction contractor's request for additional compensation for a change in the project scope.

We would start with a discussion with the Contactor to understand their position on the change in the project scope and reasons for additional compensation. If it is determined there is a change in scope, we would then identify the next steps as outlined in the contract documents regarding changes in work and proceed accordingly. This is cognizant of our role as the Owner's representative. Generally, we strive to provide solutions at the lowest possible level. Experience indicates the higher up the ladder the issue goes, leads to higher project costs.

II-6 References

Wade Trim has provided references, along with contact information of previous clients for similar projects on pages 16-32.

PART II - COST

Identification of Personnel and Estimated Compensation

In this section, Wade Trim has provided compensation information with the III-2-A Position, Classification and Employee Billing Rate Information form provided by DTMB.

III-2-A POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION

POSITION, CLASSIFICATION AND EMPLOYEE BILLING RATE INFORMATION
2023 Indefinite-Scope Indefinite-Delivery – Request for Proposal
General Professional Design Services
(Architecture, Engineering, Landscape Architecture)

Firm Name Wade Trim, Inc.
Yearly Hourly Billing Rate Increase 3%
Mark-up for Sub-Consultants (not to exceed 5%) 3%
Mark-up for Reimbursables (not to exceed 5%) 3%

	RATE RANGES			
POSITION/CLASSIFICATION	YEAR 1	YEAR 2	YEAR 3	YEAR 4
Paul Repasky, PE Project Manager Professional Engineer V	$210	$216.30	$222.79	$229.47
Kevin Cook, PE Project Manager Professional Engineer V	$210	$216.30	$222.79	$229.47
Troy Andrews, PE Project Manager Professional Engineer III	$160	$164.80	$169.74	$174.83
Garth Bogart, PE Project Manager Professional Engineer I	$120	$123.60	$127.31	$131.13
Brian Sousa, PE Principal-in-Charge Senior Professional	$210	$216.30	$222.79	$229.47
Jennie Benford Administrative Technician Project Aide III	$110	$113.30	$116.70	$120.20
Pam Halcomb Accounting Analyst Project Aide II	$90	$92.70	$95.48	$98.34
Jason Caverson, PS Professional Surveyor Professional Surveyor III	$160	$164.80	$169.74	$174.83
Scott Bliss, PS Professional Surveyor Professional Surveyor III	$160	$164.80	$169.74	$174.83
Nicholas Grim, PS Surveyor Project Specialist IV	$175	$180.25	$185.66	$191.23
Breanna Anderson, PE Civil Engineer Professional Engineer III	$160	$164.80	$169.74	$174.83
Tiffany Harrison, PE Civil Engineer Principal	$260	$267.80	$275.83	$284.10

POSITION/CLASSIFICATION	RATE RANGES YEAR 1	YEAR 2	YEAR 3	YEAR 4
Damian Curry, PE Civil Engineer Professional Engineer III	$160	$164.80	$169.74	$174.83
Jeffrey Reynhout, PE Civil Engineer Senior Professional	$210	$216.30	$222.79	$229.47
Mark Pribak, PE Civil Engineer Senior Professional	$210	$216.30	$222.79	$229.47
Quinn Ridley, PE Civil Engineer Professional Engineer III	$160	$164.80	$169.74	$174.83
Kenneth Schwerdt, PE Civil Engineer Professional Engineer III	$160	$164.80	$169.74	$174.83
Carmelle Tremblay, PE Civil Engineer Professional Engineer III	$160	$164.80	$169.74	$174.83
Robert Breen, PE Structural Engineer Senior Professional	$210	$216.30	$222.79	$229.47
Leon Solowjow, Jr., PE Structural Engineer Senior Professional	$210	$216.30	$222.79	$229.47
Michael Nicolls, PE Structural Engineer Professional Engineer III	$160	$164.80	$169.74	$174.83
Brian Gombos, PE Structural Engineer Senior Professional	$210	$216.30	$222.79	$229.47
Scot Lautzenheiser, PLA Landscape Architect Senior Professional	$210	$216.30	$222.79	$229.47
David Richards, PLA Landscape Architect Professional Landscape Architect II	$120	$123.60	$127.31	$131.13
Catherine Dennis, PLA Landscape Architect Professional Landscape Architect II	#120	$123.60	$127.31	$131.13
Jason Smith, AICP Professional Planner Senior Professional	$210	$216.30	$222.79	$229.47
Arthur Mullen, AICP Professional Planner Professional Planner III	$140	$142.20	$146.47	$150.86
Michael Lynett, PE Construction Engineer Professional Engineer V	$190	$195.70	$201.57	$207.62
David Ashenfelter Construction Technician Construction Technician VI	$145	$149.35	$153.83	$158.44

	RATE RANGES			
POSITION/CLASSIFICATION	YEAR 1	YEAR 2	YEAR 3	YEAR 4
Tyler Tomlinson Construction Technician Engineer III	$110	$113.30	$116.70	$120.20
Brian Scherdt Construction Technician Construction Technician VI	$145	$149.35	$153.83	$158.44
Scott Butkovich Construction Technician Construction Technician VI	$145	$149.35	$153.83	$158.44
Jason Martin Construction Technician Construction Technician VI	$145	$149.35	$153.83	$158.44
Russ Whaley CADD Technician CADD Technician VI	$120	$123.60	$127.31	$131.13
Martin Flanagan CADD Technician CADD Technician VI	$120	$123.60	$127.31	$131.13
Timothy Ruggles CADD Technician CADD Technician VI	$120	$123.60	$127.31	$131.13

REQUIRED DOCUMENTS

On the following pages Wade Trim has provided the required DTMB documents listed below:

- Certification of a Michigan Based Business
- Responsibility Certification
- Acknowledgment of Addendums

R 08/20

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

Certification of a Michigan Based Business

(Information Required Prior to Contract Award for Application
of State Preference/Reciprocity Provisions)

To qualify as a Michigan business:

Vendor must have, during the 12 months immediately preceding this bid deadline:
or
If the business is newly established, for the period the business has been in existence, it has:

(Check all that apply):

- ☐ Filed a Michigan single business tax return showing a portion, or all the income tax base allocated or apportioned to the State of Michigan pursuant to the Michigan Single Business Tax Act, 1975 PA 228, MCL • ˜208.1 – 208.145: or

- ☒ Filed a Michigan income tax return showing income generated in or attributed to the State of Michigan; or

- ☒ Withheld Michigan income tax from compensation paid to the bidder's owners and remitted the tax to the Department of Treasury; or

I certify that **I have personal knowledge** of such filing or withholding, that it was more than a nominal filing for the purpose of gaining the status of a Michigan business, and that it indicates a significant business presence in the state, considering the size of the business and the nature of its activities.

I authorize the Michigan Department of Treasury to verify that the business has or has not met the criteria for a Michigan business indicated above and to disclose the verifying information to the procuring agency.

Bidder shall also indicate one of the following:

- ☒ Bidder qualifies as a Michigan business (provide zip code: 48226)

- ☐ Bidder does not qualify as a Michigan business (provide name of State: _____).

- ☐ Principal place of business is outside the State of Michigan, however service/commodity provided by a location within the State of Michigan (provide zip code: _____)

R 08/20

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

Bidder: Wade Trim, Inc.

Ralph A. Picano
Authorized Agent Name (print or type)

January 3, 2023
Authorized Agent Signature & Date

Fraudulent Certification as a Michigan business is prohibited by MCL 18.1268 § 268. A BUSINESS THAT PURPOSELY OR WILLFULLY SUBMITS A FALSE CERTIFICATION THAT IT IS A MICHIGAN BUSINESS OR FALSELY INDICATES THE STATE IN WHICH IT HAS ITS PRINCIPAL PLACE OF BUSINESS IS GUILTY OF A FELONY, PUNISHABLE BY A FINE OF NOT LESS THAN $25,000 and subject to debarment under MCL 18.264.

R 08/20

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

Responsibility Certification

The bidder certifies to the best of its knowledge and belief that, within the past three (3) years, the bidder, an officer of the bidder, or an owner of a 25% or greater interest in the bidder:

(a) Has not been convicted of a criminal offense incident to the application for or performance of a contract or subcontract with the State of Michigan or any of its agencies, authorities, boards, commissions, or departments.

(b) Has not had a felony conviction in any state (including the State of Michigan).

(c) Has not been convicted of a criminal offense which negatively reflects on the bidder's business integrity, including but not limited to, embezzlement, theft, forgery, bribery, falsification, or destruction of records, receiving stolen property, negligent misrepresentation, price-fixing, bid rigging, or a violation of state or federal anti-trust statutes.

(d) Has not had a loss or suspension of a license or the right to do business or practice a profession, the loss or suspension of which indicates dishonesty, a lack of integrity, or a failure or refusal to perform in accordance with the ethical standards of the business or profession in question.

(e) Has not been terminated for cause by the Owner.

(f) Has not failed to pay any federal, state, or local taxes.

(g) Has not failed to comply with all requirements for foreign corporations.

(h) Has not been debarred from participation in the bid process pursuant to Section 264 of 1984 PA 431, as amended, MCL 18.1264, or debarred or suspended from consideration for award of contracts by any other State or any federal Agency.

(i) Has not been convicted of a criminal offense or other violation of other state or federal law, as determined by a court of competent jurisdiction or an administrative proceeding, which in the opinion of DTMB indicates that the bidder is unable to perform responsibly or which reflects a lack of integrity that could negatively impact or reflect upon the State of Michigan, including but not limited to, any of the following offenses under or violations of:

   i. The Natural Resources and Environmental Protection Act, 1994 PA 451, MCL 324.101 to 324.90106.
   ii. A persistent and knowing violation of the Michigan Consumer Protection Act, 1976 PA 331, MCL 445.901 to 445.922.

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

iii. 1965 PA 166, MCL 408.551 to 408.558 (law relating to prevailing wages on state projects) and a finding that the bidder failed to pay the wages and/or fringe benefits due within the period required.

iv. Repeated or flagrant violations of 1978 PA 390 MCL 408.471 to 408.490 (law relating to payment of wages and fringe benefits).

v. A willful or persistent violation of the Michigan Occupational Health and Safety Act, 1974, PA 154, MCL 408.10001 to 408.1094, including: a criminal conviction, repeated willful violations that are final orders, repeated violations that are final orders, and failure to abate notices that are final orders.

vi. A violation of federal or state civil rights, equal rights, or non-discrimination laws, rules, or regulations.

vii. Been found in contempt of court by a Federal Court of Appeals for failure to correct an unfair labor practice as prohibited by Section 8 of Chapter 372 of the National Labor Relations Act, 29 U. s. C. 158 (1980 PA 278, as amended, MCL 423.321 et seq).

(j) Is NOT an Iran linked business as defined in MCL 129.312.

I understand that a false statement, misrepresentation, or concealment of material facts on this certification may be grounds for rejection of this proposal or termination of the award and may be grounds for debarment.

Bidder: Wade Trim, Inc.

Brian Sousa, PE
Authorized Agent Name (print or type)

January 3, 2023
Authorized Agent Signature & Date

☐ I am unable to certify to the above statements. My explanation is attached.

R 08/20

DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
State Facilities Administration
Design & Construction Division

ACKNOWLEDGMENT OF ADDENDUMS

PSC acknowledges receipt of Addenda: No. 1 dated: 12/07/2022,

No. ___ dated: _____ No. ___ dated: _____

APPENDIX A
RESUMES

Paul Repasky, PE
PROJECT MANAGER

COMPANY

WADE TRIM

EDUCATION

- MS, Civil Engineering, Michigan State University
- BS, Civil Engineering, Michigan State University

REGISTRATION

- Professional Engineer: MI
- MDEQ Storm Water Operator
- MDOT/ACEC Certified Office Management Procedures for Local Transportation Projects

QUALIFICATIONS

- 39 years of experience managing design and construction engineering projects for municipalities, as well as county and state agencies
- Broad experience includes design, project management, and construction engineering throughout northern Michigan
- Various types of project experience including dam control structures, dam rehabilitation, fish passages, non-motorized trails, site plans, roadways and bridges, along with other infrastructure improvements
- Skilled in planning, schematic design, preparation of technical specification and contract documents, bidding assistance, and construction engineering and administration, geotechnical design, evaluation, and materials testing

PROJECT EXPERIENCE

MILAKOKIA BOAT LAUNCH AND PARKING AREA, DTMB, MI | Project Manager for the design of a new boat access launch ramp gravel parking area, concrete sidewalks, and vault toilet restroom facility. The design of the project involved stakeholders including MDNRE Park and Recreation Division and MDTMB Design and Construction Division.

ALOHA STATE PARK, BOAT ACCESS SITE DREDGING, MULLETT LAKE, CHEBOYGAN COUNTY, MI | Project Engineer responsible for the design and construction engineering for maintenance dredging of the entrance channel, mouth basin and boat basin to the Aloha State Park boat launch on Mullett Lake in Cheboygan County. Work included topographic surveying, lake bottom and water depth sounding, hand probing, dredge sediment sampling and testing and preparing soil erosion control plans and permitting.

SOUTH HIGGINS LAKE SANITATION STATION IMPROVEMENTS, ROSCOMMON COUNTY, MI | Design of a new four lane sanitary dump station, parking, and entrance road at South Higgins Lake State Park including removal of existing HMA pavement, widening of the entrance road, sanitation stations and services.

WASTEWATER COLLECTION AND TREATMENT DISPOSAL SYSTEM – VARIOUS STATE PARKS, MI | Project Engineer responsible for the design engineering of sanitary sewer collection, pumping, treatment and disposal of sanitary sewage at numerous State Parks in northern Michigan. These small-scale treatment systems consisted of large capacity septic and effluent tanks with pressure distribution to a subsurface disposal area.

WASTEWATER TREATMENT AND DISPOSAL SYSTEM – ALOHA STATE PARK, CHEBOYGAN COUNTY, MI | Project Engineer responsible for the design engineering of an aerated lagoon with sand infiltration discharge for Aloha State Park in Cheboygan County. The project also included design of a pump stations and forcemains.

SANCTUARY ISLAND PARK IMPROVEMENTS – VILLAGE OF ALANSON, MI | Project Engineer/Manager for the design of a new park including a self-propelled pedestrian ferry, boardwalk, viewing platform, fishing pier, picnic platform, parking area with ADA access. The design of the project involved many stakeholders including MDNRE Trust Fund, Village of Alanson, MDNRE Land and Water Management Division, and volunteer construction contractors.

COLONIAL MICHILIMACKINAC VISITOR CENTER, PARKING AREA IMPROVEMENTS, MACKINAW CITY, MI | Project Engineer/Manager for the design and construction engineering of a new parking facility at the Petersen Center Administration Building and resurfacing of the parking areas at the Colonial Michilimackinac Visitor Center located below the Mackinaw Bridge south causeway. Work included evaluation of the existing pavement structure to determine proper corrective repairs to the localized

settlement and minimize reflective cracking, blending of the new HMA surface with the existing sidewalks to meet ADA standards and storm water drainage.

MICHIGAN DEPARTMENT OF NATURAL RESOURCES, WILDLIFE AND FISHERIES DIVISIONS, MI | Project Engineer for the design and construction oversight of a various dam improvement projects including: Stoney Creek, Foch Lake, Big Creek, Cannon No.1 and No. 2 Dams, Kawkawlin Flooding, Molasses Creek Dams and Backus Creek Dams. The design of these projects included coordination of surveying, geotechnical investigations, evaluation of existing conditions, hydraulic analysis, demolition of existing inlet control structures, outlet piping and spillways; design of new concrete control structures, sheet piling, outlet piping, seepage control systems, and erosion control. These projects also involved permitting, bidding and construction management.

BACKUS LAKE (UPPER) DAM CONTROL STRUCTURE AND OUTLET PIPE REPLACEMENT, MDNR WILDLIFE, MI | Project Engineer/Manager for the design and construction services for the replacement of a concrete drop control structure, outlet pipe and emergency spillway. The new concrete control structure is a four-bay structure with removable stoplog weirs, outlet pipe, filter diaphragm, accessible grating, bank underdrains and armored slopes. Constructed in 2021.

TOWNLINE CREEK DAM REMOVAL, MDNR WILDLIFE DIVISION, MI | Project Engineer/Manager for design and construction services for the complete removal of an 8-bay concrete dam overflow structure and earthen dike dam. Design tasks included developing alternative construction access through State Forest property, performed watershed assessment, hydrology & hydraulic evaluations and reach-based geomorphic assessments to restore Townline Creek to near its original channel geometry using natural channel design solutions and bioengineering bank stabilization.

DENTON CREEK DAM REMOVAL, MDNR WILDLIFE DIVISION, MI | Project Engineer/Manager for design and construction services for the complete removal of a single bay concrete dam overflow structure and earthen dike dam. Design tasks included evaluating stream geomorphology to restore Denton Creek to near it original geometry, final grading, plunge pool filling, and stream restoration with the use of native planting. EGLE permitting included a Basis of Design addressing HEC-RAS stream modeling and analysis, stream hydrology and hydraulics. A project assessment identifying both positive and negative impacts and implementation of best management practices to minimize impacts on the adjacent natural resources including sediment transport and construction sequencing was prepared.

LITTLE MUD LAKE DAM REMOVAL, MDNR WILDLIFE DIVISION, MI | Project Engineer/Manager for design and construction services for the complete removal of a four-bay concrete dam overflow structure and earthen dike dam. Design tasks included evaluating stream geomorphology to restore Backus Creek to near it original geometry, final grading, and stream restoration with the use of native planting. EGLE permitting included a Basis of Design addressing HEC-RAS stream modeling and analysis, stream hydrology and hydraulics. A project assessment identifying both positive and negative impacts and implementation of best management practices to minimize impacts on the adjacent natural resources including sediment transport and construction sequencing was prepared.

VAN ETTEN LAKE DAM FISH PASSAGE, MICHIGAN DEPARTMENT OF NATURAL RESOURCES, MI | Project Engineer/Manager for the design of a fish passage across the Van Etten Creek, including a “natural” fish channel, river restoration/stabilization box culvert and lake level controls. The design of the project involved many stakeholders including MDNR fisheries division, Iosco County (Owner of the Van Etten Lake Dam), and MDNRE Dam Safety.

SWAN RIVER SALMON WEIR, MICHIGAN DEPARTMENT OF NATURAL RESOURCES, MI | Project Manager for the design of a salmon weir structure across the Swan River, concrete fish ladder and raceways at the Michigan Limestone quarry in Rogers City, Michigan. The design of the project involved many stakeholders including MDNR fisheries division, Michigan Limestone Operations (Owner of the quarry), MDNR and MDMB.

Kevin Cook, PE
PROJECT MANAGER

COMPANY

WADE TRIM

EDUCATION

- BS, Civil Engineering, Michigan State University

REGISTRATION

- Professional Engineer: MI

QUALIFICATIONS

- 32 years of design and construction engineering management for municipal and private sector site/civil engineering experience
- Works with local communities and road commissions on projects that include the design of roadways, sanitary and storm sewer, water main, and site engineering for municipal, commercial, industrial, and residential developments
- Significant grant administration experience and MDOT LAP projects

PROJECT EXPERIENCE

CARPENTER ROAD FROM SAGINAW ROAD TO HARRY STREET, GENESEE COUNTY ROAD COMMISSION, MI | Project Manager for preliminary engineering, construction staking, and construction engineering for 0.69 miles of MDOT LAP 3R roadway rehabilitation, including cold milling and hot-mix asphalt surfacing, concrete curb, gutter and ramps, and signing and pavement markings on Carpenter Road from Saginaw Road to Harry Street in the City of Flint, Genesee County. The project also included a road diet while maintaining turn lane transitions at Saginaw Street and the I-475 access. Permitting, maintenance of traffic, and project coordination included the City of Flint, MDOT, and Genesee Township.

ELEVATED WATER STORAGE TANK, GENESEE COUNTY DRAIN COMMISSIONER, MI | Provided civil/site services for the development of the tower site. The project includes a new 1-million-gallon elevated storage tank in the City of Burton to increase reliability and pressure within the southeast corner of the County's water distribution and transmission system. The design of the storage tank includes topographic survey, soil borings and geotechnical analysis, foundation, a hydropillar tank with a fluted column, electrical controls and instrumentation, and site updates including demolition of an existing home, upgrade of the entry drive, site clearing and grubbing, grading, fencing, and stormwater management.

ATHERTON ROAD AND DUPONT STREET CONSTRUCTION ENGINEERING SERVICES - TIGER GRANT, CITY OF FLINT, MI | Project Manager for construction engineering services for 5 miles of MDOT HMA road reconstruction and 8-inch, 16-inch, and 24-inch water transmission and distribution main replacement. The $26 million project includes the use of TIGER funds, TIP funding, safety funding for 4- to 3-lane conversion and traffic signal modernization, and funding for full bridge replacement. Also responsible for assisting the City in administering the TIGER grant, including preparation of quarterly reports, reimbursement requests for the federal transportation funding, and other supporting grant documentation.

HAMILTON DAM REMOVAL/STORM OUTFALLS, GENESEE COUNTY PARKS AND RECREATION, MI | Project Manager assisting with identifying solution to rehabilitate, replace, or remove the Hamilton Dam and restore three miles of the river through the City's Downtown District. The preparation of the preliminary engineering report included the development of a comprehensive hydraulic model of the river and analysis of the dam and its impacts to the City's water treatment plant, pumping systems, and water intake located upstream of the dam.

GOODRICH TRANSPORTATION ASSET MANAGEMENT PLAN, VILLAGE OF GOODRICH, MI | Client Representative for the Transportation Asset Management Plan (AMP) to conduct an inventory of the Village's transportation assets, establish performance goals, perform a risk of failure analysis, and anticipate revenues and expenses. The

plan will include coordination of the Village's asset management and non-motorized plans, developing expected performance outcomes and plans to coordinate with other entities, and establishing capital improvement and maintenance plans.

ROBERT T. LONGWAY REHABILITATION CONSTRUCTION ENGINEERING SERVICES, CITY OF FLINT, MI | Project Manager/Construction Engineer for 0.28 miles of MDOT 3R HMA roadway reconstruction, 8- and 12-inch water transmission main replacement, curb and gutter replacement, and sidewalk and ADA ramp replacement. This MDOT local agency program (LAP) project, federally funded through the Transportation Improvement Program, connects the Flint Cultural Center with Downtown Flint, including the University of Michigan Flint Campus and Hurley Hospital.

FY 2023-2026 TIP APPLICATIONS, CITY OF BURTON, MI | Project Manager in the preparation of fourteen funding applications through the Transportation Improvement Program (TIP) and Roadway Expand Applications associated with the Genesee County Metropolitan Planning Commission (GCMPC) Fiscal Years 2023 through 2026 Call for Projects on behalf of the City of Burton. TIP program applications included Roadway Preservation, PASER 5 Roadway Preservation, and Roadway Expand Projects for various roadway segments throughout the City of Burton. In addition, two Congestion Mitigation and Air Quality (CMAQ) Program Applications were completed for a roundabout at the Belsay Road and Bristol Road intersection and a MDOT Rideshare Facility.

STORMWATER, ASSET MANAGEMENT, AND WASTEWATER (SAW) GRANT, VILLAGE OF GOODRICH, MI | Inspection Technician completing an asset inventory of the Village's storm sewer system which involves opening manholes and catch basins, inspection of the conditions of each, and the inverts of existing pipes leaving and entering said basins.

STANLEY ROAD WATER MAIN, KAREGNONDI WATER AUTHORITY (KWA) AND GENESEE COUNTY DRAIN COMMISSIONER'S OFFICE (GCDC), DIVISION OF WATER AND WASTE SERVICES, MI | Project Manager for the design of 1.5 miles of two water main systems along Stanley Road from German Road east to the newly constructed water treatment plant. The project included a 36-inch diameter water main for raw water transmission for the City of Flint's use and a 48-inch diameter treated water transmission line for use by Genesee County residents as part of a newly formed Water Authority.

WATER RELIABILITY STUDY, CITY OF DURAND, MI | Project Engineer who collaborated on the City's 2018 computerized hydraulic model of their water distribution system and preparing a Water Reliability Study in accordance with MDEQ Part 12 and Part 16 of PA 399 requirements to determine the system's ability to meet current and future water demands within the existing service area. Work also included evaluation and analysis of several areas to which the system could expand, projected water demands, and system response based on estimated population growth, as well as a preliminary Capital Improvements Program (with cost estimates in today's dollars) for the 5-year and 20-year planning periods.

MACKINAW STREET RECONSTRUCTION, CITY OF SAGINAW, MI | Project Manager for the reconstruction of 0.63 miles of Mackinaw Street from Congress Avenue to South Alexander Street. The project includes full-depth concrete removal, concrete curb and gutter replacement, driveway approach reconstruction, and ADA-compliant sidewalk ramps. Three water mains exist within the roadway corridor and all existing service leads will be connected to the existing 16-inch diameter asbestos-cement (AC) water main while abandoning the older mains. Potential drainage system concerns such as brick structures, blind taps to storm sewers, and self-draining/earthen bottom drainage structures will be recommended for removal and replacement. The Program Application and construction document package was approved by MDOT in December 2022 with a bid letting in February 2023.

FLINT RIVER RESTORATION, GENESEE COUNTY PARKS AND RECREATION, MI | Assisted with the civil/site construction services for the removal of the Hamilton and Fabri Dam structures, infrastructure improvements, and capping and restoring seven acres over the former Chevy in the Hole site.

Troy Andrews, PE
PROJECT MANAGER

COMPANY

WADE TRIM

EDUCATION

- BS, Civil Engineering, Michigan Technological University

REGISTRATION

- Professional Engineer: MI
- Pipeline Assessment Certification Program (PACP), National Association of Sewer Service Companies

QUALIFICATIONS

- 12 years of experience in site design, roadway design, water main and stormwater design, project management, and construction engineering for municipal service and private development clients
- Involved in all phases of projects, including design, bidding documentation, construction observation, pre-construction meetings, requests for information, field change orders, shop drawing reviews, and project closeouts

PROJECT EXPERIENCE

ALGONAC STATE PARK AND WETZEL STATE RECREATION AREA ARPA TARGETED IMPROVEMENTS -2023-2024, DTMB, MI | Project Manager assisting the DNR with plans for water, sanitary, and pavement upgrades to the Algonac State Park and Wetzel State Recreation Area. Improvements at Algonac State Park include expanding the sanitation station from 2- to 4-lanes and installing full hook-up sites (fresh water and sanitation) providing water and sanitary service to approximately 120 sites in the Riverfront Campground. Improvements at Wetzel State Recreation Area include replacing vault toilets, resurface an existing accessible asphalt walking path, and construction of an outdoor classroom/picnic shelter.

STORMWATER, ASSET MANAGEMENT, AND WASTEWATER (SAW) GRANT, EASTERN MICHIGAN UNIVERSITY, MI | Project Engineer assisting with day-to-day activities for field investigation and asset inventory, GIS mapping, asset condition assessment, and criticality evaluation. Project also included hydrologic and hydraulic modeling.

HAMILTON DAM REMOVAL/STORM OUTFALLS, GENESEE COUNTY PARKS AND RECREATION, MI | Project Engineer for the demolition plans, bid documents, and permitting for removal of the Hamilton Dam and inflatable fabri-dam in the Flint River in the City of Flint.

VARIOUS MUNICIPAL AND MDOT PROJECTS, CITY OF FLUSHING AND CITY OF LINDEN, MI | Project Engineer for road design, water main, storm and sanitary sewer layout, various grade calculations, storm water detention and retention basins, and field inspection of road projects.

SECONDARY WATER SUPPLY, CITY OF FLINT, MI | Project Engineer for the construction of 5.5 miles of large-diameter, dedicated 36-inch transmission main to connect the City of Flint to the Genesee County Drain Commissioner North Water Loop near the Frances and North Lewis Roads intersection, including a master meter vault adjacent to the connection point. Responsibilities included EGLE wetland permitting and coordination with an environmental wetland expert as subconsultant.

FUNCHITECTURE ELGA GRAND BLANC TOWNSHIP, MI | Lead Project Manager on this 12 acre site plan design and layout for the branch office and headquarters buildings. The project included demolition and full drainage, utility, and parking design. The project also included navigating the Township Site Plan approval process and managing the permitting process within the county with various agencies such as the Genesee County Drain Commissioner (GCDC) and the Genesee County Road Commission (GCRC.) The most interesting aspects of this project were bringing the community into the plan by integrating a public walking path, garden area, patio, and retention pond with fountain surrounded by beautiful landscaping while still being a functional business. This was a project delivered under the Construction Manager

(CM) led project model. Sorensen Gross was the acting CM.

FLINT RIVER RESTORATION, GENESEE COUNTY PARKS AND RECREATION, MI | Project Engineer assisting with the planning and design of the riverbank improvements including the redevelopment of Riverbank Park, a section of the Iron Belle trail along the riverfront, and coordination with the in-river design improvements. This large-scale project will transform underutilized riverfront into a diverse recreational corridor with a vast array of public open spaces and habitat improvements. The end goal is to strike a balance with the naturalized river design which is environmentally compliant, while improving fish passage, safety, and the recreational experience.

CHEVY COMMONS PHASE 3 CONSTRUCTION ENGINEERING SERVICES, GENESEE COUNTY LAND BANK, MI | Project Engineer assisting with construction documents for landscape architecture and engineering services for master planning, design, and construction of Phases 1 through 5 to convert a 70-acre brownfield site, a former Chevrolet Plant location, into an urban natural park area.

RESEARCH AND ENGINEERING CENTER CONSTRUCTION DOCUMENTS, FORD MOTOR COMPANY, DEARBORN, MI | Project Engineer for construction plans, standard details, reports, studies, and other tasks for the multi-year infrastructure engineering project transforming the Ford Research and Engineering Center campus in Dearborn. Project includes civil and underground infrastructure for work on roadways, traffic, intersections, tunnels, electrical, natural gas, fire protection, geothermal water loop, domestic water, compressed air, communications, storm sewer, pond water, and combined sewer.

KAREGNONDI WATER AUTHORITY (KWA) CONSTRUCTION PROGRAM MANAGEMENT, GENESEE COUNTY DRAIN COMMISSIONER, MI | Project Engineer providing construction assistance for several contracts including high-capacity pump stations, 60-inch to 66-inch welded steel pipe contracts, and a 36-inch DIP pipe contract.

SAGINAW STREET REHABILITATION AND RECONSTRUCTION, CITY OF FLINT, MI | Project Engineer for the rehabilitation of six city blocks of Saginaw Street in Flint's downtown district. The brick road, listed on the state's historic register, is to be completely reconstructed, and includes curb and gutter, sidewalk, drainage, ADA-compliant sidewalk ramps, and landscaping improvements along the corridor. The project also includes a new 24-inch water transmission main with service lead replacements.

WATER POLLUTION CONTROL FACILITY BATTERY A GRIT CHAMBER DESIGN, CITY OF FLINT, MI | Project Engineer for the design and construction of rehabilitation of the influent structure at the City's Water Pollution Control Facility (WPCF). Work includes bypassing of the influent structure, internal and external concrete repair of the structure, severing and plugging the existing interconnection between Grit Batteries A and B, installation of sluice gates in the structure, and installation of cured-in-place pipe and a flow meter on the Grit Battery A influent piping. A new grit classifier building is also being constructed.

ATHERTON ROAD AND DUPONT STREET CONSTRUCTION ENGINEERING SERVICES - TIGER GRANT, CITY OF FLINT, MI | Project Engineer for 4.75 miles of road and storm-water reconstruction including water main replacement as well as sidewalk and intersection design. The project consisted of road repairs, storm sewer and drainage modifications, as well as a significant water distribution and transmission design to right-size the City's water infrastructure. As part of the FY 2016 TIGER program, Wade Trim designed the reconstruction of two of three arterials within the City (Dupont Street and Atherton Road).

DORT HIGHWAY ROAD RECONSTRUCTION, CITY OF FLINT, MI | Project Engineer for the reconstruction of a major arterial road. Tasks included CAD design and construction inspection for 4 miles of road reconstruction including storm sewer structures and curb and gutter.

Garth Bogart, PE
PROJECT MANAGER

COMPANY

WADE TRIM

EDUCATION

- BS, Civil Engineering, Michigan Technological University

REGISTRATION

- Professional Engineer: MI

QUALIFICATIONS

- Experience in a broad variety of civil engineering and municipal consulting projects and a member of the Infrastructure Funding Committee at Wade Trim
- Assists clients with obtaining project funding through a variety of grant and low interest rate sources
- Design engineer for grading, water, wastewater, stormwater, structural, site development, dam rehabilitation, road, and other municipal projects
- Well-versed with site inspections, record drawings, closeout documentation, and grant administration

PROJECT EXPERIENCE

BLACK RIVER BAS, DTMB, MI | Project Engineer providing design services for improvements to the old Black River Marina boating access facility. Project tasks include demolishing the two existing buildings and construction of a new HMA-paved surface, including parking for up to 50 vehicle-trailer spaces and single car spaces, as well as circulation for boat trailer traffic. A cast-in-place dual concrete boat ramp is desired to be constructed where the existing boat well is currently located.

DNR/HOUGHTON LAKE FLATS DIKE EVALUATION, DTMB, MI | Project Engineer responsible for the structural design of catwalks, drain pipe supports, concrete repairs, and stop log guides.

LAKE SKEGEMOG BAS DESIGN, DTMB, MI | Project Engineer responsible for grading design of a boat launch rehabilitation project.

EAST BAY TOWNSHIP WATER MAIN & TANK CONSTRUCTION, EAST BAY TOWNSHIP, MI | On-site Inspector for the construction phase of a $3.2 million water main loop consisting of approximately 20,000 lineal feet of water main and a 300,000-gallon elevated water storage tank with an on-site well. Duties included construction inspection, acceptance testing, and the completion of record drawings.

ENGINEER OF RECORD, EAST BAY TOWNSHIP, MI | Project Engineer responsible for providing Engineering Consulting services to East Bay Township on an as-needed basis. Services include cost estimating, infrastructure funding sources, asset management, record-keeping, project planning and more.

COLLECTION SYSTEM PUMP STATION REHABILITATION DESIGN, LAKE MITCHELL SEWER AUTHORITY, MI | Project Engineer responsible for design assistance of a large-scale sanitary sewer system rehabilitation project in Cadillac, MI. Design responsibilities included integrating new pumps within an aging system, 2D site layout, Right-of-Way mapping, quantities, contract documents, and grant administration.

BOWERS HARBOR / EAST ARM BAS IMPROVEMENTS, DTMB, MI | Project Engineer responsible for redesigning two existing boat access sites to accommodate larger boats, additional parking, and improved traffic flow. Project responsibilities include removal and redesign of an existing HMA-paved parking surface, design of a new entrance, permitting assistance, construction cost estimating, and contract document development.

CORNWALL CREEK FLOODING DAM CONTROL, HURON PINES, NORTHEAST MI | Worked with Huron Pines in association with the Department of Natural Resources, Fisheries Division, to provide structural engineering design services for a concrete structure and steel sheet piling overflow. The repair protects a world-class bluegill fishery and better supports the structure's frequent use by non-gas-powered water craft,

campers, hikers and equestrian groups (embankment doubles as a trail).

ELMWOOD MARINA, ELMWOOD TOWNSHIP, MI | Gathered information from nearby marinas and providing recommendations in relation to slip fees and services that should be provided to customers. Other services include site design, structural design, pre-construction, inspection, record drawings, and grant administration assistance on a 3-phase marina improvements project.

SOUTH BROWNSON RECONSTRUCTION, VILLAGE OF KINGSLEY MI | Project Engineer responsible for designing a roadway replacement within the Village of Kingsley's downtown district. Project tasks included removal and redesign of ¼ mile of streetscaped roadway, alignment design, grading design, intersection design, ADA-compliant sidewalk design, construction cost estimating, and coordination with MDOT Local Agency Program staff.

BREWERY CREEK STORM WATER SYSTEM MAINTENANCE, ELMWOOD TOWNSHIP, MI | Project Engineer responsible for on-site evaluations of a business commons site in Elmwood Township, which included wetlands. Also assisted with the Bewery Creek Parking and Drainage project which entailed topographic survey, site design and bidding for the proposed Marina overflow parking lot.

BLAINS FARM & FLEET CONSTRUCTION, BLAIR TOWNSHIP, MI | On-site inspector for the installation of 8" water main and appurtenances. Responsibilities included inspection, acceptance testing and the completion of record drawings.

WWTP ASSET MANAGEMENT PLAN, VILLAGE OF KINGSLEY, MI | Provided an engineer's review of the Village of Kingsley's existing wastewater treatment infrastructure and developed an asset management plan in order to improve the sustainability of the wastewater system. Highlights of the plan included cost estimating for future WWTP upgrades, preliminary engineering, site investigation, and a Capital Improvement Plan.

HURON RIVER DRIVE OVER HURON RIVER, WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES, MI | Structural Engineer responsible for assisting with development of plans, specifications and estimate (PS&E) for bridge reconstruction in Van Buren Towsnhip consisting of deck replacement, bearing replacement, beam end repairs, substructure patching, and roadway approach work. PS&E documents were prepared to MDOT LAP and Wayne County standards.

METRO REGION BRIDGE SCOPING, MICHIGAN DEPARTMENT OF TRANSPORTATION, MI | On-site engineer for the detailed inspection of 10 bridges at the I-94/M-10 interchange in Detroit. Tasks included sounding concrete, obtaining beam end measurements, and quantifying deficiencies observed that impact the structural integrity of the bridges.

ONEKAMA TOWNSHIP-TLSA SHPO PROCESS, ONEKAMA TOWNSHIP, MI | Project Engineer responsible for assisting the Two Lake Sewer Authority in completing an Environmental Review process to apply for USDA Rural Development funding for a future wastewater collection system.

WASTEWATER SYSTEM CONSTRUCTION PHASE, FILER CHARTER TOWNSHIP, MI | On-site Inspector for the construction phase of a new wastewater system which included 10,000 lineal feet of gravity main and 2,000 feet of force main along US-31. Tasks included construction inspection, acceptance testing, and the completion of record drawings.

ARBUTUS 5 PARK IMPROVEMENTS, | Project Engineer responsible for redesigning an existing park along the banks of Arbutus Lake No. 5. Project tasks included pedestrian bridge structural design, boardwalk design, ledgestone seawall design, parking lot improvements, sidewalk and ADA grading, a low pressure onsite septic system, joint permit application coordination with Michigan Department of Environment, Great Lakes, and Energy, construction cost estimating, contract document development, and bidding assistance.

Brian Sousa, PE

PRINCIPAL-IN-CHARGE

COMPANY

WADE TRIM

EDUCATION

- BS, Civil Engineering, Michigan Technological University
- BS, Environmental Science, Lake Superior State University

REGISTRATION

- Professional Engineer: MI
- Soil Erosion and Sedimentation Control Certification MEGLE
- Hazardous Materials and Site Investigations (HAZWOPER) Certified
- Troxler Nuclear Density Gauge Certified

QUALIFICATIONS

- 24 years of experience in municipal, water resources, environmental, and erosion control services as well as serves as Engineer of Record for several communities and agencies
- Extensive experience includes municipal marina projects, coordinating with funding agencies and other stakeholders, designing water and wastewater systems, and managing other infrastructure improvements
- Experience includes positions as an Aquatic Toxicologist, an Environmental Scientist, and an Erosion Control Program Director
- Oversees many projects and maintains open communication with clients and project team staff

PROJECT EXPERIENCE

BOWER'S HARBOR BAS DESIGN, WEST GRAND TRAVERSE BAY, DEPARTMENT OF MANAGEMENT AND BUDGET, MI | Project Manager for the rehabilitation of the Bower's Harbor Boating Access Site including existing parking lot expansion, reconstruction, repaving, drainage improvements, relocation of the vault toilets, ADA access/sidewalks to new toilets and to the launch. The project included minor landscaping amenities.

CENTER ROAD BAS DESIGN, EAST ARM OF GRAND TRAVERSE BAY, DEPARTMENT OF MANAGEMENT AND BUDGET, MI | Project Manager for the reconstruction of the existing access site including geometric improvements, parking lot expansion, adding a dedicated parking lot exit drive, relocation of existing vault toilets, ADA sidewalk serving the new vault toilets and ADA access to the launch.

LAKE SKEGEMOG BAS DESIGN, DTMB, MI | Project Manager and Design Engineer for the rehabilitation of the Lake Skegemog Boating Access Site including parking lot grading, paving, new ADA sidewalks to the vault toilet, site geometric changes, parking layout and a landscaping plan.

ENGINEER OF RECORD, ELMWOOD TOWNSHIP, MI | Serving as the Township Engineer since 2016. Finalized the transfer of sewer ownership to the City of Traverse City. Provide various engineering services including site plan reviews, water and sewer installation inspection, review of current systems for improvement, upgrade list stations, and numerous other efforts.

GENERAL ENGINEERING SERVICES, CITY OF REED CITY, MI | City Engineer for the day to day needs of the city on water/sewer infrastructure, park improvements, road improvements, bridge inspections, and lift station replacements/improvements.

GENERAL ENGINEERING SERVICES, FILER CHARTER TOWNSHIP, MI | Provides as-needed engineering services for Filer Township since 2015. Also serve as Project Manager for various infrastructure projects including a wastewater system study to determine phasing for the future collection system, and the feasibility of developing the Township's own WWTP, along with eventual design and construction of the system.

BLAIR TOWNSHIP GENERAL SERVICES, BLAIR TOWNSHIP, MI | Project Manager and Township Engineer for water and sewer projects for Blair Township including the design, permitting and construction of a new Iron Removal Plant for potable water, water and sewer plan reviews and extensions, and the construction inspection and closeout of all municipal water and sewer installation.

COLLECTION SYSTEM PUMP STATION REHABILITATION DESIGN, LAKE MITCHELL SEWER AUTHORITY, MI | Project Manager for the rehabilitation 215 Pump stations serving the Lake Mitchell Sewer Authority system costing over $10M. Services

include condition assessment, project funding through Rural Development, public participation, design, permitting and construction oversight of all 215 lift station reconstructs.

ELMWOOD TOWNSHIP MARINA, PHASE I, ELMWOOD TOWNSHIP, MI | Project Manager for DNR Waterways and a Trust Fund grant project, to improve the Elmwood Township Municipal Marina. A Grant-In-Aid facility that operates a seasonal marina and boat launch, the Township is looking to improve the site pavement, stormwater runoff and site circulation and a new Harbormaster building, along with a new fish cleaning station.

ARBUTUS 5 PARK DESIGN ENGINEERING, EAST BAY TOWNSHIP, MI | Project Manager for the redevelopment of this Township Park on Arbutus Lake. Project included Public Input, MDNR Trust Fund grant application, preliminary layout, design of a new seawall, fishing pier, ADA kayak and canoe launch, ADA walkways, pedestrian bridge, bathroom building, septic and well systems along with needed permitting.

KALKASKA STREETSCAPE DESIGN, VILLAGE OF KALKASKA, MI | Project Manager. Design phase for streetscape improvements along US 131 from 3rd Street to 5th Street. Project included helping the Village obtain $750,000 in grant funding through MEDC. Design elements included traffic calming, parallel parking, street lighting, stamped concrete crosswalks, and ADA-compliant sidewalk ramps, and drainage. The standard concrete pavement was scored with an alternate 45 degree angle that focuses pedestrian attention on storefronts. Site amenities such as benches, landscape planters, and others complement the historic features of the downtown.

TWO LAKES SEWER AUTHORITY RURAL DEVELOPMENT, TWO LAKES SEWER AUTHORITY, MANISTEE, MI | Project Manager for the development of a regional sewer authority, preliminary design, public participation meetings, and USDA Rural Development application for this $50M sanitary sewer collection and treatment system around Portage and Bear Lakes in Manistee County. Project included a comprehensive Archeological report and field investigation to determine cultural resources in the project area.

SAW GRANT SANITARY CAPITAL IMPROVEMENT PLAN, ELMWOOD TOWNSHIP, MI | Project Manager for the condition assessment of the Township's entire wastewater collection and pump station system. Services included GPS coordinate system for all manholes, entering all manholes to assess the condition(s), cleaning and videoing the existing gravity system, making recommendations on improvements and consultation on funding opportunities to complete needed improvements.

US-31 FORCE MAIN REHABILITATION PROJECT, EAST BAY TOWNSHIP, MI | Project manager for the preliminary investigation to determine the condition of the Township's 60-year old force main that served two municipalities. Developed an alternatives analysis outlining the rehab options and assisted the Township on selecting an option. Cured in Place Pipe Lining (CIPP) was the chosen alternative. Oversaw the design, permitting, bidding and construction phase services for the project through closeout.

WASTEWATER SYSTEM CONSTRUCTION PHASE, FILER CHARTER TOWNSHIP, MI | Project Manager and Lead Engineer for the development of a new wastewater collection system for Filer Township. The project included preliminary engineering and alternatives analysis, negotiations with the City of Manistee and the Little River Band of Ottawa Indians to provide wastewater treatment services along with project grant and loan funding through USDA Rural Development, system design, permitting, bidding, construction oversight and final project and funding closeout.

WATER AND SEWER MAIN MASTER PLAN, EAST BAY TOWNSHIP, MI | Project Manager for the development of a overall water and sanitary sewer master plan for the Township Growth Boundary. The final layout included pipe sizing needed for future build-out as allowed by current zoning. All work was reviewed and accepted by the Michigan Department of Environmental Quality and the Township uses this document as a basis for future water and sewer installations.

Breanna Anderson, PE

CIVIL ENGINEERING

COMPANY

WADE TRIM

EDUCATION

- BS, Civil and Environmental Engineering, University of Michigan

REGISTRATION

- Professional Engineer: MI

QUALIFICATIONS

- Focuses on site and utility design for private and public developments with 10 years of experience which includes site plan layouts, utility layout and profiling, parking, roadway, and driveway approaches, stormwater management practices, detailed grading and site balancing, demolition planning, and soil erosion and sedimentation control (SESC) procedures
- Site work has included parking lots, driveways and roadways, sidewalks and shared-use trails, stormwater management and green infrastructure, earthwork and site balancing, and maintenance of traffic
- Experienced with using 3D modeling softwares such as AutoCAD Civil 3D, Pipe Networks, and Microstation

PROJECT EXPERIENCE

BELLEVILLE WEST BOATING ACCESS SITE IMPROVEMENTS, DTMB, MI | Civil Engineer who designed an informal, naturalized kayak launch, additional parking, and replacement concrete plank boat launch for the Belleville West Boating Access Site. Improvements to the parking lot included ADA walkways to both launch areas, crack sealing, pavement striping, and parking bumper replacements. This project also included upgrades to signage and wayfinding. Breanna was responsible for concept design, plan preparations, permit preparations, and assisting with DTMB specifications and cost estimates.

FT MICHILIMACKINAC DRAINAGE STUDY, DTMB, MI | Civil Engineer who performed a study to determine cause of erosion from storm runoff throughout the fort property, identify areas for drainage collection, storm piping, and other solutions to route water through the site while reducing maintenance of walkways. Special consideration was given to the historical nature of the site, with creative options to disguise traditional storm collection facilities in a historically-accurate manner. Breanna assisted with preliminary concept layout, storm sewer sizing, and analysis of existing conditions.

DIXBORO TRAIL PHASE II, WASHTENAW COUNTY ROAD COMMISSION, MI | Project Engineer for the preparation of civil construction plans for a new biking trail adjacent to Dixboro Trail, along with a new right-turn lane at the Dixboro Trail/Plymouth Road intersection. The project included new curb and gutter, Americans with Disabilities Act (ADA) ramps, asphalt trail design, and re-grading of roadway shoulders, signage, pavement striping, signal design, and stormwater modifications. A tributary stream was also evaluated and plans were made for mitigating any impacts to the streambed.

NICHOLS DRIVE SLOPE STABILIZATION PROJECT, UNIVERSITY OF MICHIGAN, ANN ARBOR, MI | Lead Project Engineer for the design of slope stabilization, including new retaining wall, and reconstruction of Nichols Drive. Schematic design tasks included the review of historical documents, soil borings, utility records, modeling of proposed roadway, retaining wall, slopes, and development of a Schematic Basis of Design memo which outlined all of the wall options considered and conclusions for recommended design features. Prepared design development documents for roadway and wall design and associated improvements to the project area.

PROFESSIONAL DESIGN, CONSTRUCTION ENGINEERING AND OBSERVATION, AND ENVIRONMENTAL SERVICES FOR RIVERSIDE PARK PHASES 3 & 4, CITY OF DETROIT BSEED, MI | Project Engineer assisting with existing utility investigation, mapping of all utilities, utility conflict coordination, and general support in coordination between adjacent projects.

David Ashenfelter

CONSTRUCTION ENGINEERING/INSPECTION

COMPANY

WADE TRIM

CERTIFICATION

- MCA Concrete Field Testing Technician, Level I
- MCA Concrete Construction Inspector
- ACI Concrete Field Testing Technician – Grade I
- ACI Concrete Strength Testing Technician
- MDEQ Storm Water Management – Construction Site
- Michigan Certified Aggregate Technician, Level I
- Michigan Certified Hot Mix Asphalt Laboratory Technician, Level 1

QUALIFICATIONS

- Over 40 years of field construction engineering and inspection experience
- Responsible for making sure projects are constructed in accordance with contract plans and specifications
- Duties include coordinating survey crews, on-site inspection and materials testing, structure layouts, and total inspection
- Experienced in site work, roadway construction, water and wastewater distribution, storm sewer improvements, bridge construction, and various infrastructure improvements

PROJECT EXPERIENCE

COLONIAL MICHILIMACKINAC VISITOR CENTER PARKING AREA IMPROVEMENTS, DTMB, MI | Construction Inspection Technician or for a new parking facility at the Petersen Center Administration Building and resurfacing of the parking areas at the Colonial Michilimackinac Visitor Center located below the Mackinaw Bridge south causeway. Work included evaluation of the existing pavement structure to determine proper corrective repairs to the localized settlement and minimize reflective cracking, blending of the new HMA surface with the existing sidewalks to meet ADA standards, and stormwater drainage.

BACKUS LAKE DAM CONTROL STRUCTURE AND OUTLET PIPE REPLACEMENT, DTMB, MI | Construction Engineering for the replacement of a concrete drop control structure, outlet pipe, and emergency spillway. The new concrete control structure is a four-bay structure with removable stop log weirs, outlet pipe, filter diaphragm, accessible grating, bank underdrains, and armored slopes.

CANNON NO.1 AND NO. 2, DTMB, MI | Construction Engineering for the replacement of concrete drop control structures, headwall, outlet pipe, clay lining, and earthen dike at Cannon Wildlife Flooding Impoundments. The new concrete control structures are one and two-bay structures with removable stop log weirs.

KAWKAWLIN FLOODING, DTMB, MI | Construction Engineering for the replacement of a steel standpipe control structure, outlet pipe, and clay earthen dike repairs at Kawkawlin Wildlife Flooding Impoundment. The new concrete control structure is a four-bay structure with removable stop log weirs, outlet pipe, filter diaphragm, accessible grating, and armored slopes.

EAST BAY TOWNSHIP WATER MAIN & TANK CONSTRUCTION, EAST BAY TOWNSHIP, MI | Inspection Technician for approximately four miles of water main improvements including both plastic and ductile iron water main, installation of two pressure relief valves, and the construction of an elevated water tank. Also provided nuclear density testing of the backfill to prevent settling.

MEANS INDUSTRIES WATER MAIN IMPROVEMENTS, BUENA VISTA CHARTER TOWNSHIP, MI | Inspection Technician for a 12-inch commercial water service, including connection to an existing 12-inch distribution main (Township-owned), 64 lineal feet of 12-inch directionally drilled Certa-Lok water main, 305 lineal feet of 12-inch open-cut PVC C-900 water main, and connection to an existing 12-inch water main at the Means Industries facility. Responsibilities included witnessing installation and bacteriological sampling by the Contractor, as well as field engineering to ensure the connection of the proposed water service was made correctly to the Township's distribution system.

Jennie Benford, COT
ADMINISTRATION/ACCOUNTING

COMPANY

WADE TRIM

EDUCATION

- A, Paralegal, Great Lakes College
- A, Legal Secretary, Davenport University

CERTIFICATION

- Certified Office Technician

QUALIFICATIONS

- 26 years of experience as a Senior Document Controller for large-scale transportation, water, and wastewater projects and adeptly develops innovative methods of document control that provide easy tracking and retrieval
- Provides Quality Assurance/ Quality Control on contract documentation and project correspondence
- Proficient in several document control software applications including Adobe Professional and Dbase, Microsoft Access, and SharePoint

PROJECT EXPERIENCE

BACKUS LAKE DAM CONTROL STRUCTURE AND OUTLET PIPE REPLACEMENT, BELLEVILLE WEST BOATING ACCESS SITE IMPROVEMENTS, DENTON CREEK DAM REMOVAL, FT MICHILIMACKINAC DRAINAGE STUDY, AND OTHER VARIOUS DTMB PROJECTS, DTMB, MI | Senior Document Controller developing innovative methods of document control that provide easy tracking and retrieval. Assisted with quality assurance/quality control on contract documentation and project correspondence.

ATHERTON ROAD AND DUPONT STREET CONSTRUCTION ENGINEERING SERVICES - TIGER GRANT, CITY OF FLINT, MI | Certified Office Technician for the project that includes five miles of MDOT 4R HMA road reconstruction and 8-inch, 16-inch, and 24-inch water transmission, storm sewer replacement, and distribution main replacement. The $36M project includes the use of Federal TIGER funds, TIP funding for MDOT 4R, safety funding for 4- to 3-lane conversion and traffic signal modernization, and funding for full bridge replacement. Assisted the City with grant administration responsibilities.

M-68 FROM SOUTH STRAITS HIGHWAY TO I-75, CHEBOYGAN COUNTY, MI | MDOT Certified Office Technician for 1.30 miles of hot mix asphalt micro-cold milling and ultra-thin overlay, pavement repairs and pavement markings. This work was performed under an as-needed inspection and testing contract for the Gaylord TSC.

US-31 FROM WEST OF DIVISION STREET TO WEST OF ZAIGER ROAD, AND FROM EAST OF MANVEL ROAD TO SOUTH OF GRAHAM ROAD, EMMET COUNTY, MI | MDOT Certified Office Technician for 5.77 miles of hot mix asphalt crack treatment, cape and chip seal and pavement markings. This work was performed under an as-needed inspection and testing contract for the Gaylord TSC.

DINGELL DRIVE OVER EUREKA ROAD - BRIDGE, PATCHING, AND LIGHTING REPLACEMENT, DETROIT METRO WAYNE COUNTY AIRPORT, MI | MDOT Certified Office Technician for full construction engineering services on Dingell Drive and associated ramps through Detroit Metropolitan Airport including: bridge rehabilitation (two precast concrete I-beam replacements and partial deck replacement, superstructure and substructure patching and approach pavement replacement), significant concrete removal and replacement, concrete patching, street lighting replacement and wayward signing improvements.

KRYS ROAD CONSTRUCTION ENGINEERING, OTSEGO COUNTY ROAD COMMISSION, MI | MDOT Certified Office Technician for full construction engineering services for 2.50 miles of hot mix asphalt crushing, shaping and resurfacing, shoulder trenching along horizontal curves, shoulder aggregate, drainage and pavement markings.

Scott Bliss, PS
SURVEY

COMPANY

WADE TRIM

EDUCATION

- BS, Surveying Engineering, Ferris State University

REGISTRATION

- Professional Surveyor: MI
- Licensed Surveyor and Mapper: FL

QUALIFICATIONS

- Over a decade of experience overseeing multiple crews and providing large-scale topographic, ALTA, and boundary surveys as well as high precision control networks
- Extensive experience working with DTE, AT&T, and other utilities on gas transmission line and related infrastructure
- Technical Survey Lead for Civil 3D processing and 3D modeling with expertise in Leica/Trimble survey and laser scanning equipment, MicroStation Power GEOPAK, and laser scanning software packages

PROJECT EXPERIENCE

SANITARY SEWER RELOCATION, WESTERN WESTMORELAND MUNICIPAL AUTHORITY, NORTH HUNTINGDON, PA | Survey Lead for a 7-mile sewer relocation. Developed an overall deed mosaic of nearly 125 properties impacted by the relocation. Individual easement drawings were developed for each property in the mosaic. All property and easement information was provided in a digital format to be integrated into an overall GIS database for the project.

CS-102 REHABILITATION OF PUMP STATION 1 IMPROVEMENTS, GREAT LAKES WATER AUTHORITY, DETROIT, MI | Survey Lead for laser scanning and civil site topographic survey. The survey team completed over 100 terrestrial scan stations of the facility collecting over 1 billion data points. All point cloud data was registered to on-site control and meshed with the exterior existing conditions topographic survey. The final deliverable was used for 3D modeling of all interior and exterior facility assets.

DIVISION STREET BIKEWAY, ANN ARBOR DDA, MI | Lead Surveyor for topographic survey of 3,700 feet of Division Street for design of separated bikeway with modifications to sidewalk ramps, signals, pavement marking, and signage. Intersection geometry modifications were designed at Packard Road and Catherine Street to accommodate bikeway. Utilized terrestrial laser scanning and UAV/drone technology as part of the project.

7 MILE/NEVADA TRANSMISSION MAIN RENEWAL PROJECT, GREAT LAKES WATER AUTHORITY, DETROIT, MI | Survey Lead for the water transmission main pipe renewal project that included trenchless slip line rehabilitation techniques, traffic control, and plan development. Survey tasks span 7.2 miles and include easement and right-of-way surveys, topographic survey, aerial survey, and control survey, as well as manholes and inverts, utility connections, and review.

ATHERTON ROAD AND DUPONT STREET CONSTRUCTION ENGINEERING SERVICES - TIGER GRANT, CITY OF FLINT, MI | Lead Surveyor for construction staking for 5 miles of hot mix asphalt reconstruction, concrete pavement, curb, gutter, traffic signals, sidewalk and ramps, earth excavation, aggregate base, water main, storm sewer, signing, bridge reconstruction with 21-inch prestressed concrete box beams, steel piles, cofferdams, and pavement markings.

CEDAR CREEK GAS LINE CROSSING, DTE ENERGY COMPANY, PENTWATER, MI | Survey Crew Chief for topographic, hydraulic survey of the creek and right-of-way determination. Survey was performed to identify existing conditions of the DTE gas transmission line due to a portion of the pipeline being exposed within Cedar Creek. Created a plan and profile drawing consisting of the existing site features, pipeline stationing and delineation, and pipe exposure.

Robert Breen, PE
STRUCTURAL ENGINEERING

COMPANY

WADE TRIM

EDUCATION

- BS, Civil Engineering, University of Detroit

REGISTRATION

- Professional Engineer: MI, OH, PA, FL, TX

QUALIFICATIONS

- 47 years of structural engineering experience and has been involved with the inspection of a number of dams in southeast Michigan as well as the design of five lake level control dams
- Provides expertise with project management and review, design, and checking of MDOT interstate and local agency bridges and culverts including field inspection of local agency bridges, analysis and required reporting
- Experience also includes project management for recreational facilities including pedestrian bridges, boardwalks, fishing piers, and small marinas
- Qualified Team Leader for Bridge Safety Inspections through the Federal Highway Administration and National Highway Institute

PROJECT EXPERIENCE

BACKUS LAKE DAM CONTROL STRUCTURE AND OUTLET PIPE REPLACEMENT, DTMB, MI | Senior Engineer who assisted hydraulic analysis (HEC-RAS) of the proposed structure. The new concrete control structure is a four-bay structure with removable stop log weirs, outlet pipe, filter diaphragm, accessible grating, bank underdrains, and armored slopes.

DNR/HOUGHTON LAKE FLATS DIKE EVALUATION, DTMB, MI | Senior Project Engineer who assisted with the structural design of catwalks, drain pipe supports, concrete repairs, and stop log guides.

CORNWALL CREEK FLOODING DAM CONTROL, HURON PINES, OTSEGO COUNTY, GAYLORD, MI | Lead Structural Engineer for the design of a permanent sheet pile and reinforced concrete headwall overflow structure. This work was for the Department of Natural Resources, Fisheries Division in association with Huron Pines.

WALTZ ROAD OVER HURON RIVER BRIDGE REPLACEMENT, WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES, MI | Project Manager and QA/QC Engineer for the replacement of this 2-span pony truss built in 1924. The replacement structure was lengthened (220 feet) and widened (47'-2" out-to-out) to meet current design standards. The superstructure consists of 48-inch x 49-inch Bulb-Tee Beams with cast-inplace concrete abutments and pier with pile foundations. Additional work consisted of bridge approaches, HMA roadway, guardrail replacement, bridge lighting, and bike path reconstruction.

JORDAN LAKE TRAIL, VILLAGE OF LAKE ODESSA MI | As a subconsultant to ENG, Inc., Structural Engineer responsible for the design of a 600-foot long boardwalk on the north side of Jordan Lake. Narrow shoreline and road shoulder conditions required this boardwalk to be placed within the lake. Existing docks were integrated into the design and an overlook with benches was strategically placed along the boardwalk near Veterans Memorial Park to provide an area for respite and fishing access. Further east along the trail corridor, a 95-foot long pedestrian bridge was designed to span the Tupper Creek. AASHTO guidelines were used for the design of the boardwalk and bridge including H-10 loading and 14-foot clear widths. The bridge was also designed to support a sanitary pipe routed directly underneath the bridge.

MERRIMAN ROAD OVER TARABUSI CREEK, WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES, MI | QA/QC Engineer for a bridge reconstruction consisting of superstructure replacement, bearing replacement, substructure patching, and roadway approach work. Plans, specifications, and estimate documents were prepared to MDOT LAP and County standards.

Scott Butkovich

CONSTRUCTION ENGINEERING/INSPECTION

COMPANY

WADE TRIM

EDUCATION

- BS, Construction Management, Central Michigan University

CERTIFICATION

- MACP/PACP/LACP Certification, National Association of Sewer Service Companies (NASSCO)
- HMA Paving Operations
- Concrete Field Testing Technician Level I
- Concrete Strength Testing Technician Grade I
- Certified Storm Water Operator, Michigan Department of Environmental Quality (MDEQ)
- PASER Certification, Pavement Surface Evaluation and Rating (PASER)

QUALIFICATIONS

- 14 years of experience performing construction inspection and testing on a variety of projects including bridge replacement and roadway rehabilitation and reconstruction
- Thorough understanding of the standard practices of MDOT, as well as Field Manager
- Proficient in the electronic documentation that is necessary for use in MDOT ProjectWise

PROJECT EXPERIENCE

ATHERTON ROAD AND DUPONT STREET CONSTRUCTION ENGINEERING SERVICES - TIGER GRANT, CITY OF FLINT, MI | Provided construction inspection for the reconstruction of Dupont and Atherton Streets. The 4.75-mile, MDOT 4R road rehabilitation project also included 8-inch, 16-inch, and 24-inch water transmission main work to right-size the City's infrastructure.

CEDAR RIVER WATER STORAGE TANK BOOSTER STATION CONSTRUCTION ENGINEERING, MANCELONA AREA WATER & SEWER AUTHORITY, MI | Provided construction inspection for water infrastructure improvements including a 300,000-gallon, two-cell, cast-in-place, concrete ground-based water storage tank and booster station.

SOUTH AIRPORT ROAD WATER MAIN RELOCATION, GRAND TRAVERSE COUNTY, MI | Lead Inspection Technician for 2,000 feet of 12-inch water main relocation including installation of services for East Bay Township as part of the Costco store project on East South Airport Road.

US-24 (TELEGRAPH ROAD) FROM M-5 (GRAND RIVER) TO M-102 (EIGHT MILE ROAD), MICHIGAN DEPARTMENT OF TRANSPORTATION, MI | Provided construction inspection for the reconstruction of US-24 boulevard roadway including mainline, vertical and horizontal alignment modifications, median crossover modifications, drainage, and maintenance of traffic. In addition, the existing US-24 / M-102 interchange is being reconstructed/reconfigured as part of this project to a diverging diamond.

WOLVERINE POWER TUSTIN DISTRIBUTION, HYDAKER-WHEATLAKE COMPANY, TUSTIN, MI | Provided as-needed construction testing services for the Wolverine Power Tustin Distribution project in Burdell Township, Osceola County, Michigan.

WASTEWATER SYSTEM CONSTRUCTION PHASE, FILER CHARTER TOWNSHIP, MI | Provided construction inspection for a new sanitary sewer collection system funded through Rural Development for Filer Charter Township.

US-31/M-37 FROM GRIFFIN STREET TO 10TH STREET, GRAND TRAVERSE COUNTY, MI | Lead Inspection Technician for 0.34 miles of hot mix asphalt widening for center turn lane, cold milling and hot mix asphalt resurfacing, median island and sidewalk construction, landscaping, and minor drainage work in the City of Traverse City.

HOT MIX ASPHALT CRACK TREATMENT, VARIOUS ROUTES, GRAND TRAVERSE, LEELANAU, AND MANISTEE COUNTIES, MI | Lead Inspection Technician for 42.14 miles of hot mix asphalt crack treatment at various locations on US-31, M-72, and US-31/M-72 in the City of Traverse City.

Jason Caverson, PS

SURVEY

COMPANY

WADE TRIM

EDUCATION

- BS, Surveying and Civil Technology, Ferris State University

REGISTRATION

- Professional Surveyor: MI
- Certified Soil Erosion and Sedimentation Control (SESC) Inspector
- Certified for Hazardous Waste Operations and Emergency Response (HAZWOPER) Site Safety

QUALIFICATIONS

- 26 years of experience with GPS static and RTK control and digital leveling surveys, ALTA surveys, road design surveys, subdivision and site condominium layouts, water system projects, industrial park development, surveying for oil and gas well projects, mortgage reports, boundary surveys, construction staking, and topographic surveying
- Experience includes project management and QA/QC management on MDOT design surveys
- Proficient with AutoCAD Civil 3D, Trimble Geomatics Office, Plus II, Softdesk, CAICE, and other computer software used routinely for estimating, correspondence, computations, and drawing production

PROJECT EXPERIENCE

BACKUS LAKE DAM CONTROL STRUCTURE AND OUTLET PIPE REPLACEMENT, DTMB, MI | Lead Surveyor for the replacement of a concrete drop control structure, outlet pipe, and emergency spillway. The new concrete control structure is a four-bay structure with removable stop log weirs, outlet pipe, filter diaphragm, accessible grating, bank underdrains, and armored slopes.

CANNON NO.1 AND NO. 2, DTMB, MI | Lead Surveyor for the replacement of concrete drop control structures, headwall, outlet pipe, clay lining, and earthen dike at Cannon Wildlife Flooding Impoundments. The new concrete control structures are one and two-bay structures with removable stop log weirs.

DENTON CREEK DAM REMOVAL, DTMB, MI | Lead Surveyor for the complete removal of a single bay concrete dam overflow structure and earthen dike dam. Design tasks included evaluating stream geomorphology to restore Denton Creek to its original geometry, final grading, plunge pool filling, and stream restoration with the use of native planting. EGLE permitting included a Basis of Design addressing HEC-RAS stream modeling and analysis, stream hydrology, and hydraulics. A project assessment identifying both positive and negative impacts and implementation of best management practices to minimize impacts on the adjacent natural resources including sediment transport and construction sequencing was prepared.

AS-NEEDED SERVICES, OTSEGO COUNTY ROAD COMMISSION, MI | Project Surveyor for as-needed surveying services including topographic and construction surveying for various road improvement projects, monument preservation, boundary surveys, volume determination for stored materials, legal description reviews, and right-of-way determination.

BUFFALO RIDGE TRAIL PHASE II, CHARTER TOWNSHIP OF GARFIELD, MI | Project Surveyor for a 1-mile extension of the Buffalo Ridge Trail, a vital part of the vast trail system in and around Traverse City. This project included topographic survey, wetland mapping, easement preparation, and construction staking.

ALPINE POWER PLANT, WOLVERINE POWER COOPERATIVE, ELMIRA, MI | Project Manager and Lead Surveyor for a new gas turbine power plant. Provided boundary and topographic surveying, assistance with property and easement acquisition, zoning and special-use permit approvals, as well as site and civil design services in preparation for new plant construction on a 170-acre property in Otsego County. Additional permits for driveways, soil erosion and sedimentation control (SESC), notice of intent, potable water well, process water supply well, and on-site septic disposal were secured from five agencies. Also provided construction phase engineering support including coordination with other design consultants, materials testing, SESC monitoring, and inspections. Construction surveying services included staking and QA/QC on staking provided by other surveying firms.

Damien Curry, PE
CIVIL ENGINEERING

COMPANY

WADE TRIM

EDUCATION

- BS, Civil Engineering and Environmental Engineering, University of Michigan

REGISTRATION

- Professional Engineer: MI

QUALIFICATIONS

- 24 years of municipal engineering experience with a focus on water supply and sanitary sewer systems, pump stations, water storage tanks, force main and related infrastructure
- Performed numerous hydraulic studies and modeling projects and has led site development, storm water control, utility connections, permitting, and road design projects
- Uses a multitude of software modeling platforms to efficiently design various types of infrastructure projects saving communities and clients thousands of dollars by evaluating designs and developing solutions to achieve the best "bang for your buck" improvements

PROJECT EXPERIENCE

EAST BAY TOWNSHIP GENERAL SERVICES, EAST BAY TOWNSHIP, MI | Project Manager for evaluation and improvements of the Township pump station. After the operators noticed excessive wear and vibrations in one of the main pump stations, examined the piping arrangement and pump location and completed reconfiguration to extend pump life. Relocated control panels to conform to code regulations, while remaining operational during construction.

BUFFALO RIDGE TRAIL PHASE II, CHARTER TOWNSHIP OF GARFIELD, MI | Design and grading for a large Garfield Township park that included the 1.2-mile ADA-compliant paved walked trail, a wood chip trail weaving in between lakes, parking lots, soccer fields, softball field, tennis courts, basketball courts, bathrooms, and storm water basins integrated into the facility.

COLLECTION SYSTEM PUMP STATION REHABILITATION DESIGN, LAKE MITCHELL SEWER AUTHORITY, CADILLAC, MI | Project Manager for pump station rehabilitation and replacement. Hydrogen sulfide caused two pump stations to deteriorate, and one became inoperable. Replaced one pump station and repaired the other. Converted both to above ground pump stations to remove expensive components from the corrosive wet well environment. Lined both stations with an epoxy coating to prevent future deterioration.

EAST BAY TOWNSHIP PUMP STATION 1 ADJUSTMENTS, EAST BAY TOWNSHIP, MI | Project Manager for evaluation and improvements of the Township pump station. After the operators noticed excessive wear and vibrations in one of the main pump stations, the piping arrangement was examined and adjustments to the configuration were needed to extend pump life. New pumps were installed on the existing 100 hp motors, and the control panels were relocated above ground to conform to new code regulations, all while remaining operational during construction.

STREETSCAPE DESIGN, VILLAGE OF KALKASKA, MI | Project Engineer for design phase for streetscape improvements along US-131 from 3rd Street to 5th Street. Project included helping the Village obtain $750,000 in grant funding through MEDC. Design elements included traffic calming, parallel parking, and street lighting, stamped concrete crosswalks, and ADA compliant sidewalk ramps.

FILER TOWNSHIP DDA WASTEWATER SYSTEM, FILER CHARTER TOWNSHIP, MI | Design of 8,000-feet of 12-inch diameter gravity sanitary sewer along US-31, a duplex 2 horsepower submersible grinder pump station with a valve vault, and 1,000 feet of 2-inch force main. A gravity sewer flow meter was incorporated that uses radar and ultrasound technology to measure flows, and the readouts can be read through the internet at any time.

Catherine Dennise, PLA, LEED GA

LANDSCAPE ARCHITECTURE/PLANNING

COMPANY

WADE TRIM

EDUCATION

- MS, Landscape Architecture, University of Michigan
- BA, Program in the Environment, University of Michigan

REGISTRATION

- Professional Landscape Architect: MI
- LEED Green Associate, U.S. Green Building Council

QUALIFICATIONS

- 11 years of experience in site planning and design, visual communication and rendering, and research and analysis for public and private sector projects
- Well-versed with master planning, land development regulations, grant writing, and public involvement facilitation
- Specializes in sustainable and ecological design and brings proficiency in the Adobe CreativeSuite, Trimble Sketchup, ArcGIS and ESRI, and AutoCAD software applications

PROJECT EXPERIENCE

BELLE ISLE - MULTIMODAL TRANSPORTATION STUDY, DTMB, MI | Landscape Architect assisting in a comprehensive multimodal transportation, circulation, and traffic management study. The project aim is a phased strategy for implementing sustainable improvements to manage traffic, circulation, and multi-modal transportation services within park capacity recommendations. Innovative and transformative improvements in park access and circulation will be developed to reduce vehicular congestion, increase public safety, and improve park transportation access and wayfinding. Recommendations will provide an improved Belle Isle visitor experience while balancing the preservation of the park's natural and cultural resources.

ANN ARBOR TRAILHEAD DESIGN, WAYNE COUNTY PARKS, MI | Landscape Architect for included construction of 0.4 miles of non-motorized paved trail, an 80-foot pedestrian bridge across the Middle Rouge River, 0.1 miles of aggregate foot trails to adjacent natural resource hiking trails, fishing and canoe/kayak access areas, trailhead parking and green stormwater management controls. Responsible for tree survey and removal plans, and provided assistance for the landscape plans.

NIXON ROAD CORRIDOR RECONSTRUCTION DESIGN, CITY OF ANN ARBOR, MI | Landscape Architect responsible for tree survey and assessment within the road right-of-way as part of design services for one mile of the Nixon Road corridor. Land surveyed included wetlands, agricultural fields, and residential developments. Survey included tagging, measuring, assessing condition, and recording data for 385 deciduous and coniferous trees. Provided assistance with tree selection and planting design for four roundabouts.

CHEVY COMMONS REDEVELOPMENT, GENESEE COUNTY PARKS AND RECREATION, MI | Landscape Architect as part of a multi-discipline team for the conversion of the former 70-acre Chevrolet Plant site along the Flint River into a destination urban open space. Five phases of Chevy Commons development have combined an extensive trail network with native landscapes. Responsibilities included native tree and shrub planting design, graphical representation of proposed designs, and construction documentation.

LOWER ROUGE RIVER GREENWAY PLAN, WAYNE COUNTY PARKS, MI | Landscape Architect responsible for research and analysis of existing site conditions, project graphics, and visual communications. The Lower Rouge River Greenway Plan seeks to evaluate the feasibility of providing a non-motorized path network to connect six communities within the Lower Rouge River greenway corridor in Southeast Michigan. The plan included a conceptual layout of safe, convenient, and functional non-motorized links across the greenway for pedestrians and bicyclists.

Martin Flanagan
CADD

COMPANY

WADE TRIM

EDUCATION

- AS, Civil Engineering Technology, New Brunswick Community College

QUALIFICATIONS

- 28 years of experience focused on CADD design for municipal and land development projects including water, sewer, and road improvements
- Proficient in GIS, AutoCAD, ArcMap, AutoCAD Land Desktop, InRoads, Civil 3D, & Microstation
- Completed Geographic Information Systems and 3D modeling, and served as a survey crew chief for various infrastructure projects

PROJECT EXPERIENCE

COMBINED SEWER OVERFLOW L-43 ENGINEERING DESIGN, CITY OF DEARBORN HEIGHTS, MI | CADD Designer for separation of the combined sewers servicing the Volks Dearborn Hills Subdivision. Project included construction of a new storm sewer system consisting of 3,800 linear feet of 12-inch to 24-inch sewers, and reconstruction of the roadway. Water main replacement was also incorporated in the sewer and roadway project.

2021 INFRASTRUCTURE IMPROVEMENTS PROGRAM, CITY OF PLYMOUTH, MI | CADD Designer who set up and draft AutoCAD drawings related to sanitary and storm sewer, water, and sidewalk improvements for annual road, sewer, and water main rehabilitation program.

DIVISION STREET DESIGN, ANN ARBOR DDA, MI | Design Technician for separated bikeway with modifications to sidewalk ramps, signals, pavement marking, and signage. Intersection geometry modifications were designed at Packard Road and Catherine Street to accommodate bikeway.

CAMPUS DESIGN, CHARTER TOWNSHIP OF BROWNSTOWN, MI | CADD Technician for concept designs of a five-phased campus park surrounding the Township offices that will include soccer and softball fields and event pavilions. Sustainable design methods are being used for drainage including rain gardens and moist prairies.

WATERMAIN DESIGN, CITY OF DEARBORN HEIGHTS, MI | CADD Technician and Coordinator for water main replacement program including 2,700 feet of main for Hopkins and Stanford Streets, 2,300 feet for Stanford, and 2,300 feet for Andover Avenue. Also included 6,600 feet of water main for Joy Road, Fordson Highway and Waverly Street.

FULLER AND NIXON SIDEWALKS, CITY OF ANN ARBOR, MI | CADD Coordinator/Design Technician for two sidewalk gap locations. Submitted project through MDOT Local Agency Program for federal funding and compliance. Set up design CADD files and coordinated creation of project plan sheets. Assisted on design using Civil3D and AutoCAD. Provided QA/QC check to make sure the City's CADD standards for the plan sheets were met.

WATER MAIN REPLACEMENT AND REHABILITATION PROGRAM, BROWNSTOWN TOWNSHIP, MI | CADD Technician and Coordinator for late stages of 3-year water main improvements program placing 87,000 linear feet of 8- and 12-inch water main.

MAIN STREET RECONSTRUCTION, CITY OF ROANOKE, TX | Project CADD Designer for roadway reconstruction including replacement of 2,550 feet of 8-inch sanitary sewer with 8-inch PVC and 1,880 feet of 6-inch sanitary force main and 3,400 feet of 8-inch water main.

Brian Gombos, PE

STRUCTURAL ENGINEERING

COMPANY

WADE TRIM

EDUCATION

- MS, Structural Engineering, Michigan State University
- BS, Civil Engineering, Michigan State University

REGISTRATION

- Professional Engineer: MI, OH, NE, TX, FL, PA, KY, NY
- PACP/LACP/MACP, National Association of Sewer Service Companies (NASSCO)

QUALIFICATIONS

- 23 years of experience designing structural systems for collection system facilities including serving as project manager and structural design lead
- Designed structural rehabilitations for pump stations, basins/tanks, tunnels, wastewater treatment upgrades, and CSO facilities
- Demonstrated ability to perform structural design, respond to client concerns, and manage the design and construction of infrastructure projects

PROJECT EXPERIENCE

CS-102 REHABILITATION OF PUMP STATION 1 IMPROVEMENTS, GREAT LAKES WATER AUTHORITY, MI | Structural Engineer for improvements to a raw sewage pump station with a wet weather design capacity of 1,444 MGD. Work includes facility architectural, structural, electrical, instrumentation, and HVAC improvements, regulatory compliance, hydraulic modeling, permitting, rehabilitation/rebuilding of existing pumping units, improvements to major process piping and valves, and the potential addition of a variable speed controller (including variable frequency drives and eddy current drives at a minimum).

SOUTHERLY CSO EARLY ACTION PROJECT, NORTHEAST OHIO REGIONAL SEWER DISTRICT, MI | Structural Engineer for culvert assessment and strengthening. Also provided structural design including developing a preliminary design report documenting the alternatives analyzed, detailed confined space entry inspections, topographic surveys of the project facilities and sites, geotechnical data and baseline reports, and preparation of three design packages for nine project sites.

A. RAGNONE WWTP AND PUMP STATION IMPROVEMENTS, GENESEE COUNTY DRAIN COMMISSIONER, MI | Structural design for a new 3-MG wet weather treatment basin and pump station including provisions for future expansion to 6 MG, modifications to the existing deep pump station, and new chlorination building. Basin and future expansion were located within tight site constraints at an existing WWTP. The basin is designed to provide retention, clarification, and disinfection for SSO and wet weather overflows at the existing pump station. The new basin is an open-top structure with an active underdrain system designed to eliminate the need for uplift anchors and thus reduce overall costs of the structure. Two foundation systems, the underdrain system, and a tied belled-caisson system were designed to a 50% level, and the client selected the most economical system.

BRONX RIVER LONG TERM CONTROL PLAN, NEW YORK CITY, NY | Structural Engineer for the long term control plan project, which includes design and construction of facilities needed to achieve water body-specific water quality standards, consistent with the EPA's 1994 CSO policy. Wade Trim's services include inspection and design to support the complete life cycle delivery of the project from planning, design, and procurement design services through construction and close-out.

DEQUINDRE PUMP STATION REHABILITATION DESIGN, OAKLAND COUNTY WATER RESOURCES COMMISSIONER, MI | Structural Engineer for the assessment of the pump station facility and preparation of bidding documents to rehabilitate the facility for another 30 years of service. The project included replacing six dewatering pumps, manual bar screen discharge piping and valves, compressed air system, high efficiency lighting, and new finishes throughout. A roof was also added to an adjacent building for storage.

Nicholas Grim
SURVEY

COMPANY

WADE TRIM

EDUCATION

- BS, Land Surveying, Ferris State University

CERTIFICATION

- Marine Safety, Michigan Department of Natural Resources

QUALIFICATIONS

- 24 years of land surveying experience and supervises the day-to-day field operations of more than 10 survey crews
- Experience includes collecting and processing GPS data networks and the conversion of that data to several design software formats
- Experience with researching and reestablishing land boundaries using Public Land Survey System (PLSS) retracement surveys and remonumentation

PROJECT EXPERIENCE

ATHERTON ROAD AND DUPONT STREET CONSTRUCTION ENGINEERING SERVICES - TIGER GRANT, CITY OF FLINT, MI | Survey Processing for construction staking services for 5 miles of hot mix asphalt reconstruction, concrete pavement, curb, gutter, sidewalk and ramps, earth excavation, aggregate base, water main, storm sewer, signing, bridge reconstruction with 21-inch prestressed concrete box beams, steel piles, cofferdams, pavement markings, and construction staking. Staking activities for the project include establishing and verifying site control, setting calibration control for the contractor, and staking proposed improvements including water main, storm sewer, curb and gutter, and roadway improvements of subgrade and final grade.

ANN ARBOR TRAILHEAD DESIGN, WAYNE COUNTY PARKS, MI | Survey Crew Chief for topographic and boundary survey for construction of 3,000 feet of non-motorized trail, plus a small parking area, near the intersection of Hines Drive and Ann Arbor Trail.

CHEVY COMMONS REDEVELOPMENT, GENESEE COUNTY PARKS AND RECREATION, MI | Survey Technical Lead supervising data collection, processing, adjustment, drawing compilation, and final QA/QC of all submitted data. The project called for an overall rejuvenation of the riverfront and surrounding area, which in turn will enhance community connectivity, restore the natural ecosystem, improve stormwater and flood control, create economic opportunities, and enhance overall quality of life within the heart of the County and the City of Flint.

DUTCH ROAD BRIDGE CONSTRUCTION, VILLAGE OF GOODRICH, MI | Construction Staking Crew Chief for bridge rehabilitation including superstructure replacement, riprap placement, approach paving, and guardrail placement on Dutch Road over Kearsley Creek in Goodrich. Staking included establishing control throughout the project site, establishing reference lines for bridge layout, staking out roadway improvements, laying out beam locations, and staking out the bridge approach and guardrail. This was an MDOT Local Agency Program project through the Davison TSC.

ROBERT WILLIAMS PARK PLANNING AND DESIGN, DAVISON TOWNSHIP, MI | Survey Crew Chief for improvements to the 100-acre park along the Kearsley Creek. Completed topographic survey, construction layout, and wetland delineation for nature trails, asphalt trails, 630 linear feet of boardwalks through existing wetlands, and a 60-foot-long bridge over the Kearsley Creek. The park also includes an outdoor classroom, overlooks, pavilion, interpretive signage, grand entrance arch, cascading water feature, native plantings, and parking lot.

SHARED USE TRAIL CONSTRUCTION ENGINEERING PHASE, CHARTER TOWNSHIP OF MONTROSE, MI | Surveyor for design and construction layout for a 1-mile multi-use trail along Seymour Road to connect Barber Memorial Park with the City of Montrose. Completed topographic and boundary survey and construction layout.

Pam Halcomb

ADMINISTRATION/ACCOUNTING

COMPANY

WADE TRIM

QUALIFICATIONS

- 25 years of experience as a Project Accounting Specialist, assisting Wade Trim's Project Manager's in the financial management of ongoing projects
- Updating and assisting with projects in the BST accounting software, monthly invoicing, as well as assisting in all A/R responsibilities

PROJECT EXPERIENCE

BASS LAKE PROJECT EASEMENTS, DTE ENERGY, DETROIT, MI | Project Accountant serving the Project Manager in Wade Trim's Gaylord office,monthly invoicing for DTE, as well as maintaining and updating the monthly budget. Wade Trim's role was to prepare an easement for Bass Lake Road.

GORDIE HOWE INTERNATIONAL BRIDGE OVERSIGHT ENGINEERING, WINDSOR, ON | Project Accountant serving as part of the owner's engineer team for the Gordie Howe International Bridge project, which is being delivered through a public-private partnership (P3). Wade Trim's role is to provide technical reviews for the Michigan interchange and US port of entry. These reviews include hydrologic/hydraulic modeling, reports, and construction plans as they relate to drainage and utilities. Specific responsibilities include, monthly invoicing, and updating the budget in BST.

I-94 MODERNIZATION PROJECT, TASK 5A, MDOT, LANSING, MI | Project Accountant for the evaluation of the 7-mile corridor. Wade Trim evaluated the feasibility of installing green infrastructure as well as integrating stormwater management for the corridor to meet MDOT and City of Detroit drainage criteria. Creating monthly invoice for Wade Trim as the sub to the prime HNT, as well as maintaining MDOT spreadsheets.

I-275 (NORTHLINE TO FORD ROAD) AS-NEEDED DESIGN ASSISTANCE DURING CONSTRUCTION, MDOT, LANSING, MI | Project Accountant assisting the Project Manager in monthly MDOT invoicing and any budget adjustments. This project is the 1-275 Northline to Ford Road Design assistance during construction.

LINCOLN AND FIFTH AVENUE STAKING, DTE ENERGY, DETROIT, MI | Stake right of way along 3rd Avenue and stake SRT on Lincoln Street in Section 25, T39N, R22W, City of Escanaba, Delta County, Michigan. Project Accountant assisting in invoicing and monthly budgets adjustments for DTE.

MDOT - SCOUR VARIOUS LOCATIONS (2022), MDOT, LANSING, MI | Hydraulic analysis, scour analysis, and scour countermeasures for seven locations throughout Michigan. Project Accountant assisting in invoicing through MDOT spreadsheets and monthly budget adjustments.

STADIUM DRIVE RIGHT OF WAY STAKING, DTE ENERGY, DETROIT, MI | Stake the right of way of Stadium Drive in part of T2S, R6E, City of Ann Arbor, Washtenaw County, Michigan. Project Accountant assisting in invoicing and monthly budgets adjustments for DTE.

Tiffany Harrison, PE

CIVIL ENGINEERING

COMPANY

WADE TRIM

EDUCATION

- BS, Environmental Engineering, Michigan Technological University
- BS, Chemical Engineering, Michigan Technological University

REGISTRATION

- Professional Engineer: MI

QUALIFICATIONS

- 22 years of experience in the planning, design and construction of wastewater process treatment systems, water distribution systems, wastewater collection systems, storm water collection systems
- Hydraulic modeling expertise in domestic potable water and fire water systems to investigate, evaluate, and optimize pumping, transmission and distribution, and storage facilities

PROJECT EXPERIENCE

WESTLAWN AND RANCH PUMP STATION REHABILITATION, BAY COUNTY DEPARTMENT OF WATER AND SEWER, BANGOR TOWNSHIP, MI | Project Engineer responsible for the design of upgrades to two pump stations located in Bangor Township – Westlawn and Ranch. The existing pump stations were first constructed in the 1950s and are comprised of a concrete wet well and a steel dry pit, which houses dual dry pit pumps. Due to the age of the pumps and the scarcity of available parts, the rehabilitation of the pump stations has become necessary.

WASTEWATER TREATMENT PLANT EVALUATION, VILLAGE OF CHESANING, MI | Project Manager responsible Project applying for and obtaining S2 Grant funding in order to perform an evaluation and equipment inventory of the Village of Chesaning's Wastewater Treatment Plant (WWTP) in order to assess the condition of each piece of equipment and to determine an upgrade or replacement schedule in accordance with their current NPDES permit for the facility.

TIGER GRANT ROADWAY AND WATER MAIN REPLACEMENT, CITY OF FLINT, MI | Project Engineer responsible for performing a detailed QA/QC on the plans and Special Provisions associated with the 4.75 miles of road reconstruction and water main replacement, bridge superstructure replacement along Atherton over Carmen Creek, traffic signal modernization at the Dupont and Stewart intersection, street light fixture replacements and drainage modifications. Performed the hydraulic analysis necessary to compare water main sizing and routing effects on Fire Flow, analyzing cross connection alternatives.

20-INCH TRANSMISSION MAIN AND PRICE ROAD BOOSTER STATION IMPROVEMENTS, WATER DISTRICT NO. 1 MIDLAND COUNTY, MI | Project Manager responsible planning and executing the design of a nearly five miles of a 20-inch transmission main from the City of Midland to Water District No. 1 of Midland County, a master metering station within City limits, modification of the Price Road Booster Station including the addition of three 1,600-gpm booster pumps, telemetry at two elevated storage towers, one ground storage tower, and the master meter station.

WATER SYSTEM RELIABILITY STUDY, WATER DISTRICT NO. 1 MIDLAND COUNTY, MI | Project Manager responsible for updating the District's hydraulic model following the completion of the construction of a five mile 20-inch transmission main from the City of Midland to the Price Road Booster Station, as well as the addition of three 1,600-gpm booster pumps. The hydraulic analysis was used to determine whether or not an aging 200,000 gallon ground storage tank was necessary to maintain system reliability and safety, or if it could be eliminated.

Scot Lautzenheiser, PLA

LANDSCAPE ARCHITECTURE/PLANNING

COMPANY

WADE TRIM

EDUCATION

- BS, Landscape Architecture, Michigan State University
- International Studies, Community Design and Graphic Communication

REGISTRATION

- Professional Landscape Architect: MI
- Soil Erosion and Sedimentation Control (SESC) Inspector
- Storm Water Management Operator

QUALIFICATIONS

- 16 years of experience with a diverse background in public and private sector projects which includes parks and recreation, site planning, trail and bikeway planning, residential, commercial and higher education planning and design, and storm water system design and construction
- Strong technical skills to complement his creative and artistic background allowing him to integrate design issues, client desires, and technical and budget constraints into innovative solutions under tight time constraints
- Responsibilities have included site layout and design, trail and ADA accessible design, residential and commercial design, CAD drafting, rendering, construction documentation, and field inspection

PROJECT EXPERIENCE

BELLE ISLE - MULTIMODAL TRANSPORTATION STUDY, DTMB, MI | Landscape Architect assisting in a comprehensive multimodal transportation, circulation, and traffic management study. The project aim is a phased strategy for implementing sustainable improvements to manage traffic, circulation, and multi-modal transportation services within park capacity recommendations. Innovative and transformative improvements in park access and circulation will be developed to reduce vehicular congestion, increase public safety, and improve park transportation access and wayfinding.

CHEVY COMMONS REDEVELOPMENT, GENESEE COUNTY PARKS AND RECREATION, MI | Project Manager for landscape architecture and engineering services for master planning, design, and construction of Phases 1 through 5 to convert a 70-acre brownfield site, a former Chevrolet Plant location, into an urban natural park area. Master plan efforts included historical research and data collection, aerial mapping, utility investigations, field survey and base plan development. Site design elements included drive and parking areas, ADA accessibility, sidewalks and trails, underground utility rehabilitation, stormwater drainage and pre-treatment enhancements, tree plantings, native landscape restoration, integration of art and unique site features, and site lighting.

ELIZABETH PARK SITE IMPROVEMENTS, WAYNE COUNTY PARKS, MI | Landscape Architect for the project which included waterfront pedestrian promenade, boat landing, natural shoreline habitat enhancements, amphitheater, and marina renovations at the historic park along the Detroit River. Managed design, construction documentation preparation and permitting for about $1.2 million in improvements.

GESU SCHOOL GREEN INFRASTRUCTURE, GESU CATHOLIC CHURCH AND SCHOOL, DETROIT, MI | Project Manager for the campus redesign at Gesu Catholic Church and School. The redesign incorporated multiple green infrastructure features into its 6-acre campus including impervious surface removal, downspout disconnections, and bioinfiltration gardens. The design directs rainwater to vegetated areas to encourage infiltration and reduces paved areas.

GREENMEAD HISTORIC PARK MASTER PLAN, CITY OF LIVONIA, MI | Landscape Architect for the development of a master plan for an underutilized, nearly 200-year-old historic resource. A key component is to draft a 5- to 20-year master plan through robust community engagement that will develop a mission and vision for the historic park as well as goals and objectives for the master plan. The final master plan will bring new life into this community space and historic village through the integration of event spaces and plazas, a natural play playground, roadway reconfiguration and improvements, gateways and entry beautification, petting farm, orchards, picnic spaces, historic building reuse, and pedestrian trail connections.

Michael Lynett, PE

CONSTRUCTION ENGINEERING/INSPECTION

COMPANY

WADE TRIM

EDUCATION

- BS, Civil Engineering, Michigan State University

REGISTRATION

- Professional Engineer: MI
- PACP/LACP/MACP, National Association of Sewer Service Companies (NASSCO)
- Construction Storm Water Management, EGLE

QUALIFICATIONS

- 13 years of significant experience assisting with project management and engineering on multiple projects for as-needed inspection and testing contracts
- Experience on high-profile HMA and concrete reconstruction projects that have included storm sewer and sanitary sewer upgrades, water main, and realignment of multiple roads and major intersections

PROJECT EXPERIENCE

ALFRED STREET REHABILITATION, CITY OF MONTROSE, MI | Assistant Project Manager/Field Engineer/Certified Office Technician for 0.20 miles of hot mix asphalt cold milling and resurfacing, select concrete curb and gutter replacement, concrete sidewalk ramps, structure cover adjustments, pavement markings, and permanent signing. Responsibilities included tracking project budgets, reviewing daily reports, DBE monitoring, management of the project files and tracking pay items.

KETTERING GATEWAY ROADWAY AND WATER MAIN IMPROVEMENTS, MICHIGAN DEPARTMENT OF TRANSPORTATION, MI | Lead Inspector and Testing Services Coordinator for the City of Flint for 0.95 miles of HMA non-motorized path, concrete curb and gutter, sidewalk, ADA ramps, bridge deck repair, ornamental street lighting, fencing, permanent signing, pavement markings, tree planting, and turf establishment on Hammerberg Road, Miller Road, Court Street, and Fox Street. The bridge deck repair included hydro demolition, slurry runoff collection, pH testing, steel reinforcement replacement, silica fume modified pour, end header replacement, and bridge approach replacement. Decorative street lighting included directional boring for conduit, wiring, light poles, and foundations. Served as primary contact for field activities and assisted in project administration.

WILSON ROAD EXTENSION, MICHIGAN STATE UNIVERSITY, LANSING, MI | Project Construction Engineer responsible for coordination of field inspection, project documentation, shop drawing submittals, and design services during construction of 0.5 miles of new roadway and associated site and utility upgrades for a new facility expected to significantly increase campus traffic. The extension of Wilson Road serves as a marquis entrance to campus and includes a gateway campus sign. Hagadorn Road and Conrad Road also received improvements as part of this project, including the addition of new traffic signals to improve heavily populated pedestrian crossings. Additional project elements included stormwater improvements, significant landscaping, detention basins, water quality treatment facilities, a retention pond, and permeable paver system in select parking areas.

DUTCH ROAD BRIDGE CONSTRUCTION, VILLAGE OF GOODRICH, MI | Field Engineer/Office Technician for bridge rehabilitation including superstructure replacement, riprap placement, approach paving, guardrail placement, and traffic control on Dutch Road. Close coordination required between residents and the DPW for rerouting traffic and accommodating the general public. Responsibilities included budget tracking, pay item and material tracking, review of daily reports, payroll review, and management of the files.

TRAFFIC SIGNAL MODERNIZATION ON M-85, M-10, MICHIGAN DEPARTMENT OF TRANSPORTATION, MI | Assistant Project Manager/Field Engineer for full construction engineering services for traffic signal modernizations and sidewalk and ramp upgrades at 15 locations in the City of Detroit.

Jason Martin

CONSTRUCTION ENGINEERING/INSPECTION

COMPANY

WADE TRIM

EDUCATION

- BS, Construction Management, Michigan State University

QUALIFICATIONS

- 25 years of experience in all phases of civil infrastructure construction
- Responsibilities include construction management for various types of industrial infrastructure improvement projects including field management and administration, record drawing coordination, constructability reviews, conflict resolution, and quality assurance/quality control

PROJECT EXPERIENCE

KAREGNONDI WATER AUTHORITY (KWA) CONSTRUCTION PROGRAM MANAGEMENT, GENESEE COUNTY DRAIN COMMISSIONER, MI | Resident Project Representative for a 63-mile raw water transmission main and two pump stations from Lake Huron to Flint to provide a new water source to serve the residents of Genesee County, Lapeer County, and the Cities of Flint and Lapeer. Included 60-inch and 66-inch welded steel pipeline and ductile iron pipe. Responsible for construction management, observation, and daily reporting. Also acted as the program technical expert regarding installation and testing of the large diameter welded steel pipe.

ATHERTON ROAD AND DUPONT STREET CONSTRUCTION ENGINEERING SERVICES - TIGER GRANT, CITY OF FLINT, MI | Construction Manager providing constructibility for five miles of MDOT 4R HMA road reconstruction and 8-inch, 16-inch, and 24-inch water transmission, storm sewer replacement, and distribution main replacement. The $36M project includes the use of Federal TIGER funds, TIP funding for MDOT 4R, safety funding for 4- to 3-lane conversion and traffic signal modernization, and funding for full bridge replacement. Assisted the City with grant administration responsibilities.

CHEVY COMMONS REDEVELOPMENT, GENESEE COUNTY PARKS AND RECREATION, MI | Provided constructability for the master planning, design, and construction of Phases 1 through 5 to convert a 60-acre brownfield site, a former Chevrolet Plant location, into an urban natural park area. Construction plans and bidding documents were developed for each phase. Construction was implemented in multiple phases based on funding including federal, state, local, and private sources. Funding assistance and grant administrative support was also provided for the project.

RESEARCH AND ENGINEERING CENTER (REC) DESIGN DEVELOPMENT, FORD MOTOR COMPANY, MI | Assistant Construction Manager for Construction Administration. Assisted with shop drawing and RFI review coordination. Kept track of the QA/QC review process of all drawings and dates to be submitted to the Owner. Assisted with coordination efforts that design leads may need from Ford regarding existing utilities that are still in the ground. The utility information is either gathered from older plan sets or meeting with Ford Building Superintendents. Performed field investigations of utilities, as needed, to determine size, material type, and if they are still in use or not. Also responsible for organizing old Ford drawings and filing them in ProjectWise.

KEARSLEY STREET CONSTRUCTION ENGINEERING SERVICES, CITY OF FLINT, MI | Provided constructibility for the design of a federally funded project that included storm sewer and sidewalk improvements, as well as one mile of 12-inch ductile iron water transmission main replacement. The project connects the downtown corridor to new Chevy Commons park adjacent to Kettering University.

Arthur Mullen, AICP

LANDSCAPE ARCHITECTURE/PLANNING

COMPANY

WADE TRIM

EDUCATION

- MS, Historic Preservation, Columbia University
- BA, History, Hamilton College

REGISTRATION

- American Institute of Certified Planners
- Historian and Architectural Historian, Code of Federal Regulations

QUALIFICATIONS

- 29 years of experience in historic preservation, heritage planning and development, grant writing, marketing, and media inform his efforts to develop transformative plans
- Qualified as both a Historian and an Architectural Historian per the federal requirements found at 36 CFR 61
- Extensive experience in managing public engagement efforts spanning from all of southeast and central Michigan to villages of less than 2,000 residents

PROJECT EXPERIENCE

BELLE ISLE - MULTIMODAL TRANSPORTATION STUDY DTMB, MI | Planner for a phased strategy for implementing sustainable improvements to manage traffic, circulation, and multi-modal transportation services within park capacity recommendations. Wade Trim was recently selected to lead this comprehensive multi-modal transportation, circulation, and traffic management study. Innovative and transformative improvements in park access and circulation will be developed to reduce vehicular congestion, increase public safety, and improve park transportation access and wayfinding. Recommendations will provide an improved Belle Isle visitor experience while balancing the preservation of the park's natural and cultural resources.

SAGINAW STREET REHABILITATION AND RECONSTRUCTION, CITY OF FLINT, MI | Provided planning services in support of the rehabilitation of six city blocks of Saginaw Street in Flint's downtown district. The brick road, listed on the state's historic register, is to be completely reconstructed, including curb and gutter, sidewalk, drainage, ADA-compliant sidewalk ramps, and landscaping improvements along the corridor. The project also includes a new 24-inch water transmission main with service lead replacements.

COMMUNITY RECREATION PLAN, CASEVILLE HARBOR COMMISSION, MI | Project Manager for the preparation of a community recreation plan for Caseville, Caseville Township, and the Caseville Harbor Commission that meets MDNR Recreation Plan standards and community needs. Drafted and incorporated the community's first nonmotorized vision into the plan. Negotiated the challenges of working with three separate municipal entities on drafting the plan, and prepared and distributed a community-wide survey while enabling the plan's rapid adoption to allow for grants to be submitted by the April 2020 grant application deadline.

CS-152 ROUTE ANALYSIS AND PRELIMINARY DESIGN, GREAT LAKES WATER AUTHORITY, MI | Provided planning services to support the execution and authoring of the Water Works Park to Northeast Transmission Main SRF Project Plan as well as the funding application to Michigan Department of Environment, Great Lakes, and Energy (EGLE) to potentially secure $133 million in low interest funding for design-build construction costs. Planning efforts covered the project needs, authority service area economic, demographic, and environmental characteristics, existing facilities, analysis of alternatives, alternatives estimating and technical considerations, economic and financial considerations, environmental impacts, and public participation outreach.

DEVELOPMENT REVIEW MEETINGS AND OTHER PLANNING 2019, EAST BAY TOWNSHIP, MI | Project Manager who served as East Bay Township's consultant planner. The project included daily interaction with Township staff to address planning-related issues, as well as preparing materials for Planning Com-mission meetings. Also supported the zoning administrator in preparing for Zoning Board of Appeals (ZBA) meetings.

Michael Nicolls, PE
STRUCTURAL ENGINEERING

COMPANY

WADE TRIM

EDUCATION

- BS, Civil Engineering, Wayne State University

REGISTRATION

- Professional Engineer: MI, OH, TX, FL

QUALIFICATIONS

- 22 years of transportation-related structural engineering with a primary focus on the design, load ratings, and inspection of bridges, culverts, and retaining walls
- Experience in analysis, design, and development of plans, specifications, and estimates on structural projects ranging from simple span structures and retaining walls to multi-span interstate structures
- Well-versed in utilizing FHWA and AASHTO design, load ratings, and inspection specifications

PROJECT EXPERIENCE

MERRIMAN ROAD OVER TARABUSI CREEK, WAYNE COUNTY DEPT. PUBLIC SERVICES, MI | Lead Structural Engineer for the replacement of this three-span concrete slab bridge built in 1964. The existing structure had a length of 64'-0" with no skew. The replacement structure consists of a 64'-0" single span with spread box beams (27" by 48") with CIP concrete abutments on pile-supported footings. The structure is not skewed and maintains the waterway width through the bridge. Additional work consisted of reconstruction of bridge approaches and guardrail replacement.

DUFFIELD ROAD OVER JONES CREEK (#2733), STRUCTURE REPLACEMENT, GENESEE COUNTY ROAD COMMISSION, MI | Project Engineer responsible for analysis, design and plan preparation of the replacement design of a bridge in poor condition that no longer met current design standards. The replacement will meet current AASHTO LRFD design specifications as well as current LRFR load rating requirements. The new, single-span bridge (skewed 30 degrees) was lengthened and widened to meet current structure and hydraulic design standards. The replacement structure consists of adjacent box beams with a concrete deck, curtain wall abutments, and wingwalls on pile foundations and approach reconstruction.

EAST RIVER ROAD OVER NORTH HICKORY CANAL BRIDGE REPLACEMENT, WAYNE COUNTY DPS, MI | Project Structural Engineer for the replacement of this 3 span reinforced concrete slab bridge constructed in 1945. The replacement structure was lengthened (65 feet) and widened (41'-2" out-to-out) to meet current design standards. The superstructure consists of 21-inch x 48-inch prestressed box beams with cast-in-place concrete abutments on spread foundations. The structure was built using part-width construction to allow residents onto Meso Island. Multi-celled cofferdams were utilized to construct the abutments and wingwalls due to very poor soil conditions encountered at the site. Additional work consisted of bridge approaches, HMA roadway, and guardrail replacement.

BRIDGE INSPECTION SERVICES, HURON-CLINTON METRO AUTHORITY, MI | Qualified Team Leader for the inspection and documentation of 10 vehicular and 20 pedestrian bridges under the jurisdiction of the Huron-Clinton Metropark Authority. Scope of the work included an in-depth evaluation of the deck, approaches, guardrails, superstructure, substructure, slope surfaces, and surroundings, as well as determination of streambed cross sections and level 1 scour analyses.

I-75 MODERNIZATION PROJECT DESIGN-BUILD (DB) PHASE, MDOT, METRO REGION, OAKLAND COUNTY, MI | Project Engineer as part of the Owner's Representative Consultant (ORC) Services related to project development and assistance for the reconstruction section of I-75 from Wattles Road to Coolidge Highway. Responsibilities include the Structure Study development, site design, plan preparation, and cost estimation for the design-build replacement of I-75 NB and SB bridges over East Long Lake Road.

Mark Pribak, PE
CIVIL ENGINEERING

COMPANY

WADE TRIM

EDUCATION

- MS, Environmental Engineering, Wayne State University
- BS, Civil Engineering, Michigan State University

REGISTRATION

- Professional Engineer: MI, TX, MO

QUALIFICATIONS

- 33 years of experience in analysis and design of sanitary and stormwater systems, watersheds and riversheds, force main, metering systems, and open channels
- Specialty expertise in computational fluid dynamics (CFD) and gradually varied profile modeling
- Extensive experience with Flow3D, HEC-1, HEC-2, HEC-HMS, HEC-RAS, SWMM, WASP, and PCSWMM models, including CFD modeling
- Applies varied hydraulic experience to applications in roadway projects for detention routing, storm sewer design, and design of sewer outfalls using both TR-55 and the rational method to meet federal, state, and local municipal requirements

PROJECT EXPERIENCE

DENTON CREEK DAM REMOVAL, DTMB, MI | Hydraulics Engineer responsible for the complete removal of a single bay concrete dam overflow structure and earthen dike dam. Design tasks included evaluating stream geomorphology to restore Denton Creek to its original geometry, final grading, plunge pool filling, and stream restoration using native planting. EGLE permitting included a Basis of Design addressing HEC-RAS stream modeling and analysis, stream hydrology, and hydraulics. A project assessment identifying both positive and negative impacts and implementation of best management practices to minimize impacts on the adjacent natural resources, including sediment transport and construction sequencing, was prepared.

AS-NEEDED HYDRAULIC DESIGN SERVICES 2020, MICHIGAN DEPARTMENT OF TRANSPORTATION, MI | Hydraulic Engineer for as-needed hydraulic design services to support the intermittent needs of MDOT's Hydraulics Unit statewide. The first task included a hydraulic study for an existing storm sewers system which is experiencing flooding on a regular basis on the I-94BL in Benton Harbor. Flooding is exacerbated by high Great Lakes levels that are imposing backwater at the point of discharge to the St. Joseph River. The study analyzed the system and developed alternatives to mitigate flooding.

UPPER DUCK ALL BUNDLE, METRO SEWER DISTRICT OF CINCINNATI, OH | Project Engineer responsible for developing a streamlined method for modeling water quality benefits to the receiving stream as a result of the implementation of stormwater and CSO best management practices (BMPs). Tasks included updating the existing SWMM5 model to include numerous stormwater detention basins and bioswales. Detention basins were modeled to design water quality benefits to the receiving stream from a flow quantity and quality perspective.

EUREKA CORRIDOR IMPROVEMENT PLAN, CITY OF TAYLOR, MI | Hydraulic/Hydrologic Engineer in support of alternatives evaluation, design, and construction of a flood control project on a major Wayne County drain that was integrated into the Lakes of Taylor Golf Course. The project included a detailed hydrologic/hydraulic analysis using HEC-1 and HEC-2 computer model programs.

PURITAN/FENKELL AND SEVEN MILE HYDRAULIC ANALYSIS, GREAT LAKES WATER AUTHORITY, MI | Project Manager for the development and updating of the system hydraulic analysis. Updated Rouge River flood level statistics were developed based on USGS stream gauge data and river rating curves. Internal basin hydraulics were developed within the HEC-RAS model framework to evaluate the total headloss through the system due to minor losses associated with weirs, gates, screens, and bends. Model results were used to develop head discharge rating curves for each basin. The entire collection and basin system was evaluated within the SWMM5 model framework to develop an updated operational protocol for the system.

Jeffrey Reynhout, PE

CIVIL ENGINEERING

COMPANY

WADE TRIM

EDUCATION

- BS, Civil Engineering, Michigan Technological University

REGISTRATION

- Professional Engineer: MI, MO, OH, NY

QUALIFICATIONS

- 47 years of experience designing process improvements for collection systems and wet weather facilities
- Focused on operator-friendly equipment and design features that address maintenance and operations concerns
- Has developed preliminary design and design documents for CSO and wastewater treatment and floatables control facilities in Detroit, Cleveland, Omaha, Pittsburgh, and New York

PROJECT EXPERIENCE

MACOMB INTERCEPTOR DRAIN DRAINAGE DISTRICT AS-NEEDED ENGINEERING SERVICES, MACOMB COUNTY PUBLIC WORKS, MI | Senior Process Engineer as part of an as-needed engineering contract for the North Gratiot Interceptor Pump Station project to replace two 600-GPM, submersible dry weather pumps and control gates in the wet well.

CS-102 REHABILITATION OF PUMP STATION 1 IMPROVEMENTS, GREAT LAKES WATER AUTHORITY, MI | Project Engineer for improvements to a pump station with a wet weather design capacity of 1,444 MGD. The project includes regulatory compliance, hydraulic modeling, permitting, isolation and inspection of the lower wet well, rehabilitation/rebuilding of existing pumping units, improvements to major process piping and valves, potential addition of a variable speed controller (including VFDs and eddy current drives at a minimum), as well as facility architectural, electrical, instrumentation, structural, and HVAC improvements.

EAST CHINA WWTP CONSTRUCTION ENGINEERING, CHARTER TOWNSHIP OF EAST CHINA, MI | Lead Engineer for design and construction administration of improvements to the headworks, replacement of the secondary rotating biological contactor, replacement of primary and secondary clarifier machines, and improvements to the digester system.

SANITARY SEWER IMPROVEMENTS, VILLAGE OF CHESANING, MI | Project Engineer who assisted with the development of a detailed design plan, bidding documents, and specifications for improvements to the WWTP. Demolition of existing equipment and replacement with new equipment included an aerated grit removal system, two primary clarifiers, two final clarifiers, waste burner from digesters, sludge recirculating pumps, sludge pumps, main boiler, and electrical systems. The project also included the replacement of pumps, valves, and piping offsite at the Village's Chapman Street Pump Station.

CS-166 CAPITAL IMPROVEMENT PLAN (CIP) ASSISTANCE, GREAT LAKES WATER AUTHORITY, MI | Process Engineer for the subconsultant design firm on a job order contract to deliver capital improvement projects, technical services, and implementation assistance. The contract involved capital project definition and planning, design and construction phases, third-party contract administration and oversight, claims analysis and resolution, training, and value engineering services for select projects.

DOAN VALLEY STORAGE TUNNEL SYSTEM DESIGN, NORTHEAST OHIO REGIONAL SEWER DISTRICT, OH | Project Engineer for inflow control gates and mechanical design of the 18-foot-diameter storage and conveyance tunnel serviced by two 8.5-foot-diameter consolidation tunnels.

David Richards, PLA, LEED GA

LANDSCAPE ARCHITECTURE/PLANNING

COMPANY

WADE TRIM

EDUCATION

- BA, Landscape Architecture, University of Oregon
- International Studies, Semester at Sea

REGISTRATION

- Professional Landscape Architect: MI
- LEED Green Associate, U.S. Green Building Council

QUALIFICATIONS

- Seven years of landscape architecture experience which includes roadway stormwater management controls, riverfront enhancements, college campus improvements, and medical care facility accessible outdoor activity areas
- Proficient in AutoCAD, GIS and Adobe software, as well as Google Sketchup and Lumion 3D rendering software programs

PROJECT EXPERIENCE

BELLE ISLE - MULTIMODAL TRANSPORTATION STUDY, DTMB, MI | Landscape Architect assisting in a comprehensive multimodal transportation, circulation, and traffic management study. The project aim is a phased strategy for implementing sustainable improvements to manage traffic, circulation, and multi-modal transportation services within park capacity recommendations. Innovative and transformative improvements in park access and circulation will be developed to reduce vehicular congestion, increase public safety, and improve park transportation access and wayfinding.

CHAGRIN RIVER-LAKE ERIE DIRECT TRIBUTARIES STORMWATER MASTER PLAN STUDY, NORTHEAST OHIO REGIONAL SEWER DISTRICT, OH | Assisted with the stormwater landscape marsh design within the stretch of the canal including preparation of drawings and specifications. Also created professional perspective renderings to showcase overall design intent.

LOWER ROUGE RIVER GREENWAY PLAN, WAYNE COUNTY PARKS, MI | Landscape Architect responsible for project graphics and visual communication assistance. The Lower Rouge River Greenway Plan seeks to evaluate the feasibility of providing a non-motorized path network to connect six communities within the Lower Rouge River greenway corridor in Southeast Michigan. The plan included a conceptual layout of safe, convenient, and functional non-motorized links across the greenway for pedestrians and bicyclists. This effort involved in-depth coordination between the neighbor communities along the Lower Rouge River and the project's client, Wayne County Parks.

SAGINAW STREET REHABILITATION AND RECONSTRUCTION, CITY OF FLINT, MI | Landscape Architect for the rehabilitation of six city blocks of Saginaw Street in Flint's downtown district. The brick road, listed on the state's historic register, is to be completely reconstructed, and includes curb and gutter, sidewalk, drainage, ADA-compliant sidewalk ramps, and landscaping improvements along the corridor. The project also includes a new 24-inch water transmission main with service lead replacements.

GRANDVUE RECREATION AND ACTIVITY TERRACE, GRANDVUE MEDICAL CARE FACILITY, EAST JORDAN, MI | Landscape Architecture for conceptual design and layout of the outdoor Recreation and Activity Terrace designed to be an extension of the existing medical care facility. The design was driven by a focus on accessible spaces and providing opportunities for a wide array of outdoor uses. Accessibility was evident through the use of special accessible tables and chairs, and the accessible walking paths designed into the rolling terrain. Project components included strolling paths with a bridge, raised planter boxes, fruit and vegetable garden, barn-themed playground, two small orchards, seating areas, and aesthetically pleasing plantings that add a therapeutic component to the outdoor space.

Quinn Ridley, PE
CIVIL ENGINEERING

COMPANY

WADE TRIM

EDUCATION

- BS, Civil and Environmental Engineering, University of New Orleans

REGISTRATION

- Professional Engineer: MI

QUALIFICATIONS

- 10 years of experience in conceptual design, grant application, design engineering, and bidding assistance
- Serves as a design engineer for various types of projects including non-motorized trails, site plans, roadways, seawalls and retaining walls, and parks. Quinn also has a background in geotechnical engineering, including foundation analysis, slope stability, and subsurface investigation
- Background in geotechnical engineering, including foundation analysis, slope stability, and subsurface investigation

PROJECT EXPERIENCE

BLACK RIVER BAS, DTMB, MI | Project Manager responsible for improvements to the boating access facility, a 2.5-acre site located along the west bank of the Black River. Improvements will provide functional and efficient boating access and the project includes the demolition of two existing buildings, construction of a new HMA-paved surface, including parking for up to 50 vehicle-trailer spaces and single car spaces, as well as circulation for boat trailer traffic to load and unload and tie-down lanes. During the design of the facility, consideration will be given to designing the boating assessment site design so that the development may be phased with an initial construction consisting of the new concrete boat ramps and up to 20 to 25 vehicle trailer spaces with a minimum 1 ADA space.

DNR/HOUGHTON LAKE FLATS DIKE EVALUATION, DTMB, MI | Design/Field Engineer responsible for the site inventory and conditions assessment of the flooding facility. The site consists of a north and south unit, each containing a two-bay concrete control structure, pump station, culvert crossing and intake channel at each unit, and multiple earthen dikes throughout the site.

DNR/MILAKOKIA LAKE SFCG BAS, DTMB, MI | Project Engineer responsible for improving the existing gravel surface road and parking area to accommodate vehicle and trailer circulation. The project includes parking stalls for approximately 25 vehicle trailers, along with the required number of ADA accessible spaces for car-only and vehicle-trailer parking. Additional project elements include replacement of the existing concrete plank boat ramp with new precast concrete planks, dredging the existing launch channel, if required, to obtain a minimum 4-foot water depth, a new ADA/universally accessible vault toilet building (provided by the MDNR), ADA accessible compacted gravel walkways, and naturalized stormwater control. In addition, a soft shoreline consisting of a grassy area and natural stone is included for lake users who are using kayaks or canoes.

CR407 OVER LITTLE DAWSON CREEK CULVERT REPLACEMENT, LUCE COUNTY ROAD COMMISSION, MI | Project Engineer responsible for design engineering services for the replacement of 2 large diameter culverts with a single large diameter aluminum box culvert. The project included culvert removal, maintaining a traffic plan, a new 16'-4"x5'-11" aluminum box culvert, aggregate base, HMA paving, guardrail, pavement markings, and restoration. This was an MDOT LAP project.

CAMP PET-O-SEGA PEDESTRIAN BRIDGE, EMMET COUNTY, MI | Design Engineer for replacement of two bridges, pedestrian pathways constructed with natural materials, interpretive signs, a plaque, and benches.

Timothy Ruggles

CADD

COMPANY

WADE TRIM

EDUCATION

- Mechanical Design, Delta College
- Geophysical Survey, National College

QUALIFICATIONS

- 32 years of experience with variety of municipal infrastructure projects as a CAD technician and in the field laying out and inspecting construction projects
- Responsible for guiding design team coordination work flow from survey to design to construction

PROJECT EXPERIENCE

CONSUMERS ENERGY REPLACEMENT PAVING SYSTEM KARN/WEADOCK SITE, HAMPTON TOWNSHIP, MI | Lead CADD Designer for the rehabilitation of 1,800 lineal feet of Weadock Highway, the access road and paving around warehouse building #5, and design of the Karn 1 & 2 parking lot (this section was not constructed). Both Weadock Highway and the warehouse included a hydro-excavation plan to determine locations of existing utilities demolition plans, drainage improvements, and soil erosion control plans.

SIDEWALK IMPROVEMENTS, BUENA VISTA CHARTER TOWNSHIP, MI | Lead Designer and Construction Administrator for 2,200 linear feet of sidewalk for the Township, the first phase of a two-phase project, with additional sidewalk and streetscape elements to be completed in the second phase.

7 MILE/NEVADA TRANSMISSION MAIN RENEWAL PROJECT, GREAT LAKES WATER AUTHORITY, MI | Provided design support for the water transmission main pipe renewal project including trenchless slip line rehabilitation techniques. Services include survey, traffic control, and plan development.

BELSAY ROAD WATER MAIN IMPROVEMENTS, GENESEE TOWNSHIP, MI | CADD Designer for the design of 2.5 miles extension of 12-inch water main to loop the main corridor of Belsay Road with Carpenter Road at the north end and Richfield Road at the south. Also included three drain crossings, jack and bores at all residential subdivision roads, and restoration of yards and driveways.

CARPENTER ROAD FROM SAGINAW ROAD TO HARRY STREET, GENESEE COUNTY ROAD COMMISSION MI | CADD Designer for 0.69 miles of MDOT LAP 3R roadway rehabilitation, including cold milling and hot-mix asphalt surfacing, concrete curb, gutter and ramps, and signing and pavement markings on Carpenter Road from Saginaw Road to Harry Street in the City of Flint. The project also included a road diet while maintaining turn lane transitions at Saginaw Street and the I-475 access. Permitting, maintenance of traffic, and project coordination included the City of Flint, MDOT, and Genesee Township.

FIRST, ASHLEY, AND WILLIAM STREET CONVERSION, ANN ARBOR DOWNTOWN DEVELOPMENT AUTHORITY, MI | CADD Designer for a one-way road to two-way conversion, bikeway, and water main rehabilitation. Assisted in plan preparation laying out existing utility lines for the proposed conversion of First Street and Ashley Street from two one-way roadways to a pair of two-way streets. Responsibilities included researching and building existing pipe networks as well as putting together plan and profile sheets utilizing AutoCAD Civil 3D.

Brian Scherdt

CONSTRUCTION ENGINEERING/INSPECTION

COMPANY

WADE TRIM

EDUCATION

- BS, Environmental Science
  Michigan State University

QUALIFICATIONS

- 24 years of construction inspection experience on a variety of projects including roadways, water main, sanitary/storm sewer and wastewater treatment plants
- Expertise includes construction testing, observation, reporting, troubleshooting, and communication with clients and stakeholders regarding project issues
- Experienced in using FieldBook and is knowledgeable of various construction means and methods

PROJECT EXPERIENCE

ANN ARBOR TRAILHEAD DESIGN, WAYNE COUNTY PARKS, MI | Inspection Technician for 0.53 miles of hot mix asphalt shared use path includes aggregate trail, prefabricated steel truss bridge, concrete curb and gutter, drainage, sewer, helical piles, and pavement markings along Ann Arbor Trail from Dover Street to Hines Park Drive. This project included an 80-foot shared use path across the Middle Rouge River, 0.1 miles of aggregate foot trails to adjacent natural resource hiking trails, fishing and canoe/kayak access areas, trailhead parking, and green stormwater management controls.

WILSON ROAD EXTENSION CONSTRUCTION ENGINEERING, MICHIGAN STATE UNIVERSITY, LANSING, MI | Primary Lead Inspection Technician for a new concrete roadway and associated site and utility improvements to service a new campus facility. This extension of Wilson Road (a 4-lane boulevard roadway) serves as a marquis entrance to campus and includes a new traffic signal. Hagadorn Road, also a boulevard section, includes improvements such as right turn lanes, median reconfiguration, and upgraded pedestrian crossings with audible pedestrian signals. In addition, Conrad Road was reconfigured to a 3-lane section connecting Wilson Road to Shaw Road along with a new traffic signal at Shaw and Conrad to accommodate heavy pedestrian movements. dditional project elements included stormwater improvements, significant landscaping and site design, development of various campus walking trails, bike lanes, street lighting, detention basins, water quality treatment facilities, a retention pond, and permeable paver system in select parking areas.

FIRST AND ASHLEY STREET CONSTRUCTION SERVICES - 2021, ANN ARBOR DOWNTOWN DEVELOPMENT AUTHORITY, MI | Inspection Technician for the one-way road to two-way conversion, bikeway, and water main rehabilitation. Road improvement project included utilities and drainage structures, bike path improvements, streetscape upgrades with lighting, curb and gutter, sidewalks, signing and pavement markings.

BORDER TO BORDER SEGMENT D2 PHASE 1, WASHTENAW COUNTY ROAD COMMISSION, MI | Inspection Technician for a project which included of 1.2 miles of non-motorized shared-use path including two bridges over the Huron River and boardwalks. Scope of work on this project included concrete curb, gutter, sidewalk, ramps, prefabricated bridges, poles, boardwalks, earthwork, drainage, and pavement markings. Because this project involved working in the immediate area surrounding the Huron River, the scope also required extensive river and wetland mitigation, including a precast modular block retaining wall. Coordination with Amtrak and EGLE was required to successfully complete this contract.

SHARED USE TRAIL CONSTRUCTION ENGINEERING PHASE, CHARTER TOWNSHIP OF MONTROSE, MI | Inspection Technician for the shared use trail project along Seymour Road, Vienna Road, and Allen Drive. Project included traffic signal improvements, driveway approaches, ADA-compliant ramps, storm sewer improvements, and utility relocations.

Kenneth Schwerdt, PE

CIVIL ENGINEERING

COMPANY

WADE TRIM

EDUCATION

- BS, Civil Engineering, Michigan Technological University

REGISTRATION

- Professional Engineer: MI

QUALIFICATIONS

- Design Engineer with 22 years of project management, design, and construction engineering experience providing infrastructure improvements
- Experience includes water supply and distribution, sanitary sewer collection, road construction and rehabilitation, and storm water management
- Served as Town or City Engineer for many small communities assisting them with prioritization of infrastructure needs and obtaining funding for municipal projects
- Grant experience has focused on water and sewer infrastructure improvements involving the Michigan Department of Environmental Quality (MDEQ), related regulatory agencies, and Departments of Transportation

PROJECT EXPERIENCE

BLAIR TOWNSHIP GENERAL SERVICES, BLAIR TOWNSHIP, MI | Support the Township Engineer of Record with permitting assistance, development plan reviews, and other projects and services requested by the Township.

ENGINEER OF RECORD, ELMWOOD TOWNSHIP, MI | Support the Township Engineer of Record with permitting assistance, development plan reviews, and other projects and services requested by the Township.

ELMWOOD MARINA, ELMWOOD TOWNSHIP, MI | Lead Engineer for the design, bidding, permitting, and construction administration of a complete landward renovation of the Elmwood Township Marina to accommodate its growing demand for parking and services. Project includes site layout, grading, utility and stormwater design, and coordination with an architect for new harbormaster and boater facility buildings.

LAKE STREET WATER MAIN AND STREETSCAPE, CITY OF TRAVERSE CITY, MI | Project Manager and Lead Engineer responsible for updating preliminary street, parking, and pedestrian layouts of several streets in the City of Traverse City. Cost estimates for planning were developed from preliminary layouts for surface improvements and subsurface water, sewer, and storm water facilities in need of replacement.

TWO LAKES SEWER AUTHORITY RURAL DEVELOPMENT SHPO PROCESS, ONEKAMA TOWNSHIP, MI | Lead Engineer for a USDA Rural Development Preliminary Engineering Report and funding application for a regional sanitary sewer collection and treatment system serving areas around Portage and Bear Lakes in Manistee County. Project included developing service area boundaries, preliminary layout of collection system, cost estimation of improvements, and comparison of multiple collection and treatment technologies. Tasks also included coordination between Rural Development, archaeological subconsultant, and utility authority for Environmental Review for proposed site areas.

US-31 SIDEWALK, EAST BAY TOWNSHIP, MI | Lead Engineer for design and construction administration for installation of over 3,000 feet of new sidewalk. Required coordination and permitting with MDOT to meet applicable standards, minimize impacts to existing infrastructure, and meet improvements constructed as part of a separate MDOT improvement project.

WATER SYSTEM STUDY, ELMWOOD TOWNSHIP, MI | Lead Engineer responsible for updating water reliability studies for the Township's two municipal water systems. Researched existing conditions, updated the water models and future water use projections, and compiled information in a report submitted to the EGLE.

Leon Solowjow, PE
STRUCTURAL ENGINEERING

COMPANY

WADE TRIM

EDUCATION

- MS, Civil Engineering: Structural, Wayne State University
- BS, Civil Engineering, Michigan State University

REGISTRATION

- Professional Engineer: MI

QUALIFICATIONS

- 32 years of diverse technical and management experience in the structural/transportation industry
- Career accomplishments include incorporating context-sensitive solution in design, creating and developing alternatives analysis for preliminary engineering studies, performing bridge analysis and design, inspection and scoping, evaluating various repair alternatives with recommendations, and mentoring junior and senior engineers through professional development
- Comprehensive knowledge of AASHTO LRFD, LFD, and AREMA Bridge
- Certified FHWA-NHI Bridge Inspector since 1999

PROJECT EXPERIENCE

WALTZ ROAD OVER HURON RIVER STRUCTURE REPLACEMENT, WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES, MI | Lead Structural Engineer for the replacement of this 2-span pony truss built in 1924. The replacement structure was lengthened (220 feet) and widened (47'-2" out-to-out) to meet current design standards. The superstructure consists of 48-inch x 49-inch Bulb-Tee Beams with cast-in-place concrete abutments and pier with pile foundations. Additional work consisted of bridge approaches, HMA roadway, guardrail replacement, bridge lighting, and bike path reconstruction.

ALLEN ROAD GRADE SEPARATION, CITY OF WOODHAVEN DDA AND WAYNE COUNTY, MI | Structural Engineer for a railroad grade separation for Allen Road and the CN Railroad. The project consists of the design of a bridge carrying CN Railroad over 5 lanes of Allen Road, roadway reconstruction, 1,500 feet of retaining wall parallel to Allen Road, a stormwater pump house, and multiple public and private utility relocations. About 2,000 feet of Allen Road as well as the Van Horn/Allen Road intersection was redesigned based on a profile taking Allen Road under the bridge. New drainage has been designed, along with traffic signals at the intersection and driveways to local businesses nearby. Utility coordination and relocation is a major component.

BEECHER ROAD OVER MISTEGUAY CREEK (#2721), SUPERSTRUCTURE REPLACEMENT, GENESEE COUNTY, MI | Project Manager/Lead Structural Engineer for the superstructure replacement of a bridge that was in poor condition and no longer met current design standards (built in 1928). The superstructure replacement will meet current AASHTO LRFD design specifications as well as current LRFR load rating requirements. The abutment stems will be partially removed and reconstructed to appropriate heights and sloped for the new adjacent box beam and concrete deck superstructure. Additionally, the existing abutments and wingwalls will be repaired with patching concrete and riprap will be added to the creek embankments. The bridge approaches will be reconstructed with concrete and HMA. A HEC-RAS model of Misteguay Creek at Beecher Road was utilized to determine the feasibility of replacing the superstructure of the existing bridge without impacting upstream flood levels.

I-75 OVER SQUARE LAKE ROAD BRIDGE REPLACEMENT (I-75 MODERNIZATION PROJECT), MDOT, METRO REGION OAKLAND COUNTY, MI | Lead Structural Engineer. As part of the ORC Services related to project development and assistance for the Design- Build reconstruction section of I-75 from Adams Road through the Square Lake Road interchange. Responsibilities include the preliminary design, plan preparation, and cost estimation and quality control of the final design for the design-build replacement of the I-75 NB and SB bridges over Square Lake Road. The widened replacement structures meet current AASHTO LRFD design specifications with a higher vertical profile and a widened approach cross section as part of the extensive I-75 reconstruction project.

Jason Smith, AICP

LANDSCAPE ARCHITECTURE/PLANNING

COMPANY

WADE TRIM

EDUCATION

- BA, Public Administration, Eastern Michigan University

REGISTRATION

- American Institute of Certified Planners

QUALIFICATIONS

- 18 years of planning experience with expertise in HUD and other federally-funded programs including Community Development Block Grant (CDBG) Planning and Analysis of Impediments to Fair Housing Choice (Assessment of Fair Housing), Housing Assessments and Studies
- Has utilized the HUD IDIS Online and eCon Planning Suite in completing nine Consolidated Plans since the system was established in 2012

PROJECT EXPERIENCE

UPPER DUCK ALL BUNDLE, METRO SEWER DISTRICT OF CINCINNATI, OH | Planner for a wet weather improvements bundle that included sewer separation, conveyance sewers, regulator improvements, storage tank, and green infrastructure to address SSOs and CSOs in areas tributary to the Duck Creek Interceptor.

HANOVER STREET RESTORATION, CITY OF DEARBORN HEIGHTS, MI | Assisted City staff and officials in the acquisition of 12 blighted, single-family homes in the Ecorse Creek floodplain for FEMA Grant administration. Developed restoration plan in an effort to increase floodplain storage capacity to mitigate flooding within the subject area.

DORT HIGHWAY EXTENSION TRAFFIC STUDY AND ENVIRONMENTAL ASSESSMENT, GENESEE COUNTY ROAD COMMISSION, MI | Planner assisting with the Environmental Assessment (EA) of a proposed two-mile extension of Dort Highway from I-75 to Baldwin Rd to determine the potential social, economic, and environmental impacts related to the proposed transportation improvement as required by the National Environmental Policy Act of 1969. Project tasks included preparation of the EA and coordinating the environmental review to determine the impacts of alternatives for the Genesee County Road Commission, in cooperation with the Michigan Department of Transportation (MDOT) and the Federal Highway Administration (FHWA).

AS-NEEDED COMMUNITY DEVELOPMENT SERVICES, CITY OF DEARBORN HEIGHTS, MI | Providing ongoing assistance to the City with their Demolition Program which is funded through the Community Development Block Grant Program. Funding provided by HUD is used to demolish blighted single-family homes within the City. Tasks include assistance with documentation and record keeping, coordination of HazMat inspections and reports, site visits, environmental review requirements, assistance with preparation of bid packets, and review of final contractor invoices and documentation.

REENVISION REDFORD MASTER PLAN, REDFORD TOWNSHIP, MI | Wade Trim is leading a multi-disciplinary team tasked with developing a new comprehensive plan that includes economic development, mobility and access, housing, parks and recreation and natural features goals, strategies and actions. Primary planner responsible for developing urban redevelopment strategies, housing and mobility actions as a part of the ReEnvision Redford Comprehensive Plan update.

2014-2018 & 2019-2023 FIVE-YEAR CONSOLIDATED PLAN, CITY OF SANDUSKY, OH | Project Manager responsible for developing the Sandusky Consolidated Plan to allocate more than $700,000 in CDBG funds annually. Provided GIS/mapping, demographic and housing market analysis. Prepared the needs assessment and analyzed public input to determine goals and objectives.

Tyler Tomlinson

CONSTRUCTION ENGINEERING/INSPECTION

COMPANY

WADE TRIM

EDUCATION

- BS, Civil Engineering, Michigan Technological University

CERTIFICATION

- Michigan Qualified Concrete Technician Field Testing, Level I
- ACI Concrete Field Testing Technician, Grade I
- MDOT Density Technology
- Troxler Safety and HAZMAT Training
- MDEQ Certified Storm Water Operator
- Concrete Construction Inspector
- Concrete Strength Testing Technician
- Asphalt sampling MDOT certified

QUALIFICATIONS

- Nine years of inspection, testing and surveying experience on roadway, water and land development projects throughout the state
- Knowledgeable in MDOT LAP projects and MDOT requirements

PROJECT EXPERIENCE

AS-NEEDED INSPECTION AND TESTING GAYLORD TSC 2018, MICHIGAN DEPARTMENT OF TRANSPORTATION, MI | Inspection Technician for 1.27 miles of hot mix asphalt reconstruction and realignment, concrete retaining wall reconstruction, drainage, sanitary and water main reconstruction, traffic signal work, guardrail and pavement markings on US-31 from the Mitchell Street Bridge to Fairview Avenue in the City of Petoskey. This work was performed under an as-needed inspection and testing contract for the Gaylord TSC.

AS-NEEDED INSPECTION AND TESTING, BAY CITY TSC, MICHIGAN DEPARTMENT OF TRANSPORTATION, MI | Inspection Technician for the videotaping of sewers on 2.40 miles of hot mix asphalt cold milling and resurfacing, drainage, guardrail, signing and pavement markings on I-75 from the Bay/Arenac County line northerly to US-23 and from US-23 to Lincoln Road in Arenac County. This work is being completed under an as needed contract for the Bay City TSC.

KAREGNONDI WATER AUTHORITY (KWA) CONSTRUCTION PROGRAM MANAGEMENT, GENESEE COUNTY DRAIN COMMISSIONER MI | Construction Inspector for a 12-mile segment of 60-inch diameter, welded steel water pipeline and 2.5-mile segment of 36-inch and 48-inch diameter, welded steel and ductile water pipeline as part of the $300 million water supply project to provide an independent water source and raw water transmission main.

TIGER GRANT ROADWAY AND WATER MAIN REPLACEMENT, CITY OF FLINT, MI | Construction Inspector for five miles of MDOT 4R HMA road reconstruction and 8-inch, 16-inch, and 24-inch water transmission and distribution main replacement. The $36M project includes the use of TIGER funds, TIP funding for MDOT 4R, safety funding for 4- to 3-lane conversion and traffic signal modernization, and funding for full bridge replacement.

WILSON ROAD EXTENSION, MICHIGAN STATE UNIVERSITY, EAST LANSING, MI | Construction Inspector for 0.5 miles of new boulevard roadway. This project is a recipient of multi-million dollar TEDA grant done under the jurisdiction of MDOT. The roadway serves as a marquis entrance to campus and includes a gateway campus sign and new traffic signal interconnected with a CN railroad line and crossing, including a complex pre-signal and timing operations. Additional project elements included bike lanes and new street lighting for the pedestrian heavy environment, stormwater improvements, additional right turn lanes to access campus from a county roadway, development of various campus walking trails, detention basins, water quality treatment facilities, addition of a large bus stop addition, a retention pond, and permeable paver system in select parking areas.

Carmelle Tremblay, PE

CIVIL ENGINEERING

COMPANY

WADE TRIM

EDUCATION

- MBA, Business Administration, Wayne State University
- BS, Civil Engineering, Lawrence Technological University
- BS, Architecture, Lawrence Technological University

REGISTRATION

- Professional Engineer: MI
- PASER Certified, Michigan Transportation Asset Management Council

QUALIFICATIONS

- Nine years of experience designing, reviewing, and managing municipal water main, sanitary sewer, storm-water, streetscape, sidewalk, and road improvement projects
- Completed multiple detailed design of numerous road, water main, streetscape, and non-motorized transportation improvement projects

PROJECT EXPERIENCE

BAYHAVEN PUMP STATION, CHARTER TOWNSHIP OF HARRISON, MI | Project Engineer for evaluation of a pump station and its 2,600-foot-long, 8-inch asbestos-cement force main that exceeded their useful lifespan and were experiencing frequent failures. Assisted in evaluation of three rehabilitation options and design of pipe-bursting for 2,300 feet of new 8-inch HDPE force main, a new 375-foot-long, 8-inch river crossing using directional drilling construction, and new pump station.

NORTHEAST WATER TRANSMISSION MAIN PHASE II, GREAT LAKES WATER AUTHORITY, DETROIT, MI | Providing design engineering services, base maps, and construction documents for 4 miles of 81-inch water main through east Detroit.

FIRST, ASHLEY, AND WILLIAM STREET CONVERSION, ANN ARBOR DOWNTOWN DEVELOPMENT AUTHORITY, MI | Provided design engineering and construction documents for the upsizing and relocation of a 12-inch water main on First and Ashley Streets. Coordinated construction documents and construction administration for separated bikeway on First, Ashley, and William Streets.

STORMWATER, ASSET MANAGEMENT, AND WASTEWATER (SAW) GRANT ASSET MANAGEMENT PLAN, CHARTER TOWNSHIP OF HARRISON, MI | Compiled PACP and MACP inspection data with existing GIS system. Made appropriate updates and helped organize the Township's sanitary assets to compile an Asset Management Report and Capital Improvement Plan.

DIVISION STREET DESIGN, ANN ARBOR DDA, MI | Coordinated construction documents for separated bikeway with modifications to sidewalk ramps, signals, pavement marking, and signage. Intersection geometry modifications were designed at Packard Road and Catherine Street to accommodate the bikeway.

WAYNE COUNTY ASSET MANAGEMENT, WAYNE COUNTY DEPARTMENT PUBLIC SERVICES MI | Design services for water line and sewer utilities in Hines Park as part of the Water and Sanitary Sewer Asset Management Plan. Made updates to the GIS and compiled the asset management report.

CS-152 ROUTE ANALYSIS AND PRELIMINARY DESIGN, GREAT LAKES WATER AUTHORITY, DETROIT, MI | Provided utility analysis, preliminary mapping and rating of several alternative routes for a proposed 84-inch water main through Detroit from Water Works Park to the Northeast Water Treatment Plant.

PLYMOUTH ROAD RESURFACING PHASE 2, CITY OF ANN ARBOR, MI | Project Manager. Provided design engineering and construction documents for resurfacing of Plymouth Road between Lower Broadway Street and Murfin Avenue through the MDOT Local Agency Program.

Russell Whaley

CADD

COMPANY

WADE TRIM

EDUCATION

- Course Work, Grand Rapids Community College

QUALIFICATIONS

- Project Designer/CADD Technician with 25 years of design and construction experience as well as site development design, road reconstruction and resurfacing, bituminous pavements and concrete pavements, storm sewer, water system, sanitary sewer system, and traffic signals
- Prepares construction plans and cost estimates for state, municipal, private, and county projects

PROJECT EXPERIENCE

LAKE SKEGEMOG BAS DESIGN, DTMB, MI | CADD Technician for the rehabilitation of the Lake Skegemog Boating Access Site including parking lot grading, paving, new ADA sidewalks to the vault toilet, site geometric changes, parking layout and a landscaping plan.

DNR/EAST ARM BAS AND BOWERS HARBOR BAS DESIGN, DTMB, MI | CADD Technician assisting with redesigning two existing boat access sites to accommodate larger boats, additional parking, and improved traffic flow. Project responsibilities include removal and redesign of an existing HMA-paved parking surface, design of a new entrance, permitting assistance, construction cost estimating, and contract document development.

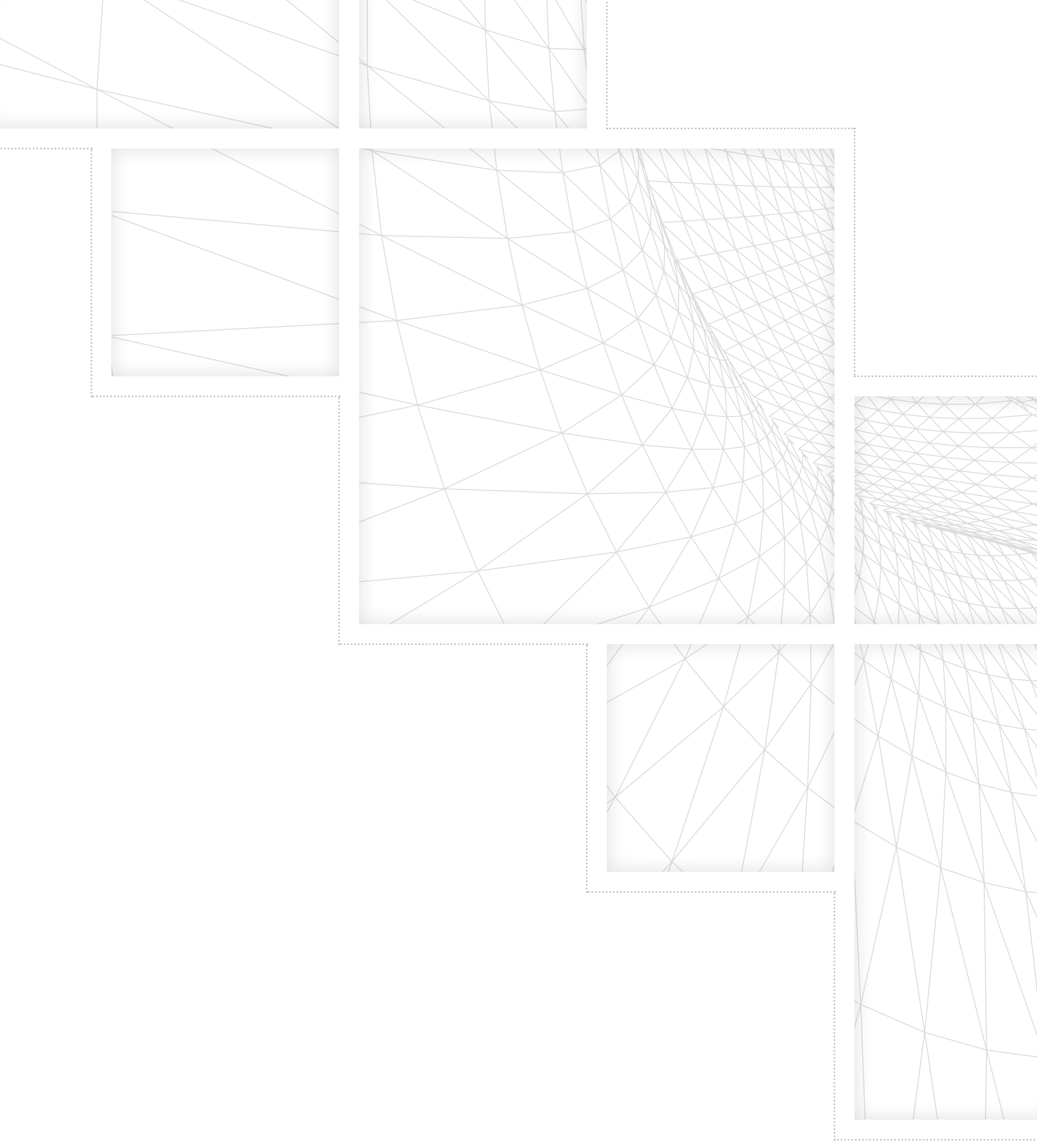
DNR/HOUGHTON LAKE FLATS DIKE EVALUATION, DTMB, MI | CADD Technician assisting with site inventory and conditions assessment of the flooding facility. The site consists of a north and south unit, each containing a two-bay concrete control structure, pump station, culvert crossing and intake channel at each unit, and multiple earthen dikes throughout the site.

TIGER GRANT ROADWAY AND WATER MAIN REPLACEMENT, FLINT, MI | Project Designer/CAD Technician for five miles of MDOT 4R HMA reconstruction and water main replacement. The $36 million project includes TIGER funding, TIP funding for MDOT 4R, Safety funding for four-lane to three-lane conversion and traffic signal modernization, as well as bridge funding for full bridge replacement.

EAST WELLS STREET AND BAILEY AVE RECONSTRUCTION AND INTERSECTION IMPROVEMENTS IN THE CITY OF SOUTH HAVEN, MI | Project Designer/CAD Technician for road reconstruction, which include water main, storm drainage, subbase, aggregate base, curb and gutter, hot-mix-asphalt paving, non-reinforced concrete pavement roundabout, pavement markings and sign replacement. Project included intersection improvements including an urban compact roundabout.

BANGOR ROAD REHABILITATION AND RESURFACING, VILLAGE OF LAWRENCE, MI | Project Designer/CAD Technician for MDOT Local agency HMA cold milling/resurfacing project from Paw Paw Street to the Village Limits.

SUPERIOR STREET PHASE II AND GREEN STREET RECONSTRUCTION IN THE CITY OF SOUTH HAVEN, MI | Project Designer/CAD Technician for road and utility total reconstruction project, which include water main, storm drainage, sanitary sewer system, subbase, aggregate base, curb and gutter, hot-mix-asphalt paving, accessibility design of pedestrian facilities, pavement markings and sign replacement. Project was separated into multiple phases of bidding and construction.



WADE TRIM

WADE TRIM ASSOCIATES, INC.
25251 Northline Road • Taylor, MI 48180
734.947.9700 • 800.482.2864 • www.wadetrim.com

FLORIDA • GEORGIA • MICHIGAN • NEBRASKA • NEW YORK • NORTH CAROLINA • OHIO • PENNSYLVANIA • TEXAS

APPENDIX 3

PROFESSIONAL CERTIFICATION FORMS
(Please see pages 132 - 135)

APPENDIX 4

OVERHEAD ITEMS ALLOWED FOR THE PROFESSIONAL SERVICES CONTRACTOR FIRM'S HOURLY BILLING RATE CALCULATION

The following instructions are to be used by the Professional Services Professional firms to determine the hourly billing rate to use on State of Michigan Projects.

The Professional's Consultant must submit a separate hourly billing rate for the professional Consultant services they will provide for State of Michigan Projects. A moderate mark-up of the Professional's Consultant services hourly billing rates, not to exceed 5%, will be allowed.

The Department will reimburse the Professional for printing and reproduction of the Contract Bidding Documents, soil borings, surveys and any required laboratory testing services and use of field equipment. **No mark-up of these Project costs will be allowed IF such items are provided in house by the Professional.**

2023 HOURLY BILLING RATE
Based on 2022 Expenses

OVERHEAD ITEMS ALLOWED FOR THE PROFESSIONAL SERVICES CONTRACTOR FIRM'S HOURLY BILLING RATE CALCULATION

SALARIES:	**EMPLOYEE BENEFITS:**	**INSURANCE:**
Principals (Not Project Related)	Hospitalization	Professional Liability Insurance
Clerical / Secretarial	Employer's Federal Insurance Contributions Act (FICA)Tax	Flight and Commercial Vehicle
Technical (Not Project Related)	Unemployment Insurance	Valuable Papers
Temporary Help Tax	Federal Unemployment	Office Liability
Technical Training	Disability	Office Theft
Recruiting Expenses	Worker's Compensation	Premises Insurance
	Vacation	Key – Personnel Insurance
	Holidays	Professional Liability Insurance
	Sick Pay	
	Medical Payments	
	Pension Funds	
	Insurance - Life	
	Retirement Plans	

TAXES:	**SERVICES (PROFESSIONAL):**	**EQUIPMENT RENTALS:**
Franchise Taxes	Accounting	Computers
Occupancy Tax	Legal	Typewriter
Unincorporated Business Tax	Employment Fees	Bookkeeping
Single Business Tax	Computer Services Bond)	Dictating
Property Tax	Research	Printing
Income Tax	Project / Contract Bond	Furniture and Fixtures
		Instruments

OFFICE FACILITIES:

Rents and Related Expenses
Utilities
Cleaning and Repair

LOSSES:

Bad Debts (net)

Uncollectible Fee
Thefts (not covered by Project / Contract)
Forgeries (not covered by Project / Contract)

FINANCIAL:

Depreciation

SUPPLIES:

Postage

Drafting Room Supplies

General Office Supplies
Library
Maps and Charts
Magazine Subscriptions

PRINTING AND DUPLICATION:

Specifications (other than Contract Bidding documents)
Drawings (other than Contract Bidding documents)
Xerox / Reproduction
Photographs

SERVICES (NONPROFESSIONAL):

Telephone and Telegram

Messenger Services

TRAVEL:

All Project – Related Travel*

MISCELLANEOUS:

Professional Organization Dues for Principals and Employees
Licensing Fees

DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET,
VEHICLE AND TRAVEL SERVICES
SCHEDULE OF TRAVEL RATES FOR CLASSIFIED AND UNCLASSIFIED EMPLOYEES
Effective January 1, 2023

MICHIGAN SELECT CITIES*

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	$85.00	
Breakfast	$11.75	$14.75
Lunch	$11.75	$14.75
Dinner	$28.00	$31.00

MICHIGAN IN-STATE ALL OTHER

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	$85.00	
Breakfast	$9.75	$12.75
Lunch	$9.75	$12.75
Dinner	$22.00	$25.00

Lodging	$51.00
Breakfast	$9.75
Lunch	$9.75
Dinner	$22.00
Per Diem Total	**$92.50**

OUT-OF-STATE SELECT CITIES*

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	Contact Conlin Travel	
Breakfast	$15.00	$18.00
Lunch	$15.00	$18.00
Dinner	$29.00	$32.00

OUT-OF-STATE ALL OTHER

	Individual	Group Meeting (pre-arranged and approved)
Lodging**	Contact Conlin Travel	
Breakfast	$11.75	$14.75
Lunch	$11.75	$14.75
Dinner	$27.00	$30.00

Lodging	$51.00
Breakfast	$11.75
Lunch	$11.75
Dinner	$27.00
Per Diem Total	**$101.50**

Incidental Costs Per Day (with overnight stay) $5.00

Mileage Rates	**Current**
Premium Rate	$0.655 per mile
Standard Rate	$0.440 per mile

* See Select Cities Listing
** Lodging available at State rate, or call Conlin Travel at 877-654-2179 or www.somtravel.com

SELECT CITY LIST
SCHEDULE OF TRAVEL RATES FOR CLASSIFIED AND UNCLASSIFIED EMPLOYEES
Effective January 1, 2023

Michigan Select Cities/Counties		
	CITIES	**COUNTIES**
	Ann Arbor, Auburn Hills, Beaver Island, Detroit, Grand Rapids, Holland, Leland, Mackinac Island, Petoskey, Pontiac, South Haven, Traverse City	Grand Traverse, Oakland, Wayne
Out of State Select Cities/Counties		
STATE	**CITIES**	**COUNTIES**
Alaska	All locations	
Arizona	Phoenix, Scottsdale, Sedona	
California	Arcata, Edwards AFB, Eureka, Los Angeles, Mammoth Lakes, McKinleyville, Mill Valley, Monterey, Novato, Palm Springs, San Diego, San Francisco, San Rafael, Santa Barbara, Santa Monica, South Lake Tahoe, Truckee, Yosemite National Park	Los Angeles, Mendocino, Orange, Ventura
Colorado	Aspen, Breckenridge, Grand Lake, Silverthorne, Steamboat Springs, Telluride, Vail	
Connecticut	Bridgeport, Danbury	
District of Columbia	Washington DC (See also Maryland & Virginia)	
Florida	Boca Raton, Delray Beach, Fort Lauderdale, Jupiter, Key West, Miami	
Georgia	Brunswick, Jekyll Island	
Hawaii	All locations	
Idaho	Ketchum, Sun Valley	
Illinois	Chicago	Cook, Lake
Kentucky	Kenton	
Louisiana	New Orleans	
Maine	Bar Harbor, Kennebunk, Kittery, Rockport, Sandford	
Maryland	Baltimore City, Ocean City	Montgomery, Prince George
Massachusetts	Boston, Burlington, Cambridge, Martha's Vineyard, Woburn	Suffolk
Minnesota	Duluth, Minneapolis, St. Paul	Hennepin, Ramsey
Nevada	Las Vegas	
New Mexico	Santa Fe	
New York	Bronx, Brooklyn, Lake Placid, Manhattan, Melville, New Rochelle, Queens, Riverhead, Ronkonkoma, Staten Island, Tarrytown, White Plaines	Suffolk
Ohio	Cincinnati	
Pennsylvania	Pittsburgh	Bucks
Puerto Rico	All locations	
Rhode Island	Bristol, Jamestown, Middletown, Newport, Providence	Newport
Texas	Austin, Dallas, Houston, L.B. Johnson Space Center	
Utah	Park City	Summit
Vermont	Manchester, Montpelier, Stowe	Lamoille
Virginia	Alexandria, Fairfax, Falls Church	Arlington, Fairfax
Washington	Port Angeles, Port Townsend, Seattle	
Wyoming	Jackson, Pinedale	

APPENDIX 5

CERTIFICATES OF INSURANCE

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 3/28/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Ames & Gough 8300 Greenboro Dr. Suite 980 McLean VA 22102	**CONTACT NAME:** **PHONE (A/C, No, Ext):** 703-827-2277 **FAX (A/C, No):** 703-827-2279 **E-MAIL ADDRESS:** admin@amesgough.com
INSURED WADETRI-01 Wade Trim Group, Inc., its subsidiaries & Wade Trim NY, PC 25251 Northline Road Taylor MI 48180	**INSURER(S) AFFORDING COVERAGE** / **NAIC #** **INSURER A :** Arch Insurance Company, A+ XV — 11150 **INSURER B :** Continental Insurance Company A(XV) — 35289 **INSURER C :** Travelers Property Casualty Company of America — 25674 **INSURER D :** Continental Casualty Company (CNA) A, XV — 20443 **INSURER E :** Travelers Casualty & Surety Co. of America A++, XV — 31194 **INSURER F :**

COVERAGES **CERTIFICATE NUMBER:** 1572944800 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] **COMMERCIAL GENERAL LIABILITY** [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:	Y	Y	ZAGLB1854400	10/1/2022	7/1/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 2,000,000 $ 300,000 $ 10,000 $ 2,000,000 $ 4,000,000 $ 4,000,000
A	**AUTOMOBILE LIABILITY** [X] ANY AUTO [ ] ALL OWNED AUTOS [ ] SCHEDULED AUTOS [ ] HIRED AUTOS [ ] NON-OWNED AUTOS	Y	Y	ZACAT1849700	10/1/2022	7/1/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 2,000,000 $ $ $
B	[X] **UMBRELLA LIAB** [X] OCCUR [ ] **EXCESS LIAB** [ ] CLAIMS-MADE [ ] DED [X] RETENTION $ 10,000	Y	Y	7034724218	10/1/2022	7/1/2023	EACH OCCURRENCE AGGREGATE	$ 10,000,000 $ 10,000,000
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY** Y / N ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? [ ] **(Mandatory in NH)** If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	Y	ZAWCI1837800	10/1/2022	7/1/2023	[X] PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
C D E	Excess Umbrella Prof. Liability (Incl Pollution) Excess Prof. Liability			EX-7S149981 AEH591913816 107711306	10/1/2022 10/1/2022 10/1/2022	7/1/2023 10/1/2023 10/1/2023	Occurrence/Aggregate Per Claim/Aggregate Per Claim/Aggregate	10,000,000 $5,000,000 $5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Workers Compensation (NY) Policy #ZAWCI1837900/ Company: Arch Insurance Company / Effective: October 1, 2022 - July 1, 2023
$1,000,000 Each Accident/ $1,000,000 Disease Each Employee / $1,000,000 Policy Limit

RE: Indefinite-Scope, Indefinite-Delivery Contract No. 00997

The State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees, and agents are included as additional insured with respect to General Liability, Automobile Liability and Umbrella Liability when required by written contract. General Liability and Automobile Liability are primary
See Attached...

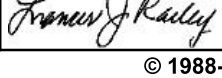
CERTIFICATE HOLDER

State of Michigan-Dept of Technology, MGMT & Budget
3111 W St Joseph St
Lansing MI 48917

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



AGENCY CUSTOMER ID: WADETRI-01

LOC #:

ADDITIONAL REMARKS SCHEDULE

AGENCY	NAMED INSURED
Ames & Gough	Wade Trim Group, Inc., its subsidiaries & Wade Trim NY, PC 25251 Northline Road Taylor MI 48180
POLICY NUMBER	
CARRIER / NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 FORM TITLE: CERTIFICATE OF LIABILITY INSURANCE

and non-contributory over any existing insurance and limited to liability arising out of the operations of the named insured and when required by written contract. General Liability, Automobile Liability, Worker's Compensation and Umbrella policies include waiver of subrogation in favor of the additional insureds where permissible by state law and when required by written contract. 30-day Notice of Cancellation will be issued for the General Liability, Automobile Liability, Workers Compensation, Umbrella Liability and Professional Liability policies in accordance with policy terms and conditions.

APPENDIX 6

FEDERAL PROVISIONS ADDENDUM

(If your project is funding wholly or in part by federal funds, this appendix applies)

STATE OF MICHIGAN
PROCUREMENT
Michigan.gov/MiProcurement

FEDERAL PROVISIONS ADDENDUM

This addendum applies to purchases that will be paid for in whole or in part with funds obtained from the federal government. The provisions below are required, and the language is not negotiable. If any provision below conflicts with the State's terms and conditions, including any attachments, schedules, or exhibits to the State's Contract, the provisions below take priority to the extent a provision is required by federal law; otherwise, the order of precedence set forth in the Contract applies. Hyperlinks are provided for convenience only; broken hyperlinks will not relieve Contractor from compliance with the law.

1. Equal Employment Opportunity

If this Contract is a "**federally assisted construction contract**" as defined in 41 CFR Part 60-1.3, and except as otherwise may be provided under 41 CFR Part 60, then during performance of this Contract, the Contractor agrees as follows:

a. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

c. The Contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Contractor's legal duty to furnish information.

d. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

e. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

f. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

g. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

h. The Contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, that if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

2. Davis-Bacon Act (Prevailing Wage)

If this Contract is a **prime construction contract** in excess of $2,000, the Contractor (and its Subcontractors) must comply with the Davis-Bacon Act (40 USC 3141-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"), and during performance of this Contract the Contractor agrees as follows:

a. All transactions regarding this contract shall be done in compliance with the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable. The contractor shall comply with 40 U.S.C. 3141-3144, and 3146-3148 and the requirements of 29 C.F.R. pt. 5 as applicable.

b. Contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor.

c. Additionally, contractors are required to pay wages not less than once a week.

3. Copeland "Anti-Kickback" Act

If this Contract is a contract for construction or repair work in excess of $2,000 where the Davis-Bacon Act applies, the Contractor must comply with the Copeland "Anti-Kickback" Act (40 USC 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work

Financed in Whole or in Part by Loans or Grants from the United States"), which prohibits the Contractor and subrecipients from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled, and during performance of this Contract the Contractor agrees as follows:

a. **Contractor**. The Contractor shall comply with 18 U.S.C. §874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this contract.

b. **Subcontracts**. The Contractor or Subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA or the applicable federal awarding agency may by appropriate instructions require, and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.

c. **Breach**. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a Contractor and Subcontractor as provided in 29 C.F.R. § 5.12.

4. Contract Work Hours and Safety Standards Act

If the Contract is **in excess of $100,000** and **involves the employment of mechanics or laborers**, the Contractor must comply with 40 USC 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5), as applicable, and during performance of this Contract the Contractor agrees as follows:

a. **Overtime requirements**. No Contractor or Subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than 1 ½ times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

b. **Violation; liability for unpaid wages; liquidated damages**. In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any Subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such Contractor and Subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of $27 for each calendar day on which such individual was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

c. **Withholding for unpaid wages and liquidated damages**. The State shall upon its own action or upon written request of an authorized representative of the

Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or Subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

d. Subcontracts. The Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the Subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

5. Rights to Inventions Made Under a Contract or Agreement

If the Contract is funded by a federal "funding agreement" as defined under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

6. Clean Air Act and the Federal Water Pollution Control Act

If this Contract is **in excess of $150,000,** the Contractor must comply with all applicable standards, orders, and regulations issued under the Clean Air Act (42 USC 7401-7671q) and the Federal Water Pollution Control Act (33 USC 1251-1387), and during performance of this Contract the Contractor agrees as follows:

Clean Air Act

1. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
2. The Contractor agrees to report each violation to the State and understands and agrees that the State will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency or the applicable federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.
3. The Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA or the applicable federal awarding agency.

Federal Water Pollution Control Act

1. The Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
2. The Contractor agrees to report each violation to the State and understands and agrees that the State will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency or the applicable federal awarding agency, and the appropriate Environmental Protection Agency Regional Office.
3. The Contractor agrees to include these requirements in each subcontract exceeding $150,000 financed in whole or in part with Federal assistance provided by FEMA or the applicable federal awarding agency.

7. Debarment and Suspension

A "contract award" (see 2 CFR 180.220) must not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (51 FR 6370; February 21, 1986) and 12689 (54 FR 34131; August 18, 1989), "Debarment and Suspension." SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

a. This Contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the Contractor is required to verify that none of the Contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

b. The Contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

c. This certification is a material representation of fact relied upon by the State. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the State, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

d. The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

8. Byrd Anti-Lobbying Amendment

Contractors who apply or bid for an award of **$100,000 or more** shall file the required certification in *Exhibit 1 – Byrd Anti-Lobbying Certification* below. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any

person or organization for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, officer or employee of Congress, or an employee of a Member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

9. Procurement of Recovered Materials

Under 2 CFR 200.322, Contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act.

a. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:

i. Competitively within a timeframe providing for compliance with the contract performance schedule;

ii. Meeting contract performance requirements; or

iii. At a reasonable price.

b. Information about this requirement, along with the list of EPA- designated items, is available at EPA's Comprehensive Procurement Guidelines web site, https://www.epa.gov/smm/comprehensive- procurement-guideline-cpg-program.

c. The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act.

10. Additional FEMA Contract Provisions.

The following provisions apply to purchases that will be paid for in whole or in part with funds obtained from the Federal Emergency Management Agency (FEMA):

a. Access to Records. The following access to records requirements apply to this contract:

i. The Contractor agrees to provide the State, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives access to any books, documents, papers, and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts, and transcriptions.

ii. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

iii. The Contractor agrees to provide the FEMA Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.

In compliance with the Disaster Recovery Act of 2018, the State and the Contractor acknowledge and agree that no language in this contract is intended to prohibit

audits or internal reviews by the FEMA Administrator or the Comptroller General of the United States.

b. Changes.
See the provisions regarding modifications or change notice in the Contract Terms.

c. DHS Seal Logo and Flags.
The Contractor shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific FEMA pre-approval.

d. Compliance with Federal Law, Regulations, and Executive Orders.
This is an acknowledgement that FEMA financial assistance will be used to fund all or a portion of the contract. The Contractor will comply with all applicable Federal law, regulations, executive orders, FEMA policies, procedures, and directives.

e. No Obligation by Federal Government.
The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the State, Contractor, or any other party pertaining to any matter resulting from the Contract."

f. Program Fraud and False or Fraudulent Statements or Related Acts
The Contractor acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the Contractor's actions pertaining to this contract.

EXHIBIT 1
BYRD ANTI-LOBBYING CERTIFICATION

Contractor must complete this certification if the purchase will be paid for in whole or in part with funds obtained from the federal government and the purchase is greater than $100,000.

APPENDIX A, 44 C.F.R. PART 18 – CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

   This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The Contractor, enter contractor name here, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. Chap. 38, Administrative Remedies for False Claims and Statements, apply to this certification and disclosure, if any.

_____

Signature of Contractor's Authorized Official

_____

Name and Title of Contractor's Authorized Official

_____

Date

APPENDIX TO
FEDERAL PROVISIONS ADDENDUM

§ 200.322 Domestic Preferences for Procurements

(a) As appropriate and to the extent consistent with law, the non-Federal entity should, to the greatest extent practicable under a federal award, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all subawards including all contracts and purchase orders for work or products under this award.

(b) For purposes of this section:

(1) “Produced in the United States” means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.

(2) “Manufactured products” means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

FEDERAL STATE and LOCAL FISCAL RECOVERY FUNDS (SLFRF) PROJECT SPECIFIC REQUIREMENTS

The funding being used for this project is Federal State and Local Fiscal Recovery Funds (SLFRF). As a result, additional provisions apply and are included in this Attachment.

Each primary contracted contractor with the DTMB must register with the Federal System for Award Management (SAM) must register prior to contract execution. The SAM website is https://sam.gov/content/home. The direct hyperlink for SAM.gov registration is https://sam.gov/content/entity-registration

As of April 4, 2022, the Federal government will use a Unique Entity Identifier (UEI) created in SAM.gov as the official subrecipient identifier. All primary contracted contractors with the DTMB will be required to maintain an active registration on SAM.gov. To receive payment, all primary contracted vendors need to have a Unique Entity Identifier (UEI) number and have the UEI entered in their SIGMA account. Information on the UEI and sign up can be obtained at: https://www.gsa.gov/about-us/organization/federal-acquisition-service/office-of-systems-management/integrated-award-environment-iae/iae-systems-information-kit/unique-entity-identifier-update

Contractor is to fill in and provide the following documentation for use in SLFRF reporting prior to Contract Execution for use in the reporting requirements:

Contractor's UEI

_____

Contractor's Full Legal Name

_____

Primary Point-of-Contact Email Address

_____

Business Address

_____

City Business is located

_____

State Business is located

_____

US Zip Code + 4 digits

_____